



# School Board of Broward County, Florida

Finance Committee Meeting

May 30, 2019

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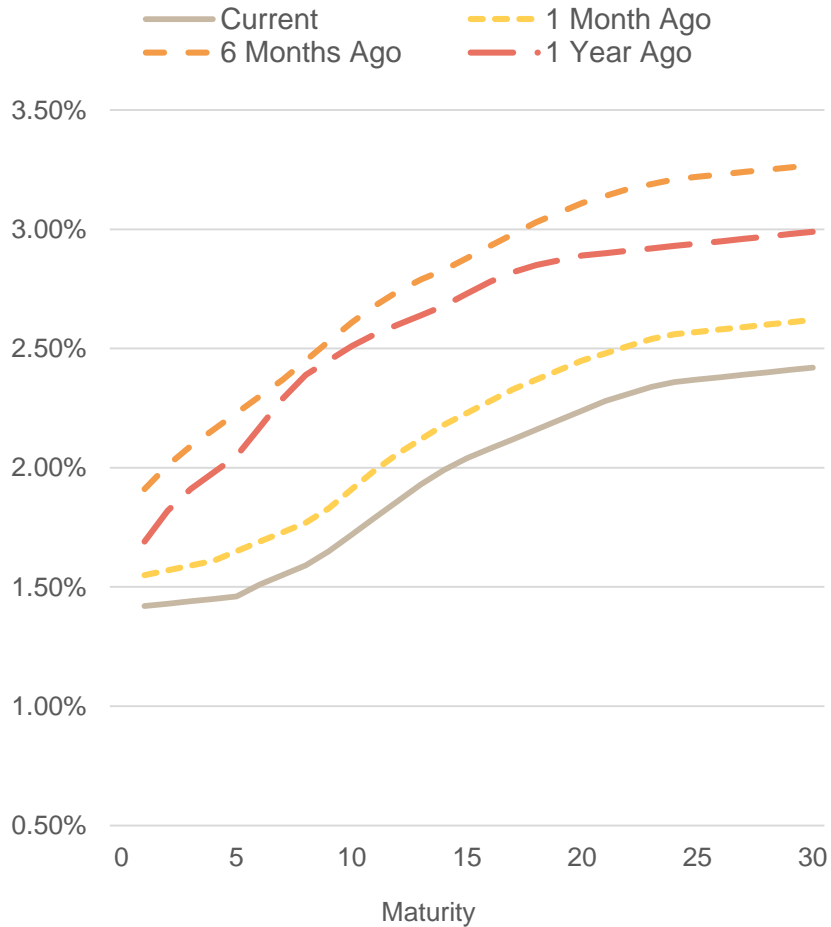


