

# School Board of Broward County, Florida

## **Financial** Advisory Committee Meeting

March 15, 2019

PFM Financial Advisors LLC

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## **Table of Contents**

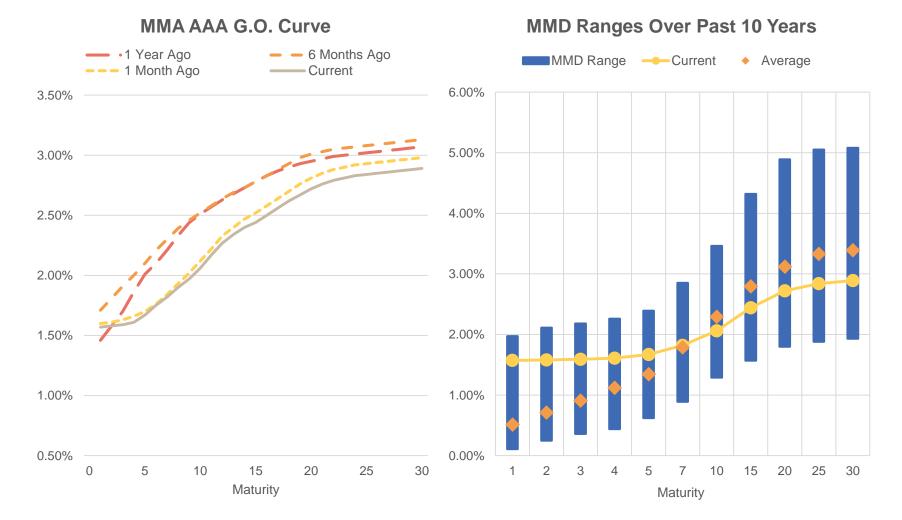
- I. Market Update
- II. Tax Anticipation Notes
- III. General Obligation Bonds
- IV. Exhibit A Secondary Trade Analysis (Series 2019)
- V. Exhibit B Secondary Trade Data (Series 2015 & Series 2019)



# I. Market Update



### **Municipal Market Interest Rates**



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### **Municipal Market Interest Rates**

#### 4.50% 4.00% 3.50% 3.00% 2.50% 2.00% 1.50% 1.00% 0.50% Mar 2015 Jun 2015 5ep 2015 Mar 2016 Jun 2016 5ep 2016 Mar 2018 Jun 2018 Jun 2017 Nor 2014 JUN 2014 Sep 2014 Dec 2014 Mar 2017 6 5ep 2018 Dec 2018 Nat 2019 5ep 201 30 Year AAA MMD 10 Year AAA MMD 20 Year AAA MMD 10 Year AAA MMD 20 Year AAA MMD 30 Year AAA MMD Current: 3/11/2019 2.06% 2.72% 2.89% Average: 2014 - 2019 2.11% 2.75% 2.93% Difference -5 bps -3 bps -4 bps

#### Market Yields: March 2014 to Present



# **II. Tax Anticipation Notes**



## **Tax Anticipation Notes**

- Series 2019 Overview
  - This September, the District will prepare to issue a Tax Anticipation Note (TAN) of approximately \$125 million as it typically does each year in the fall.
  - 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.
- Previous TAN Sales
  - The table below summarizes the sale results from the District's last five issuances of Tax Anticipation Notes

	Tax Anticipation Notes									
Series	Par Amount	TIC	Winning Bidder							
2014	\$125,000,000	0.074%	Bank of America Merrill Lynch							
2015	\$125,000,000	0.071%	J.P. Morgan Securites							
2016	\$125,000,000	0.512%	PNC Capital Markets							
2017	\$125,000,000	0.927%	Bank of America Merrill Lynch							
2018	\$125,000,000	1.871%	Bank of America Merrill Lynch							



# **III. General Obligation Bonds**



## **General Obligation Bonds**

- During the November 2014 election, voters approved a referendum allowing for the issuance by the District of up to \$800 million in general obligation (GO) bonds to finance improvements to school buildings and school grounds, including safety enhancements and instructional technology upgrades.
- Thus far, the District has issued two tranches of GO Bonds as summarized in table below.
  - The Series 2019 Bonds were sold on January 29 of this year and received seven (7) bids
  - Current ratings are "Aa2" by Moody's and "AA-" by Fitch

