



Hampton Roads Transportation Accountability Commission

\$500,000,000 Senior Lien Revenue Bonds, Series 2018A

Report of the Independent Financial Advisor

Dated: February 14, 2018

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I. Transaction Summary



Introduction

- On September 21, 2017, the Commission endorsed a written Debt Management Plan to guide the implementation of its debt program for the Six-Year Funding Plan through FY 2023 and to extend the plan through the HRBT Project's expected completion in FY 2024.
- The Debt Management Plan calls for an accelerated debt issuance schedule to take advantage of low interest rates and to introduce an phased manageable annual issuing schedule through FY 2024 that attracts investors' attention.
- The Series 2018A Bonds are the Commission's inaugural bond sale. They are to fund Interstate 64 Peninsula Widening (Segments I, II and III), I-64 / I-264 Interchange Improvements (Phases I and II), and I-64 Southside Widening & High Rise Bridge (Phase I).



Summary of the Series 2018A Bonds

◆ Summary:

- \$500,000,000 Senior Lien Revenue Bonds, Series 2018A were sold via negotiated sale on January 30, 2018
- The book running senior managing underwriter was Wells Fargo Securities. BofA Merrill Lynch and J.P. Morgan are co-managers.

◆ Purpose of Issue:

- To finance the costs of certain transportation projects in Hampton Roads
- Pay costs of issuance for the Series 2018A Bonds

◆ Structure:

- The 2018A were structured for a final maturity in 2057 (40-year bonds)
- Of the \$500 million in par amount, \$93 million matures from 2025 to 2038 and \$407 million matures from 2039 to 2057
- The amortization ranges across the entire yield curve and is back-loaded in order to capture currently low interest rates in the long-end of the yield curve



Summary of the Series 2018A Bonds – Continued

◆ Ratings:

- S&P: "AA"
- Fitch: "AA+"

◆ Optional Redemption:

- The Series 2018A Bonds maturing on and after July 1, 2028 are subject to optional redemption on and after January 1, 2028 in whole or in part, at par plus accrued interest.

◆ Payments:

- Principal paid annually on July 1, in the years 2025 through 2057
- Interest paid semi-annually on January 1 and July 1, commencing July 1, 2018



Summary of Credit Ratings – S&P Ratings Services

- ◆ S&P Ratings Services assigned a “AA” rating based on the following credit factors:
 - Deep and diverse regional economy of HRTAC’s member municipalities and good wealth and income levels in the Hampton Roads metropolitan statistical area
 - Historically good stability and resilience to economic downturns among pledged revenues
 - Strong projected MADS coverage on senior-lien debt of at least 2x based on fiscal 2017 pledges revenues after accounting for future parity debt issuance
 - The General Assembly has demonstrated commitment to transportation projects in the state with the passage of HB 2313