# I. Market Update

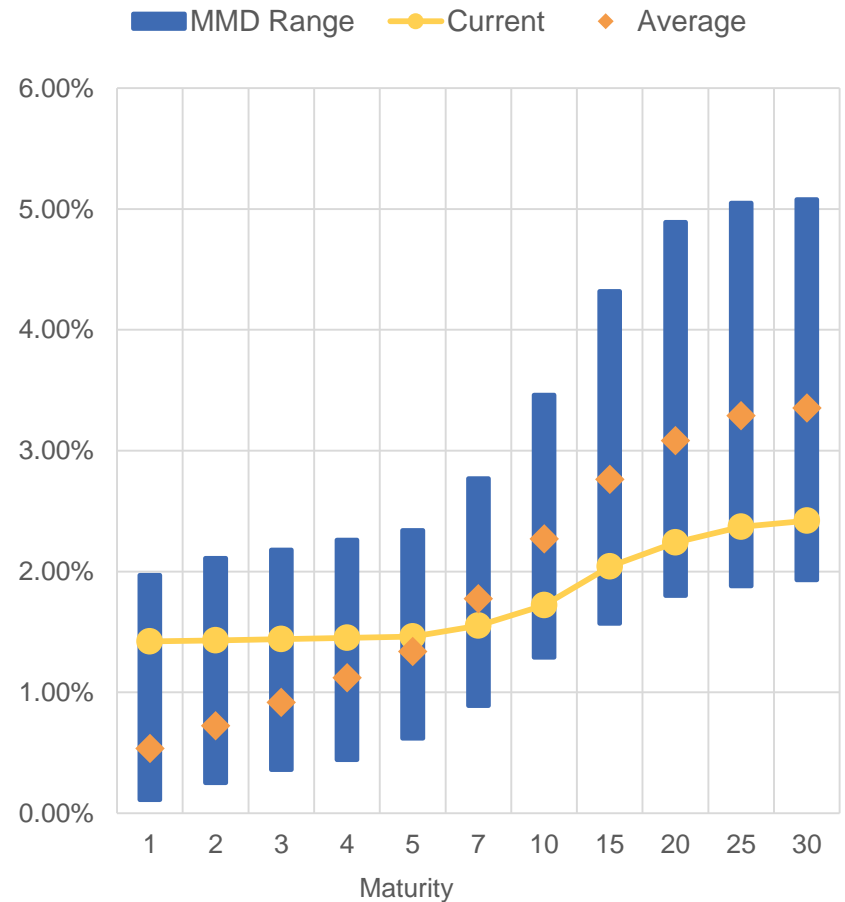


# Municipal Market Interest Rates

## MMA AAA G.O. Curve



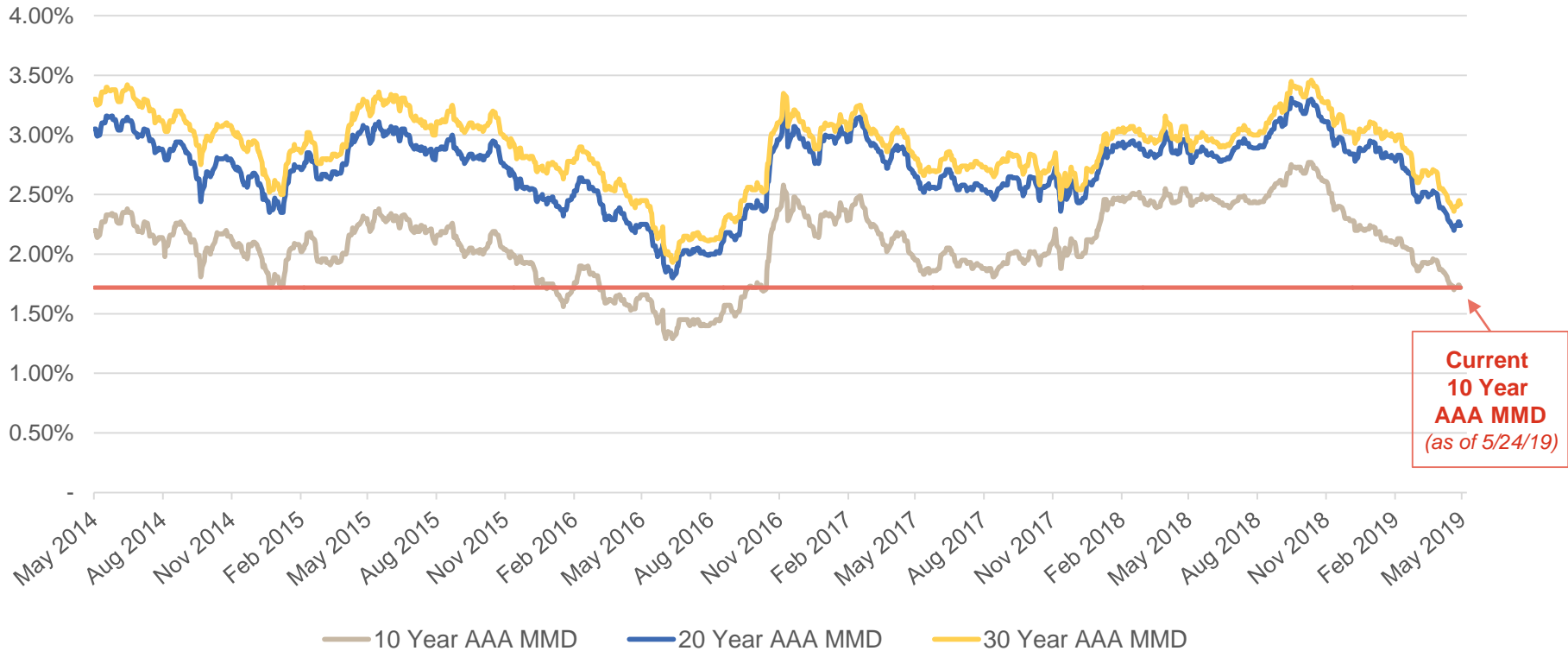
## MMD Ranges Over Past 10 Years





# Municipal Market Interest Rates

Market Yields: May 2014 to Present



**Current  
10 Year  
AAA MMD  
(as of 5/24/19)**

	10 Year AAA MMD	20 Year AAA MMD	30 Year AAA MMD
Current: 5/24/2019	1.72%	2.24%	2.42%
Average: 2014 - 2019	2.09%	2.71%	2.89%
Difference	-37 bps	-47 bps	-47 bps