Genera	General Obligation Bonds								
	Series 2015	Series 2019							
Par Amount	\$155,055,000.00	\$174,750,000.00							
Bond Proceeds	163,786,942.00	201,207,349.80							
Avg. Annual Debt Service	10,058,913.20	11,654,317.38							
True Interest Cost (TIC)	3.652%	3.802%							
Arbitrage Yield	3.597%	2.987%							
Final Maturity	July 1, 2040	July 1, 2047							



# IV. Exhibit A – Secondary Trade Analysis (Series 2019)



## **General Obligation School Bonds, Series 2019**

		Or	riginal Prici	ng Informatio	n					Secon	dary Market	Statistics		
			Reo	ffering Scale				Trades from 01-29-19 to 02-22-19						
Maturity	Par (\$000)	Coupon	Yield	Price	Insurer	MMD	Yield vs. MMD <sup>2</sup>	Max Price	Total Volume (\$000)	# of Trades	Avg. Price	Avg. Spread		\$ Weighted Avg. Spread <sup>2 3</sup>
Maturity 7/1/2019 7/1/2020 7/1/2021 7/1/2022 7/1/2023 7/1/2024 7/1/2025 7/1/2026 7/1/2027 7/1/2028 7/1/2030 7/1/2030 7/1/2031 7/1/2031 7/1/2032 7/1/2033 7/1/2034 7/1/2035 7/1/2036 7/1/2038 7/1/2038 7/1/2039 7/1/2040	Par (\$000) 1,120 2,975 3,120 3,280 3,440 3,615 3,795 3,985 4,185 4,395 4,610 4,845 5,085 5,340 5,605 5,885 6,180 6,490 6,815 7,155 7,510 7,890	Coupon 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000% 5.000%	Yield 1.740% 1.780% 1.830% 1.850% 1.920% 2.000% 2.080% 2.460% 2.460% 2.570% 2.690% 2.750% 2.830% 2.890% 2.890% 3.020% 3.020% 3.140% 3.190% 3.230%	Price 101.237 104.378 107.357 110.282 112.886 115.236 117.368 119.283 120.901 122.101 121.164 120.143 119.040 118.494 117.769 117.230 116.603 116.070 115.539 115.012 114.574 114.226	Insurer	MMD 1.670% 1.670% 1.670% 1.710% 1.750% 1.810% 1.870% 1.940% 2.030% 2.120% 2.220% 2.340% 2.430% 2.500% 2.570% 2.630% 2.700% 2.760% 2.880% 2.930% 2.970%		120.013 119.895 118.975 118.886 116.159 115.004	(\$000) 50 18,540 10,000 11,360 7,510 31,560	no-trades no-trades	119.888 119.595 118.925 117.562 115.864 114.960	2 42 bps 20 bps 23 bps 9 bps 16 bps 25 bps	Avg. Price <sup>3</sup> 119.888 119.595 118.925 116.568 115.857 114.960	Avg. Spread <sup>2</sup> <sup>3</sup> 42 bps 20 bps 23 bps 23 bps 17 bps 25 bps
7/1/2041	8,280	5.000%	3.250%	114.052		2.990%	26 bps	116.803 114.313	5,255	4	115.755 114.313	15 bps	115.176 114.313	23 bps
7/1/2042 7/1/2043 7/1/2047	8,695 9,130 41,325	5.000% 5.000% 5.000%	3.270% 3.290% 3.330%	113.878 113.705 113.360		3.010% 3.030% 3.070%	26 bps 26 bps 26 bps	114.313 114.787 115.328	8,695 24,130 94,075	1 4 14	114.313 114.581 114.303	28 bps 25 bps 24 bps	114.313 114.505 114.150	28 bps 25 bps 27 bps

<sup>1</sup>Excludes Original Issue Trades (trades on first trading day at Original Issue Price)

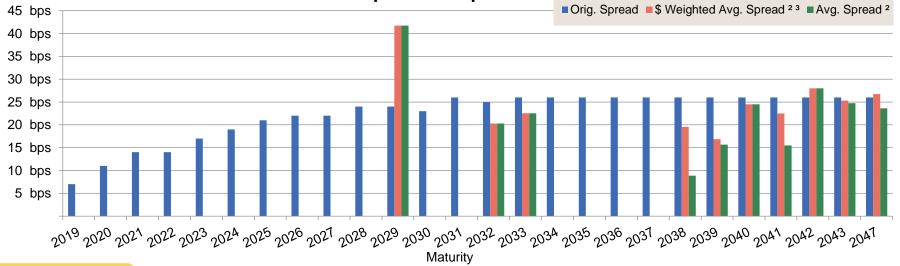
<sup>2</sup>All Spreads based on end of day MMD rates.