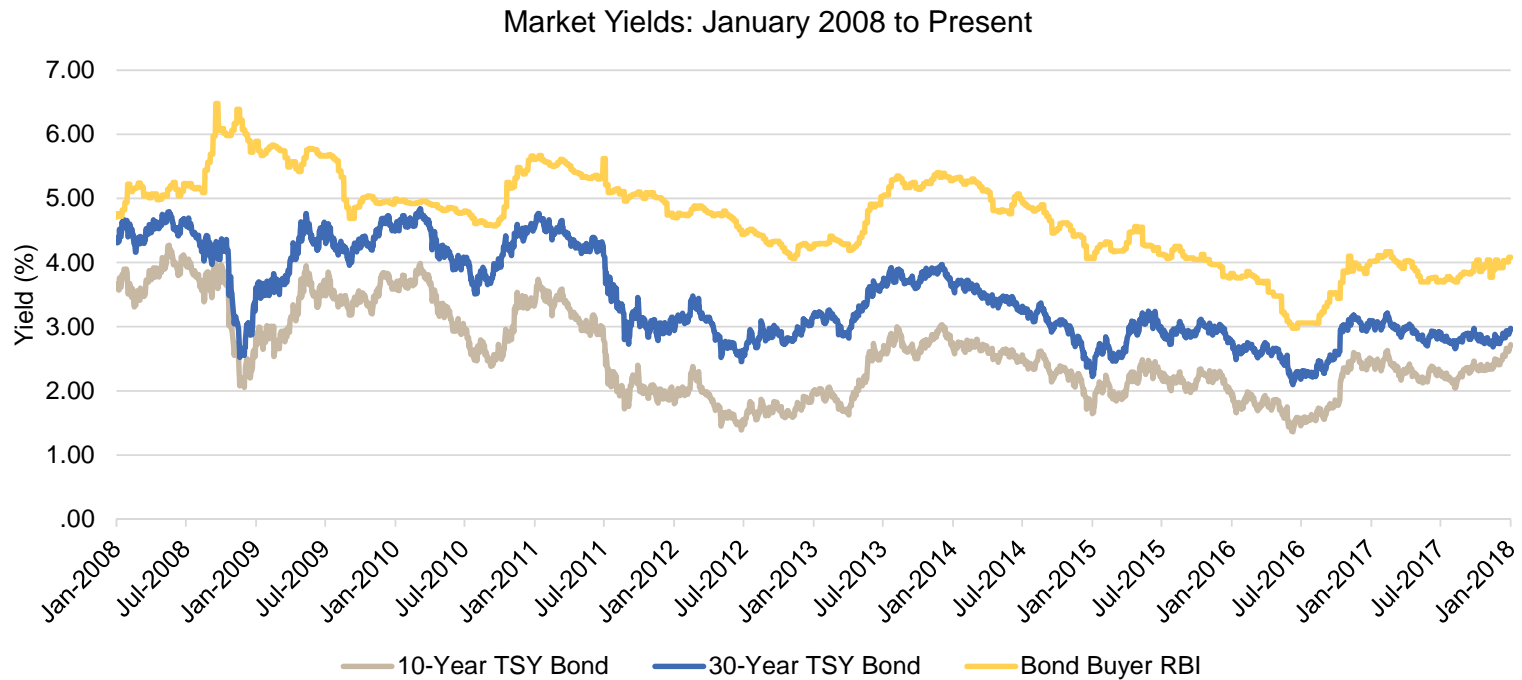
Summary of Credit Ratings – Fitch Ratings

- ◆ Fitch Ratings assigned a “AA+” rating based on the following credit factors:
 - Pledged HRTAC revenue streams exhibit high level of resilience against historical revenue losses and modeled stresses
 - Expected slow growth in HRTAC revenues as gains in sales tax revenues are tempered by continued weakness in fuels taxes
 - HRTAC’s receipt of the pledged revenue is subject to appropriation by the commonwealth’s general assembly, capping the revenue bond rating on this obligation at one notch below the commonwealth’s Issuer Default Rating
 - Presence of the U.S. Navy headquarters will help create long-term economic stability