## **II. Tax Anticipation Notes**



## Tax Anticipation Notes

### Series 2019 Overview

- The Finance Committee reviewed the 2019 TAN issuance at the March 15, 2019 meeting
  - Presenting again to increase the issuance size from \$125 million to **\$150 million**, representing \$25 million above what the District has typically issued for the annual TAN.
  - The District also plans to move up the issuance date to July rather than waiting until September as it has done in past years.
- Due to interest rate environment, the District may have an opportunity to earn positive arbitrage by meeting the exceptions in the Tax Code
  - Expected Rate for 1-Year TAN: 1.60%

Current Market Yields (1 Year)*	
Florida Education Investment Trust Fund (FEIT)	2.41%
State and Local Government Series (SLGS)	2.35%
U.S. Treasury Bill	2.38%

*\*Rates as of 5/22/2019*

- Most of the District's revenues are generated from local property taxes, of which the majority are received in November and December, so the TAN is issued to ease cash flow constraints in the General Fund during the interim.



## Key Dates for the Series 2019 TAN

May						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- 5/10 – Distribute Financing Timetable and Distribution
- 5/24 – Distribute First Drafts of Note Resolution, POS & NOS
- 5/29 – Distribute First Draft of Cash Flows
- 5/30 – Finance Committee Meeting

June						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

- 6/5 – APG Planning Meeting
- 6/12 – APG Finalize Meeting
- 6/20 – Receive Rating
- 6/25 – Regular School Board Meeting (RSBM) to Adopt Financing Documents
- 6/27 – Publish Summary NOS in Bond Buyer; Print and Post POS

July						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

- 7/9 – Competitive Sale
- 7/23 – Pre-Closing
- 7/24 – Closing Date





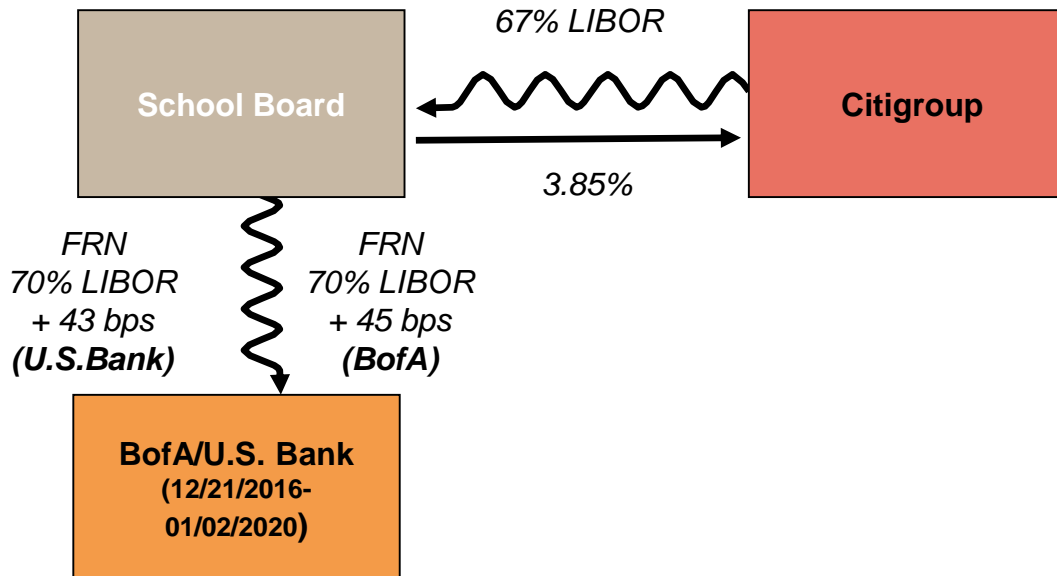
## **III. Swap Termination Analysis: Certificates of Participation, Series 2014A**