<sup>3</sup>Per MSRB reporting requirements, some trades may only be reported as > \$1mm.



Price Comparison Orig. Price S Weighted Avg. Price Avg. Price S Weighted Avg. P







# V. Exhibit B – Secondary Trade Data (Series 2015 & Series 2019)

	Broward S	Schools - Gene			s, Series 201	5
			ondary Trade 1 6/2/2015 to 7			
Maturity	Coupon	Trade Date	Par	Trade Yield	Spread	Туре
7/1/2016	5.00%	6/3/2015	3,215,000	0.390%	7 bps	to customer
7/1/2017	5.00%	6/3/2015	250,000	0.820%	16 bps	to customer
		6/8/2015	3,365,000	1.000%	33 bps	to customer
7/1/2018	5.00%	6/3/2015	3,795,000	1.300%	26 bps	to customer
7/1/2019	5.00%	6/3/2015	3,985,000	1.640%	36 bps	to customer
7/1/2020	5.00%	6/3/2015	4,185,000	1.880%	39 bps	to customer
7/1/2021	5.00%	6/3/2015	4,395,000	2.130%	39 bps	to customer
7/1/2022	5.00%	6/3/2015	4,615,000	2.310%	40 bps	to customer
7/1/2023	5.00%	6/3/2015	4,845,000	2.480%	44 bps	to customer
7/1/2024	5.00%	6/3/2015	5,085,000	2.670%	48 bps	to customer
7/1/2025	5.00%	6/3/2015	5,340,000	2.840%	53 bps	to customer
		6/17/2015	10,000	3.140%	85 bps	inter-dealer
			10,000	3.151%	86 bps	from customer
		7/2/2015	10,000	2.900%	58 bps	inter-dealer
			10,000	2.900%	58 bps	inter-dealer
			10,000	2.890%	57 bps	to customer
7/1/2026	3.50%	6/3/2015	5,605,000	3.000%	55 bps	to customer
7/1/2027	4.00%	6/3/2015	5,805,000	3.130%	56 bps	to customer
7/1/2028	4.25%	6/3/2015	6,035,000	3.270%	60 bps	to customer
7/1/2029	4.00%	6/3/2015	6,290,000	3.400%	65 bps	to customer
7/1/2030	4.00%	6/3/2015	700,000	3.530%	70 bps	inter-dealer
111/2000	4.0078	0/3/2013	5,845,000	3.530%	70 bps 70 bps	to customer
		6/8/2015	25,000	3.434%	58 bps	to customer
		0/0/2013	25,000	3.550%	70 bps	inter-dealer
			20,000	3.319%	47 bps	to customer
			20,000	3.550%	70 bps	inter-dealer
			30,000	3.288%	44 bps	to customer
			30,000	3.550%	70 bps	inter-dealer
		6/11/2015	10,000	3.560%	69 bps	inter-dealer
		0/11/2013	10,000	3.444%	57 bps	to customer
			15,000	3.560%	69 bps	inter-dealer
			15,000	3.444%	57 bps	to customer
		6/12/2015	30,000	3.268%	44 bps	to customer
		0,12,2010	30,000	3.530%	70 bps	inter-dealer
		6/15/2015	75,000	3.280%	47 bps	to customer
		0,10,2010	75,000	3.510%	70 bps	inter-dealer
		6/16/2015	10,000	3.280%	61 bps	to customer
		0, 10, 2010	10,000	3.510%	84 bps	inter-dealer
			50,000	3.249%	58 bps	to customer
			50,000	3.510%	84 bps	inter-dealer
		6/17/2015	25,000	3.470%	70 bps	inter-dealer
			25,000	3.286%	52 bps	to customer
			10,000	3.447%	68 bps	to customer
			10,000	3.470%	70 bps	inter-dealer
		6/18/2015	60,000	3.470%	68 bps	inter-dealer
			60,000	3.470%	68 bps	inter-dealer
			60,000	3.459%	67 bps	to customer
		6/22/2015	15,000	3.470%	69 bps	inter-dealer
			15,000	3.470%	69 bps	to customer
		6/23/2015	25,000	3.510%	71 bps	inter-dealer
		0,20,2010	25,000	3.510%	71 bps	to customer
			25,000	3.510%	71 bps	inter-dealer
		6/25/2015	25,000	3.356%	56 bps	to customer
		0,20,2010	25,000	3.530%	73 bps	inter-dealer
			25,000	3.356%	56 bps	to customer