Market Conditions for Sale – Historical Yields

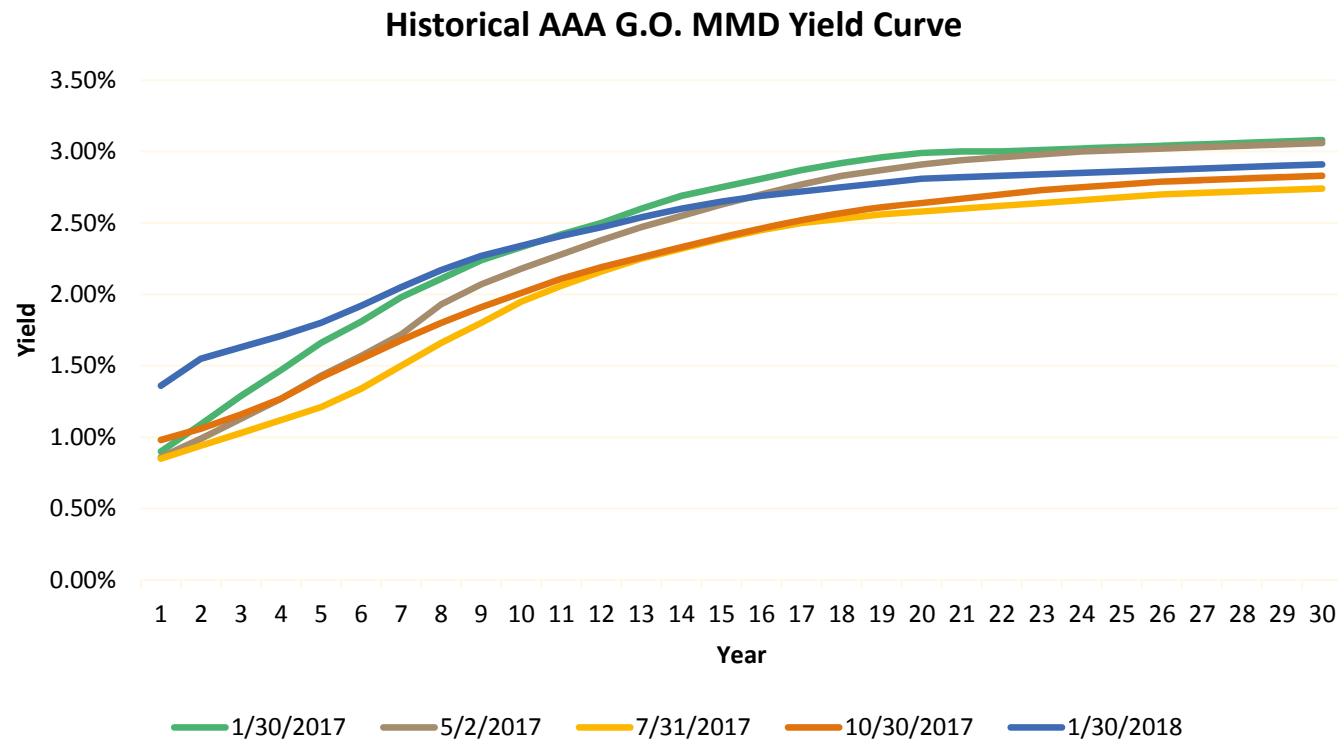
- The following graph shows the 10 year history of the 10 and 30 year US treasury bonds, along with the Bond Buyer RBI
- Interest rates steadily declined in the years leading up to the November 2016 election. In late 2016 following the election, interest rates temporarily trended up before reversing course in early 2017. On the sale date of 2018A Bonds (January 30, 2018) interest rates remained below historical averages.





Market Conditions for Sale – Yield Curve

- The chart below shows the progression of the “AAA” MMD index on a quarterly basis since January 2017. The “AAA” MMD index is a proxy for tax exempt interest rates on the highest rated (“AAA”) municipal bonds.
- Tax exempt rates were at historic lows prior to the November 2016 election. Following the election, interest rates started trending upward before reversing course leading up to the sale date of the 2018A Bonds.





Pricing of the Series 2018A Bonds – PFM Pricing Group Preliminary Scale

- Prior to entering into a pricing discussion with Wells Fargo, PFM developed independent pricing scales based on 5% coupons and alternative coupons. These scales were the starting point for the pricing negotiations.

PFM Pricing Group Scale - 5% Coupons				
Maturity	Principal	Coupon	Yield	Spread to MMD
7/1/2025	\$4,630	5.00%	2.13%	16 bps
7/1/2026	4,860	5.00%	2.26%	18 bps
7/1/2027	5,105	5.00%	2.37%	20 bps
7/1/2028	5,360	5.00%	2.46%	22 bps
7/1/2029	5,630	5.00%	2.54%	24 bps
7/1/2030	5,910	5.00%	2.60%	24 bps
7/1/2031	6,205	5.00%	2.68%	26 bps
7/1/2032	6,515	5.00%	2.73%	26 bps
7/1/2033	6,840	5.00%	2.78%	26 bps
7/1/2034	7,185	5.00%	2.81%	26 bps
7/1/2035	7,545	5.00%	2.85%	26 bps
7/1/2036	7,920	5.00%	2.88%	26 bps
7/1/2037	8,315	5.00%	2.91%	26 bps
7/1/2038	8,730	5.00%	2.94%	26 bps
7/1/2039	9,170			
7/1/2040	9,625			
7/1/2041	10,110			
7/1/2042	10,615			
7/1/2043	11,145	5.00%	3.09%	28 bps
7/1/2044	11,700			
7/1/2045	12,170			
7/1/2046	12,655			
7/1/2047	13,165			
7/1/2048	24,560	5.00%	3.18%	32 bps
7/1/2049	25,785			
7/1/2050	27,075			
7/1/2051	28,430			
7/1/2052	29,850	5.00%	3.24%	38 bps
7/1/2053	31,345			
7/1/2054	32,910			
7/1/2055	34,555			
7/1/2056	36,285			
7/1/2057	38,100	5.00%	3.21%	35 bps
	\$500,000			