## Overview – Certificates of Participation, Series 2014A

- Floating-to-Fixed Rate Swap
  - Refunded COPs: Series 2004D
  - Current Notational Amount: \$113,825,000
  - End Date: July 1, 2029
  - Current MTM: (\$15,607,204.46) as of May 20, 2019

Note: FRN rolls over in January and will shift to approximately 79% of LIBOR plus a spread





## Assumptions for 2014A COPs Debt Service

		Through 1/2/2020 <sup>(1)</sup>		Next Roll <sup>(2)</sup>
		US Bank	BofA	TBD
<b>FRN</b>	<i>District Pays</i>	70% of LIBOR + 43 bps	70% of LIBOR + 45 bps	79% of LIBOR + 41 bps
<b>Swap</b>	<i>District Pays</i>	3.850%	3.850%	3.850%
	<i>District Recieves</i>	67% of LIBOR	67% of LIBOR	67% of LIBOR
<i>Increase for LIBOR Mismatch</i>		+ 7 bps	+ 7 bps	+ 29 bps
<b>Assumed Rate</b>		<b>4.353%</b>	<b>4.373%</b>	<b>4.552%</b>

(1) 1-Month LIBOR as of 5/20/2019 equal to 2.436%.

(2) Pricing formula updated to reflect prevailing market conditions

Certificates of Participation, Series 2014A			
<i>Period Ending</i>	<i>Principal</i>	<i>Interest<sup>(3)</sup></i>	<i>Debt Service</i>
7/15/2019	-	5,035,159	5,035,159
7/15/2020	3,925,000	5,160,094	9,085,094
7/15/2021	10,350,000	5,078,673	15,428,673
7/15/2022	10,775,000	4,599,903	15,374,903
7/15/2023	11,200,000	4,102,828	15,302,828
7/15/2024	11,675,000	3,591,544	15,266,544
7/15/2025	12,150,000	3,041,431	15,191,431
7/15/2026	12,600,000	2,490,241	15,090,241
7/15/2027	13,175,000	1,907,494	15,082,494
7/15/2028	13,700,000	1,301,575	15,001,575
7/15/2029	14,275,000	658,823	14,933,823
<b>Total</b>	<b>113,825,000</b>	<b>36,967,765</b>	<b>150,792,765</b>

(3) Interest reflective of the rate assumptions of 4.353% and 4.373% through January 2, 2020 and increasing to 4.552% thereafter, as shown in the table to the left



## Refunding Results on 2014A COPs – Level Savings

- In today's market, the District could achieve 1.153% net present value savings while terminating the 2014A swap, producing level cash flow savings of approximately \$135,000 per year on average.

Assumptions & Summary Refunding Results	
Dated/Delivery Date	7/1/2019
First Interest Payment	1/1/2020
Final Maturity	7/1/2029
All-In TIC	4.421%
Arbitrage Yield	1.898%
NPV Savings	1,311,938
% NPV Savings of Refunded Bonds	1.153%

Year	Aggregate Existing Debt Service	Savings from 2014A Refunding	Aggregate Debt Service After Refunding
2020	\$153,748,419	\$132,844	\$153,615,575
2021	154,308,226	132,673	154,175,553
2022	153,622,330	135,903	153,486,427
2023	152,793,865	132,828	152,661,037
2024	152,783,404	138,044	152,645,360
2025	152,990,810	134,431	152,856,379
2026	152,931,345	134,491	152,796,854
2027	119,320,338	137,494	119,182,845
2028	112,584,916	137,575	112,447,341
2029	98,305,368	134,073	98,171,295
2030	83,592,770	-	83,592,770
2031	67,079,592	-	67,079,592
2032	46,301,438	-	46,301,438
2033	28,890,438	-	28,890,438
2034	10,494,750	-	10,494,750
<b>Total</b>	<b>\$1,639,748,007</b>	<b>\$1,350,356</b>	<b>\$1,638,397,651</b>
<b>MADS</b>	<b>\$154,308,226</b>		<b>\$154,175,553</b>



## Refunding Results on 2014A COPs – Level Aggregate Debt Service

- As an alternative to level cash flow savings, the District could terminate the 2014A swap in today's market and price to produce a smoother aggregate service structure. This would reduce maximum annual debt service to \$149.8 million from \$154.3 million while still achieving a slightly positive net present value savings of 0.331%.