		1	50,000	3.530%	73 bps	inter-dealer
			50,000	3.530%	73 bps	to customer
		6/30/2015	200,000	3.410%	64 bps	inter-dealer
			200,000	3.410%	64 bps	inter-dealer
			200,000	3.399%	63 bps	to customer
7/1/2031	4.00%	6/3/2015	700,000	3.634%	74 bps	inter-dealer
			700,000	3.640%	75 bps	inter-dealer
			6,105,000	3.640%	75 bps	to customer
		6/4/2015	15,000	3.353%	48 bps	to customer
			15,000	3.620%	75 bps	inter-dealer
			400,000	3.523%	65 bps	to customer
			400,000	3.620%	75 bps	inter-dealer
			400,000	3.650%	78 bps	inter-dealer
			10,000	3.365%	50 bps	to customer
			,		•	
		0/40/0045	10,000	3.620%	75 bps	inter-dealer
		6/12/2015	15,000	3.590%	70 bps	inter-dealer
		0/1 = /0.0 1 =	15,000	3.590%	70 bps	to customer
		6/15/2015	20,000	3.358%	49 bps	to customer
			20,000	3.590%	72 bps	inter-dealer
			15,000	3.640%	77 bps	inter-dealer
			15,000	3.640%	77 bps	inter-dealer
			15,000	3.629%	76 bps	to customer
		6/16/2015	200,000	3.558%	83 bps	to customer
			200,000	3.558%	83 bps	inter-dealer
			200,000	3.590%	86 bps	inter-dealer
		200,000	3.596%	87 bps	inter-dealer	
			25,000	3.590%	86 bps	inter-dealer
			25,000	3.590%	86 bps	to customer
7/1/2032	4.00%	6/3/2015	800,000	3.734%	79 bps	inter-dealer
.,		0, 0, 2010	6,275,000	3.740%	80 bps	to customer
		6/5/2015	25,000	3.451%	48 bps	to customer
		0,0,2010	25,000	3.720%	75 bps	inter-dealer
			20,000	3.720%	75 bps	inter-dealer
			20,000	3.713%	74 bps	inter-dealer
			20,000	3.556%	59 bps	to customer
		6/10/2015	50,000	3.421%	44 bps	to customer
		0/10/2010	50,000	3.690%	71 bps	inter-dealer
		6/12/2015	20,000	3.660%	71 bps 72 bps	inter-dealer
		0/12/2013	20,000	3.438%	50 bps	to customer
			20,000	3.660%		inter-dealer
		6/16/2015	10,000	3.640%	72 bps 86 bps	inter-dealer
		0/10/2015	10,000		•	
		C/4 0/204 F	,	3.350%	57 bps	to customer
		6/18/2015	25,000	3.368%	47 bps	to customer
		0/00/0045	25,000	3.600%	70 bps	inter-dealer
		6/22/2015	100,000	3.590%	70 bps	inter-dealer
		0/00/00/15	100,000	3.590%	70 bps	to customer
		6/29/2015	25,000	3.320%	44 bps	to customer
			25,000	3.590%	71 bps	inter-dealer
		7/1/2015	100,000	3.590%	66 bps	inter-dealer
			100 000	3.578%	65 bps	to customer
			100,000		·	
I			100,000	3.590%	66 bps	inter-dealer
		7/8/2015	100,000 100,000	3.590% 3.257%	43 bps	to customer
		7/8/2015	100,000 100,000 100,000	3.590% 3.257% 3.500%	43 bps 67 bps	
		7/8/2015	100,000 100,000	3.590% 3.257%	43 bps	to customer
		7/8/2015	100,000 100,000 100,000	3.590% 3.257% 3.500%	43 bps 67 bps	to customer inter-dealer
		7/8/2015	100,000 100,000 100,000 50,000	3.590% 3.257% 3.500% 3.226%	43 bps 67 bps 40 bps	to customer inter-dealer to customer
		7/8/2015	100,000 100,000 100,000 50,000 50,000 50,000	3.590% 3.257% 3.500% 3.226% 3.500%	43 bps 67 bps 40 bps 67 bps 67 bps	to customer inter-dealer to customer inter-dealer
			100,000 100,000 100,000 50,000 50,000 50,000 45,000	3.590% 3.257% 3.500% 3.226% 3.500% 3.500% 3.394%	43 bps 67 bps 40 bps 67 bps 67 bps 52 bps	to customer inter-dealer to customer inter-dealer inter-dealer inter-dealer
			$     \begin{array}{r}       100,000 \\       100,000 \\       100,000 \\       50,000 \\       50,000 \\       50,000 \\       45,000 \\       45,000 \\     \end{array} $	3.590% 3.257% 3.500% 3.226% 3.500% 3.500%	43 bps 67 bps 40 bps 67 bps 67 bps 52 bps 41 bps	to customer inter-dealer to customer inter-dealer inter-dealer
			100,000 100,000 100,000 50,000 50,000 50,000 45,000	3.590% 3.257% 3.500% 3.226% 3.500% 3.500% 3.394% 3.279%	43 bps 67 bps 40 bps 67 bps 67 bps 52 bps	to customer inter-dealer to customer inter-dealer inter-dealer inter-dealer to customer