PFM Pricing Group Scale - Alternative Coupons				
Maturity	Principal	Coupon	Yield	Spread to MMD
7/1/2025	\$4,630	5.00%	2.13%	16 bps
7/1/2026	4,860	5.00%	2.26%	18 bps
7/1/2027	5,105	5.00%	2.37%	20 bps
7/1/2028	5,360	5.00%	2.46%	22 bps
7/1/2029	5,630	5.00%	2.54%	24 bps
7/1/2030	5,910	5.00%	2.61%	25 bps
7/1/2031	6,205	5.00%	2.68%	26 bps
7/1/2032	6,515	5.00%	2.73%	26 bps
7/1/2033	6,840	5.00%	2.78%	26 bps
7/1/2034	7,185	5.00%	2.81%	26 bps
7/1/2035	7,545	5.00%	2.85%	26 bps
7/1/2036	7,920	5.00%	2.88%	26 bps
7/1/2037	8,315	4.00%	3.21%	56 bps
7/1/2038	8,730	4.00%	3.24%	56 bps
7/1/2039	9,170			
7/1/2040	9,625			
7/1/2041	10,110			
7/1/2042	10,615			
7/1/2043	11,145	4.00%	3.31%	58 bps
7/1/2044	11,700			
7/1/2045	12,170			
7/1/2046	12,655			
7/1/2047	13,165			
7/1/2048	24,560	5.25%	3.03%	25 bps
7/1/2049	25,785			
7/1/2050	27,075			
7/1/2051	28,430			
7/1/2052	29,850	4.00%	3.56%	78 bps
7/1/2053	31,345			
7/1/2054	32,910			
7/1/2055	34,555			
7/1/2056	36,285			
7/1/2057	38,100	5.25%	3.13%	35 bps
	\$500,000			

Interpolated MMD 1/24/2018
1.97%
2.08%
2.17%
2.24%
2.30%
2.36%
2.42%
2.47%
2.52%
2.55%
2.59%
2.62%
2.65%
2.68%
2.69%
2.70%
2.71%
2.72%
2.73%
2.74%
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Pricing of the Series 2018A Bonds – Initial Scale

- In the days leading up to the sale, the general municipal bond market experienced volatility and benchmark yields rose by 7 – 11 basis points
- After discussions with the HRTAC, PFM, and Wells Fargo, an initial scale was developed in order to enter the market for the pricing of the 2018A Bonds on January 30, 2018. The table to the right shows the initial interest rates, the spreads to the MMD index, and the difference between PFM’s preliminary Scales and the initial pricing.

HRTAC Series 2018A - Initial Pricing					Interpolated MMD 1/29/2018	Difference between Initial & PFM Spread
Maturity	Principal	Coupon	Yield	Spread to MMD		
7/1/2025	\$4,630	5.00%	2.22%	17 bps	2.05%	1 bps
7/1/2026	4,860	5.00%	2.36%	19 bps	2.17%	1 bps
7/1/2027	5,105	5.00%	2.47%	21 bps	2.26%	1 bps
7/1/2028	5,360	5.00%	2.56%	23 bps	2.33%	1 bps
7/1/2029	5,630	5.00%	2.66%	27 bps	2.39%	3 bps
7/1/2030	5,910	5.00%	2.74%	29 bps	2.45%	5 bps
7/1/2031	6,205	5.00%	2.81%	30 bps	2.51%	4 bps
7/1/2032	6,515	5.00%	2.85%	30 bps	2.55%	4 bps
7/1/2033	6,840	5.00%	2.90%	30 bps	2.60%	4 bps
7/1/2034	7,185	5.00%	2.94%	30 bps	2.64%	4 bps
7/1/2035	7,545	5.00%	2.97%	30 bps	2.67%	4 bps
7/1/2036	7,920	5.00%	3.00%	30 bps	2.70%	4 bps
7/1/2037	8,315	5.00%	3.03%	30 bps	2.73%	4 bps
7/1/2038	8,730	5.00%	3.06%	30 bps	2.76%	4 bps
7/1/2039(*)	9,170				2.77%	
7/1/2040(*)	9,625				2.78%	
7/1/2041(*)	10,110				2.79%	
7/1/2042(*)	10,615				2.80%	
7/1/2043(T)	11,145	5.00%	3.13%	32 bps	2.81%	4 bps
7/1/2044(*)	11,700				2.82%	
7/1/2045(*)	12,170				2.83%	
7/1/2046(*)	12,655				2.84%	
7/1/2047(*)	13,165				2.85%	
7/1/2048(T)	24,560	5.00%	3.21%	35 bps	2.86%	3 bps
7/1/2049(*)	25,785				2.86%	
7/1/2050(*)	27,075				2.86%	
7/1/2051(*)	28,430				2.86%	
7/1/2052(T)	29,850	5.00%	3.31%	45 bps	2.86%	7 bps
7/1/2053(*)	31,345				2.86%	
7/1/2054(*)	32,910				2.86%	
7/1/2055(*)	34,555				2.86%	
7/1/2056(*)	36,285				2.86%	
7/1/2057(T)	38,100	5.25%	3.31%	45 bps	2.86%	10 bps**
	\$500,000					