Assumptions & Summary Refunding Results	
Dated/Delivery Date	7/1/2019
First Interest Payment	1/1/2020
Final Maturity	7/1/2029
All-In TIC	3.797%
Arbitrage Yield	2.036%
NPV Savings	376,753
% NPV Savings of Refunded Bonds	0.331%

Year	Aggregate Existing Debt Service	Savings from 2014A Refunding	Aggregate Debt Service After Refunding
2020	\$153,748,419	\$3,875,094	\$149,873,325
2021	154,308,226	10,218,673	144,089,553
2022	153,622,330	10,164,903	143,457,427
2023	152,793,865	10,092,828	142,701,037
2024	152,783,404	10,056,544	142,726,860
2025	152,990,810	9,981,431	143,009,379
2026	152,931,345	9,880,241	143,051,104
2027	119,320,338	(14,272,506)	133,592,845
2028	112,584,916	(21,086,175)	133,671,091
2029	98,305,368	(35,434,677)	133,740,045
2030	83,592,770	-	83,592,770
2031	67,079,592	-	67,079,592
2032	46,301,438	-	46,301,438
2033	28,890,438	-	28,890,438
2034	10,494,750	-	10,494,750
Total	\$1,639,748,007	(\$6,523,644)	\$1,646,271,651
<b>MADS</b>	<b>\$154,308,226</b>		<b>\$149,873,325</b>



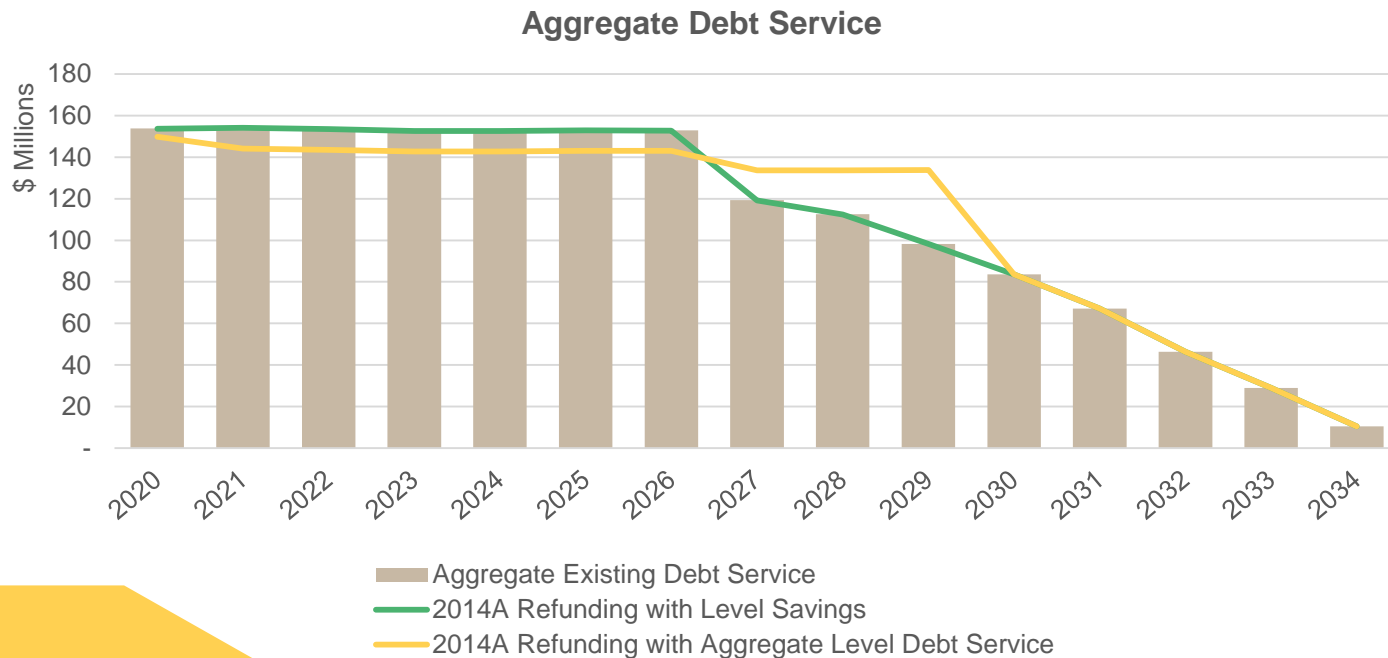
## Comparison of 2014A Refunding Structures