I		7/13/2015	180,000	3.650%	72 bps	to customer
		1/13/2013	180,000	3.700%	72 bps 77 bps	inter-dealer
			10,000	3.620%	69 bps	inter-dealer
			10,000	3.620%	69 bps	inter-dealer
			10,000	3.608%	68 bps	to customer
7/1/2033	4.00%	6/3/2015	800,000	3.774%	79 bps	inter-dealer
1/1/2000	4.00 %	0/3/2013	800,000	3.780%	80 bps	inter-dealer
			6,560,000	3.780%	80 bps	to customer
		6/23/2015	50,000	3.431%	47 bps	to customer
		0/23/2013	50,000	3.700%	74 bps	inter-dealer
			200,000	3.744%	74 bps 78 bps	inter-dealer
			200,000	3.756%	80 bps	inter-dealer
		6/24/2015	170,000	3.602%	64 bps	to customer
		0/24/2013	30,000	3.602%	64 bps	to customer
		7/2/2015	25,000	3.435%	46 bps	to customer
		1/2/2013	25,000	3.670%	69 bps	inter-dealer
		7/7/2015	25,000	3.610%	74 bps	inter-dealer
		1/1/2015	25,000	3.400%	53 bps	to customer
		7/8/2015	45,000	3.304%	43 bps	to customer
		1/0/2010	45,000 45,000	3.580%	71 bps	inter-dealer
			45,000 45,000	3.580% 3.580%	71 bps 71 bps	inter-dealer
		7/9/2015		3.478%		inter-dealer
		1/9/2013	455,000 455,000	3.478% 3.358%	57 bps 45 bps	to customer
			455,000	3.614%	70 bps	inter-dealer
			455,000	3.623%	70 bps 71 bps	inter-dealer
7/1/2034	4.00%	6/3/2015	800,000	3.814%	71 bps 79 bps	inter-dealer
1/1/2034	4.00 %	0/3/2015	6,855,000	3.820%	•	to customer
		6/12/2015	15,000	3.721%	80 bps 69 bps	to customer
		0/12/2013	15,000	3.840%	81 bps	inter-dealer
		6/18/2015	10,000	3.514%	52 bps	to customer
		0/10/2013	10,000	3.750%	76 bps	inter-dealer
			10,000	3.750%	76 bps 76 bps	inter-dealer
			10,000	3.750%	76 bps	to customer
		6/22/2015	10,000	3.700%	70 bps 72 bps	inter-dealer
		0/22/2010	10,000	3.700%	72 bps 72 bps	inter-dealer
			10,000	3.688%	71 bps	to customer
			40,000	3.431%	45 bps	to customer
			40,000	3.700%	72 bps	inter-dealer
		6/23/2015	50,000	3.740%	74 bps	inter-dealer
			50,000	3.504%	50 bps	to customer
		6/25/2015	25,000	3.582%	58 bps	to customer
			25,000	3.760%	76 bps	inter-dealer
		7/1/2015	25,000	3.475%	46 bps	to customer
			25,000	3.710%	69 bps	inter-dealer
			25,000	3.486%	47 bps	to customer
			25,000	3.710%	69 bps	inter-dealer
		7/2/2015	15,000	3.475%	46 bps	to customer
			15,000	3.710%	69 bps	inter-dealer
			25,000	3.475%	46 bps	to customer
			25,000	3.710%	69 bps	inter-dealer
		7/6/2015	25,000	3.372%	41 bps	to customer
			25,000	3.650%	69 bps	inter-dealer
			25,000	3.650%	69 bps	inter-dealer
			25,000	3.431%	47 bps	to customer
			25,000	3.710%	75 bps	inter-dealer
			25,000	3.710%	75 bps	inter-dealer
			30,000	3.474%	STOPS	to customer
				3.474% 3.710%	51 bps 75 bps	inter-dealer
			30,000	3.710%	75 bps	inter-dealer