* = Sinking Fund;

** = Coupon change

T = Term Bond



Pricing of the Series 2018A Bonds – Order Summary

- Based on the initial interest rate scale outlined on the prior page, orders were received which are summarized below. In some cases, the Commission's bonds were as much as 8x oversubscribed, indicating strong demand from investors. The only two maturities that held a balance, were the 2052 and 2057 term bonds. The following page outlines the recommended changes to the interest rate scale in order for Wells Fargo to underwrite the 2018A Bonds.

\$500,000,000 Hampton Roads Transportation Accountability Commission Series 2018A							
Maturity	Coupon	# Orders	# Full Orders	Par Amount (\$000's)	Total Orders (\$000's)	Total Balance (\$000's)	% Subscription
7/1/2025	5.00%	20	6	\$4,630	\$35,680	(31,050)	770.63%
7/1/2026	5.00%	16	7	4,860	40,050	(35,190)	824.07%
7/1/2027	5.00%	14	5	5,105	30,060	(24,955)	588.83%
7/1/2028	5.00%	17	6	5,360	39,990	(34,630)	746.08%
7/1/2029	5.00%	5	4	5,630	22,730	(17,100)	403.73%
7/1/2030	5.00%	11	4	5,910	32,050	(26,140)	542.30%
7/1/2031	5.00%	13	4	6,205	39,145	(32,940)	630.86%
7/1/2032	5.00%	12	3	6,515	32,400	(25,885)	497.31%
7/1/2033	5.00%	13	4	6,840	40,875	(34,035)	597.59%
7/1/2034	5.00%	11	1	7,185	22,490	(15,305)	313.01%
7/1/2035	5.00%	4	0	7,545	9,055	(1,510)	120.01%
7/1/2036	5.00%	7	2	7,920	22,020	(14,100)	278.03%
7/1/2037	5.00%	17	3	8,315	31,210	(22,895)	375.35%
7/1/2038	5.00%	10	3	8,730	40,855	(32,125)	467.98%
7/1/2043	5.00%	6	0	50,665	74,000	(23,335)	146.06%
7/1/2048	5.00%	15	0	74,250	121,000	(46,750)	162.96%
7/1/2052	5.00%	6	0	111,140	94,150	16,990	84.71%
7/1/2057	5.25%	6	0	173,195	26,000	147,195	15.01%
Total:		203	52	\$500,000	\$753,760	(\$253,760)	150.75%



Pricing of the Series 2018A Bonds – Final Scale

- Following the order period, many of the maturities had significant oversubscription while the final two term bonds were undersubscription (see page 13 for summary)
- As a result of the orders received, and after discussion with the Commission and PFM, Wells Fargo recommended a decrease in the *yield* on the 2025 through 2034 maturities from 2 bps to 8 bps due to investor demand
- In order to better attract investors on the later maturities, Wells Fargo recommended an increase of 1 bp on the *yield* of the 2043 Term Bond and 2 bps on the 2052 Term Bond. Additionally, the 2057 Term Bond was changed from a 5.25% coupon to 5.50%
- Excluding the MMD increase from the 29th to the 30th from the aforementioned yield adjustments, the *spreads* were actually compressed more.