### ● Level Savings

- NPV Savings: \$1,311,938 or 1.153%
- Estimated Annual Cash Flow Savings: \$135,036
- MADS: \$154,175,553

### ● Aggregate Level Debt Service

- NPV Savings: \$376,753 or 0.331%
- MADS: \$149,873,325



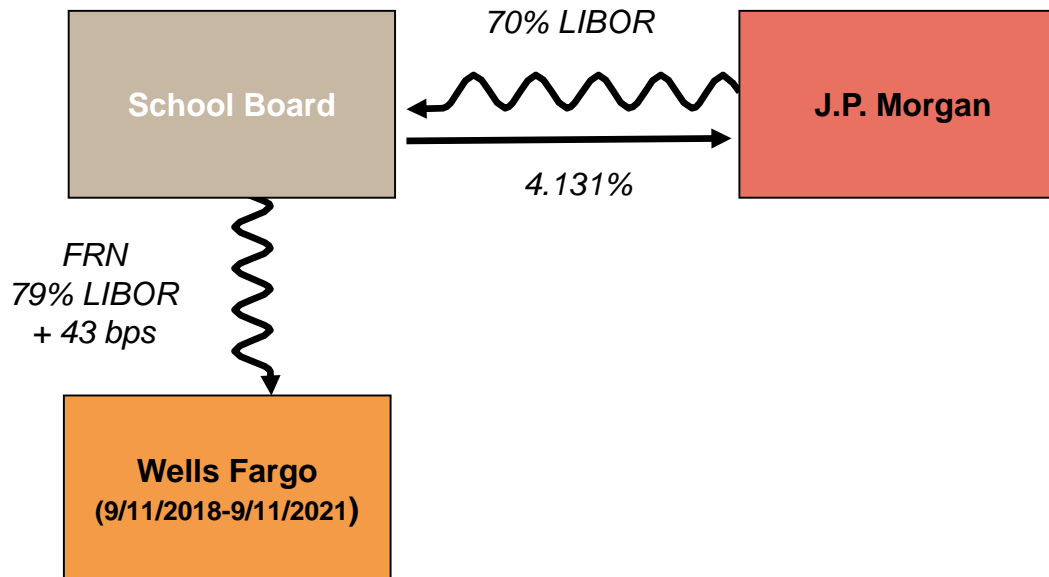


## **IV. Swap Termination Analysis: Certificates of Participation, Series 2015C**



## Overview – Certificates of Participation, Series 2015C

- Floating-to-Fixed Rate Swap
  - Refunded: Series 2006B COPs
  - Current Notational Amount: \$65,000,000
  - End Date: June 30, 2031
  - Current MTM: (\$16,689,514.40) as of May 20, 2019







## Assumptions for 2015C COPs Debt Service

		Through 9/11/2021 <sup>(1)</sup>	Next Roll <sup>(2)</sup>
FRN	District Pays	79% of LIBOR + 43 bps	79% of LIBOR + 43 bps
	District Receives	70% of LIBOR	70% of LIBOR
Swap	District Pays	4.131%	4.131%
	District Receives	70% of LIBOR	70% of LIBOR
Increase for LIBOR Mismatch		+ 22 bps	+ 22 bps
<b>Assumed Rate</b>		<b>4.780%</b>	<b>4.780%</b>

(1) 1-Month LIBOR as of 5/20/2019 equal to 2.436%.

(2) Assumes same pricing formula for next roll.

Certificates of Participation, Series 2015C			
Period Ending	Principal	Interest <sup>(3)</sup>	Debt Service
7/15/2019	-	3,150,153	3,150,153
7/15/2020	-	3,158,783	3,158,783
7/15/2021	-	3,150,153	3,150,153
7/15/2022	-	3,150,153	3,150,153
7/15/2023	-	3,150,153	3,150,153
7/15/2024	-	3,158,783	3,158,783
7/15/2025	-	3,150,153	3,150,153
7/15/2026	-	3,150,153	3,150,153
7/15/2027	-	3,150,153	3,150,153
7/15/2028	7,225,000	3,158,783	10,383,783
7/15/2029	18,425,000	2,800,001	21,225,001
7/15/2030	19,250,000	1,907,054	21,157,054
7/15/2031	20,100,000	974,124	21,074,124
<b>Total</b>	<b>65,000,000</b>	<b>37,208,599</b>	<b>102,208,599</b>

(3) Interest reflective of the rate assumption of 4.780% as shown in the table to the left



## Refunding Results on 2015C COPs – Level Savings

- If refunding the 2015C COPs and terminating the swap in today's market, the District would realize a net present value dissavings of 2.856% or approximately \$1.85 million.