		1	10,000	3.710%	75 bps	inter-dealer
		7/14/2015	25,000	3.555%	55 bps	to customer
			25,000	3.760%	75 bps	inter-dealer
		7/15/2015	170,000	3.762%	78 bps	inter-dealer
			170,000	3.750%	77 bps	inter-dealer
			170,000	3.508%	53 bps	to customer
			170,000	3.777%	80 bps	inter-dealer
			100,000	3.481%	50 bps	to customer
			100,000	3.750%	77 bps	inter-dealer
7/1/2035	4.00%	6/3/2015	25,000	3.774%	71 bps	to customer
			25,000	3.809%	75 bps	inter-dealer
			25,000	3.857%	80 bps	inter-dealer
			900,000	3.860%	80 bps	inter-dealer
			7,060,000	3.860%	80 bps	to customer
		6/10/2015	250,000	3.879%	77 bps	to customer
			250,000	3.910%	80 bps	inter-dealer
		6/11/2015	45,000	3.636%	53 bps	to customer
		0, 11,2010	45,000	3.910%	80 bps	inter-dealer
		6/12/2015	40,000	3.584%	51 bps	to customer
			40,000	3.860%	79 bps	inter-dealer
			15,000	3.584%	51 bps	to customer
			15,000	3.860%	79 bps	inter-dealer
			30,000	3.584%	51 bps	to customer
			30,000	3.860%	79 bps	inter-dealer
			25,000	3.584%	51 bps	to customer
			25,000	3.860%	79 bps	inter-dealer
			40,000	3.584%	51 bps	to customer
			40,000	3.860%	79 bps	inter-dealer
			10,000	3.622%	55 bps	to customer
			10,000	3.860%	79 bps	inter-dealer
		6/15/2015	5,000	3.655%	61 bps	to customer
		0/10/2010	40,000	3.833%	78 bps	inter-dealer
			40,000	3.582%	53 bps	to customer
			10,000	3.840%	79 bps	inter-dealer
			10,000	3.828%	78 bps	to customer
		6/16/2015	15,000	3.893%	98 bps	inter-dealer
		0/10/2010	15,000	3.870%	96 bps	to customer
			25,000	3.594%	68 bps	to customer
		6/17/2015	50,000	3.750%	74 bps	to customer
		0/11/2010	25,000	3.809%	80 bps	inter-dealer
			25,000	3.599%	59 bps	to customer
			25,000	3.809%	80 bps	inter-dealer
			25,000	3.599%	59 bps	to customer
7/1/2036	4.00%	6/3/2015	900,000	3.924%	82 bps	inter-dealer
1/1/2000	4.0070	0/0/2010	7,380,000	3.930%	83 bps	to customer
		6/4/2015	50,000	3.636%	56 bps	to customer
		0/4/2013	50,000	3.910%	83 bps	inter-dealer
		6/8/2015	65,000	3.677%	56 bps	to customer
		0,0/2010	65,000	3.940%	82 bps	inter-dealer
		6/11/2015	100,000	3.990%	84 bps	inter-dealer
		5/11/2010	100,000	3.982%	83 bps	inter-dealer
			100,000	3.777%	63 bps	to customer
		6/16/2015	200,000	3.891%	94 bps	inter-dealer
		5,10,2010	200,000	3.900%	95 bps	inter-dealer
		6/17/2015	200,000	3.891%	84 bps	inter-dealer
		5,11/2015	200,000	3.652%	60 bps	to customer
		6/30/2015	40,000	3.740%	69 bps	inter-dealer
		0,00/2010	40,000	3.740%	69 bps	inter-dealer
			40,000	3.740%	69 bps	inter-dealer
			40,000	3.562%	51 bps	to customer
			+0,000	0.002/0	equite 1	