HRTAC Series 2018A - Final Pricing					Interpolated MMD 1/30/2018	Difference between Initial & Final Yield	Difference between Initial & Final Spread
Maturity	Principal	Coupon	Yield	Spread to MMD			
7/1/2025	\$4,745	5.00%	2.15%	6 bps	2.09%	-7 bps	-11 bps
7/1/2026	4,985	5.00%	2.28%	7 bps	2.21%	-8 bps	-12 bps
7/1/2027	5,235	5.00%	2.41%	10 bps	2.31%	-6 bps	-11 bps
7/1/2028	5,495	5.00%	2.49%	11 bps	2.38%	-7 bps	-12 bps
7/1/2029	5,770	5.00%	2.62%	18 bps	2.44%	-4 bps	-9 bps
7/1/2030	6,060	5.00%	2.69%	19 bps	2.50%	-5 bps	-10 bps
7/1/2031	6,360	5.00%	2.76%	20 bps	2.56%	-5 bps	-10 bps
7/1/2032	6,680	5.00%	2.82%	22 bps	2.60%	-3 bps	-8 bps
7/1/2033	7,015	5.00%	2.87%	22 bps	2.65%	-3 bps	-8 bps
7/1/2034	7,365	5.00%	2.92%	23 bps	2.69%	-2 bps	-7 bps
7/1/2035	7,735	5.00%	2.97%	25 bps	2.72%	0 bps	-5 bps
7/1/2036	8,120	5.00%	3.00%	25 bps	2.75%	0 bps	-5 bps
7/1/2037	8,525	5.00%	3.03%	25 bps	2.78%	0 bps	-5 bps
7/1/2038	8,950	5.00%	3.06%	25 bps	2.81%	0 bps	-5 bps
7/1/2039(*)	9,400				2.82%		
7/1/2040(*)	9,870				2.83%		
7/1/2041(*)	10,360				2.84%		
7/1/2042(*)	10,880				2.85%		
7/1/2043(T)	11,425	5.00%	3.14%	28 bps	2.86%	1 bps	-4 bps
7/1/2044(*)	11,995				2.87%		
7/1/2045(*)	12,595				2.88%		
7/1/2046(*)	13,225				2.89%		
7/1/2047(*)	13,885				2.90%		
7/1/2048(T)	23,980	5.00%	3.21%	30 bps	2.91%	0 bps	-5 bps
7/1/2049(*)	25,180				2.91%		
7/1/2050(*)	26,440				2.91%		
7/1/2051(*)	27,760				2.91%		
7/1/2052(T)	29,150	5.00%	3.33%	42 bps	2.91%	2 bps	-3 bps
7/1/2053(*)	30,605				2.91%		
7/1/2054(*)	32,290				2.91%		
7/1/2055(*)	34,065				2.91%		
7/1/2056(*)	35,940				2.91%		
7/1/2057(T)	37,915	5.50%	3.31%	40 bps	2.91%	Coupon	-5 bps**
	\$500,000						

* = Sinking Fund
 ** = Coupon Change
 T = Term Bond



Pricing of the Series 2018A Bonds – Top Ten Investors

- The table below lists the top ten accounts that submitted orders for the Commission's Bonds during the order period

Top Ten Investors				
Accounts	# Orders	# Full Orders	Total Orders (M)	% Par
Lord Abbett	12	9	\$68,285	13.7%
Eaton Vance - TABS	33	6	\$56,810	11.4%
Wells Fargo Principal Investing	1	0	\$50,000	10.0%
Goldman Sachs Asset Management	14	5	\$41,635	8.3%
Franking Advsiors Inc Suballoc.	2	0	\$40,000	8.0%
JP Morgan Asset Management	10	6	\$36,600	7.3%
Piper Jaffray & Co	4	4	\$26,745	5.3%
Susquehanna Capital Group	1	0	\$25,000	5.0%
Nuveen Asset Management	3	0	\$23,500	4.7%
RBC Capital Markets	4	1	\$22,205	4.4%



Sources and Uses of Funds

Sources:

Bond Proceeds:

Par Amount	500,000,000.00
Premium	83,270,072.85

583,270,072.85

Uses:

Project Fund Deposits:

Project Fund	582,098,045.85
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Delivery Date Expenses:

Cost of Issuance	345,000.00
Underwriter's Discount	827,027.00

1,172,027.00

583,270,072.85