Assumptions & Summary Refunding Results	
Dated/Delivery Date	7/1/2019
First Interest Payment	1/1/2020
Call Date	7/1/2029
Final Maturity	7/1/2031
All-In TIC	5.162%
Arbitrage Yield	2.211%
NPV Savings	(1,856,394)
% NPV Savings of Refunded Bonds	(2.856%)

Year	Aggregate Existing Debt Service	Savings from 2015C Refunding	Aggregate Debt Service After Refunding
2020	\$153,748,419	(\$190,967)	\$153,939,386
2021	154,308,226	(191,847)	154,500,073
2022	153,622,330	(189,347)	153,811,677
2023	152,793,865	(191,847)	152,985,713
2024	152,783,404	(190,467)	152,973,871
2025	152,990,810	(190,847)	153,181,657
2026	152,931,345	(192,847)	153,124,192
2027	119,320,338	(189,597)	119,509,936
2028	112,584,916	(192,717)	112,777,633
2029	98,305,368	(191,249)	98,496,617
2030	83,592,770	(188,696)	83,781,466
2031	67,079,592	(188,376)	67,267,968
2032	46,301,438	-	46,301,438
2033	28,890,438	-	28,890,438
2034	10,494,750	-	10,494,750
<b>Total</b>	<b>\$1,639,748,007</b>	<b>(\$2,288,804)</b>	<b>\$1,642,036,811</b>
<b>MADS</b>	<b>\$154,308,226</b>		<b>\$154,500,073</b>



## Refunding Results on 2015C COPs – Level Savings (Noncallable)

- The District could remove the call option on the 2030 and 2031 maturities when refunding the 2015C COPs, which would allow the District to terminate the swap and realize reduced net present value dissavings compared to the same refunding scenarios with the call option.

Assumptions & Summary Refunding Results	
Dated/Delivery Date	7/1/2019
First Interest Payment	1/1/2020
Call Date	-
Final Maturity	7/1/2031
All-In TIC	4.969%
Arbitrage Yield	2.222%
NPV Savings	(618,193)
% NPV Savings of Refunded Bonds	(0.951%)

Year	Aggregate Existing Debt Service	Savings from 2015C Refunding	Aggregate Debt Service After Refunding
2020	\$153,748,419	(\$84,467)	\$153,832,886
2021	154,308,226	(93,097)	154,401,323
2022	153,622,330	(93,097)	153,715,427
2023	152,793,865	(93,097)	152,886,963
2024	152,783,404	(84,467)	152,867,871
2025	152,990,810	(93,097)	153,083,907
2026	152,931,345	(93,097)	153,024,442
2027	119,320,338	(93,097)	119,413,436
2028	112,584,916	(29,467)	112,614,383
2029	98,305,368	(29,749)	98,335,117
2030	83,592,770	(34,196)	83,626,966
2031	67,079,592	(30,876)	67,110,468
2032	46,301,438	-	46,301,438
2033	28,890,438	-	28,890,438
2034	10,494,750	-	10,494,750
<b>Total</b>	<b>\$1,639,748,007</b>	<b>(\$851,804)</b>	<b>\$1,640,599,811</b>
<b>MADS</b>	<b>\$154,308,226</b>		<b>\$154,401,323</b>



## Comparison of 2015C Refunding Structures

### ◆ Level Savings

- NPV Savings: **(\$1,856,394)** or **(2.856%)**
- Estimated Annual Cash Flow Savings: **(\$190,734)**
- MADS: \$154,500,073

### ◆ Level Savings (Noncallable)

- NPV Savings: **(\$618,193)** or **(0.951%)**
- MADS: \$154,401,323



## **V. Summary/Conclusion**



## Recommendations

### • TAN Recommendation

- Increase par amount issued and monitor market conditions to set maturity based on interest rates at the time of issuance

### • Swap Terminations

- PFM recommends that the District move forward with document approval for terminating the swaps and refunding the Series 2014A and 2015C COPs
  - Recommended threshold is no more than 3% present value loss
  - Move forward with 2014A immediately and a combined refunding of the 2014A and 2015C if market conditions remain favorable
  - Staff will set principal amortization structure based on market conditions and capital budget parameters