			230,000	3.790%	69 bps	inter-dealer
			230,000	3.778%	68 bps	to customer
		7/8/2015	20,000	3.421%	43 bps	to customer
			20,000	3.700%	71 bps	inter-dealer
			20,000	3.700%	71 bps	inter-dealer
		7/14/2015	10,000	3.547%	46 bps	to customer
			10,000	3.830%	74 bps	inter-dealer
			10,000	3.830%	74 bps	inter-dealer
			15,000	3.547%	46 bps	to customer
			15,000	3.830%	74 bps	inter-dealer
			15,000	3.830%	74 bps	inter-dealer
			50,000	3.806%	72 bps	to customer
			50,000	3.830%	74 bps	inter-dealer
			20,000	3.806%	72 bps	to customer
			20,000	3.830%	74 bps	inter-dealer
7/1/2037	4.00%	6/3/2015	900,000	3.963%	82 bps	inter-dealer
			900,000	3.970%	83 bps	inter-dealer
			7,710,000	3.970%	83 bps	to customer
		6/5/2015	15,000	3.950%	78 bps	inter-dealer
			15,000	3.950%	78 bps	inter-dealer
			15,000	3.680%	51 bps	to customer
		6/9/2015	20,000	3.950%	79 bps	inter-dealer
			20,000	3.819%	66 bps	to customer
		6/10/2015	100,000	4.000%	81 bps	to customer
		0, 10, 2010	100,000	4.000%	81 bps	inter-dealer
			20,000	3.700%	51 bps	to customer
			20,000	4.000%	81 bps	inter-dealer
			25,000	4.000%	81 bps	inter-dealer
			25,000	3.759%	57 bps	to customer
			15,000	4.010%	82 bps	to customer
			15,000	4.019%	83 bps	inter-dealer
		6/11/2015	25,000	4.000%	81 bps	inter-dealer
		0, 1 , 2010	25,000	4.000%	81 bps	to customer
			10,000	4.000%	81 bps	inter-dealer
			10,000	4.000%	81 bps	to customer
			10,000	4.000%	81 bps	inter-dealer
			10,000	3.759%	57 bps	to customer
			15,000	3.700%	51 bps	to customer
			15,000	4.000%	81 bps	inter-dealer
			15,000	4.000%	81 bps	inter-dealer
		6/16/2015	100,000	3.697%	71 bps	to customer
		0, 10, 2010	100,000	3.920%	93 bps	inter-dealer
			25,000	3.900%	91 bps	to customer
			25,000	3.900%	91 bps	inter-dealer
			50,000	3.916%	93 bps	to customer
			50,000	3.940%	95 bps	inter-dealer
			50,000	3.940%	95 bps	inter-dealer
			50,000	3.940%	95 bps	to customer
		6/18/2015	130,000	3.920%	81 bps	inter-dealer
		0,10,2010	10,000	3.669%	56 bps	to customer
			20,000	3.669%	56 bps	to customer
			70,000	3.788%	68 bps	to customer
			15,000	3.669%	56 bps	to customer
			15,000	3.669%	56 bps	to customer
		6/25/2015	25,000	3.700%	58 bps	to customer
		0,20,2010	25,000	3.880%	76 bps	inter-dealer
		6/26/2015	25,000	3.760%	61 bps	to customer
		0,20,2010	25,000	3.880%	73 bps	inter-dealer
		6/29/2015	25,000	3.810%	73 bps 72 bps	inter-dealer
		0/20/2010	25,000	3.573%	48 bps	to customer
			25,000	3.810%	72 bps	inter-dealer
	l	L	20,000	0.01070	12 043	

I		7/1/2015	70,000	3.637%	50 bps	to customer
			100,000	3.890%	75 bps	inter-dealer
		7/2/2015	30,000	3.554%	41 bps	to customer
			30,000	3.830%	69 bps	inter-dealer
			5,000	3.754%	61 bps	to customer
			5,000	3.830%	69 bps	inter-dealer
			10,000	3.830%	69 bps	to customer
			10,000	3.830%	69 bps	inter-dealer
		7/6/2015	25,000	3.583%	50 bps	to customer
			5,000	3.583%	50 bps	to customer
		7/8/2015	20,000	3.550%	52 bps	to customer
			20,000	3.740%	71 bps	inter-dealer
			20,000	3.740%	71 bps	inter-dealer
			50,000	3.518%	49 bps	to customer
			50,000	3.740%	71 bps	inter-dealer
			50,000	3.740%	71 bps	inter-dealer
7/1/2038	4.00%	6/3/2015	50,000	3.974%	79 bps	inter-dealer
			50,000	3.704%	52 bps	to customer
			650,000	3.993%	81 bps	inter-dealer
			8,055,000	4.000%	82 bps	to customer
			250,000	3.999%	82 bps	inter-dealer
		6/4/2015	100,000	3.975%	83 bps	inter-dealer
			100,000	3.975%	83 bps	to customer
			65,000	3.975%	83 bps	to customer
			65,000	3.975%	83 bps	inter-dealer
			35,000	3.975%	83 bps	inter-dealer
			35,000	3.824%	67 bps	to customer
		6/5/2015	10,000	3.819%	62 bps	to customer
			10,000	3.970%	77 bps	inter-dealer
		6/8/2015	50,000	3.749%	56 bps	to customer
			50,000	3.990%	80 bps	inter-dealer
			100,000	3.990%	80 bps	inter-dealer
			100,000	3.990%	80 bps	to customer
			25,000	3.869%	68 bps	to customer
			25,000	3.990%	80 bps	inter-dealer
			150,000	3.960%	77 bps	to customer
			150,000	4.003%	81 bps	inter-dealer
		6/9/2015	295,000	3.960%	76 bps	inter-dealer
			295,000	3.960%	76 bps	to customer
			295,000	4.020%	82 bps	inter-dealer
			295,000	4.024%	82 bps	inter-dealer
			20,000	3.859%	66 bps	to customer
			20,000	3.980%	78 bps	inter-dealer
7/1/2040	4.00%	6/3/2015	17,100,000	4.050%	82 bps	to customer
			1,900,000	4.050%	82 bps	to customer

Broward Schools - General Obligation School Bonds, Series 2019										
Secondary Trade Activity From 1/29/2019 to 3/12/2019										
Maturity	Coupon	Trade Date	Par	Trade Yield	Spread	Туре				
7/1/2019	5.00%	1/29/2019	25,000	1.741%	11 bps	inter-dealer				
			20,000	1.741%	11 bps	inter-dealer				
			1,075,000	1.741%	11 bps	inter-dealer				
			50,000	1.741%	11 bps	to customer				
			50,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			45,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			55,000	1.741%	11 bps	to customer				
			50,000	1.741%	11 bps	to customer				
			45,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			50,000	1.741%	11 bps	to customer				
			100,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			80,000	1.741%	11 bps	to customer				
			75,000	1.741%	11 bps	to customer				
			15,000	1.741%	11 bps	to customer				
			15,000	1.741%	11 bps	to customer				
			30,000	1.741%	11 bps	to customer				
			35,000	1.741%	11 bps	to customer				
			25,000	1.741%	11 bps	to customer				
			30,000	1.741%	11 bps	to customer				
			150,000	1.741%	11 bps	to customer				
			20,000	1.741%	11 bps	to customer				
7/1/2020	5.00%	1/29/2019	2,975,000	1.781%	11 bps	inter-dealer				
.,			110,000	1.781%	11 bps	to customer				
			50,000	1.781%	11 bps	to customer				
			15,000	1.781%	11 bps	to customer				
			15,000	1.781%	11 bps	to customer				
			2,325,000	1.781%	11 bps	to customer				
			135,000	1.781%	11 bps	to customer				
			180,000	1.781%	11 bps	to customer				
			60,000	1.781%	11 bps	to customer				
			25,000	1.781%	11 bps	to customer				
			40,000	1.781%	11 bps	to customer				
			20,000	1.781%	11 bps	to customer				
7/1/2021	5.00%	1/29/2019	3,120,000	1.830%	14 bps	inter-dealer				
			100,000	1.830%	14 bps	to customer				
			70,000	1.830%	14 bps	to customer				
			45,000	1.830%	14 bps	to customer				
			30,000	1.830%	14 bps	to customer				
			25,000	1.830%	14 bps	to customer				
			25,000	1.830%	14 bps	to customer				
			20,000	1.830%	14 bps	to customer				
			15,000	1.830%	14 bps	to customer				
			165,000	1.830%	14 bps 14 bps	to customer				
		I	100,000	1.00070	i - upa					

			110,000	1.830%	14 bps	to customer
			60,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			30,000	1.830%	14 bps	to customer
			45,000	1.830%	14 bps	to customer
			40,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			735,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			210,000	1.830%	14 bps	to customer
			55,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			140,000	1.830%	14 bps	to customer
			100,000	1.830%	14 bps	to customer
			50,000	1.830%	14 bps	to customer
			35,000	1.830%	14 bps	to customer
			50,000	1.830%	14 bps	to customer
			45,000	1.830%		
					14 bps	to customer
			40,000	1.830%	14 bps	to customer
			40,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			25,000	1.830%	14 bps	to customer
			140,000	1.830%	14 bps	to customer
			100,000	1.830%	14 bps	to customer
			90,000	1.830%	14 bps	to customer
			35,000	1.830%	14 bps	to customer
			45,000	1.830%	14 bps	to customer
			30,000	1.830%	14 bps	to customer
			110,000	1.830%	14 bps	to customer
			60,000	1.830%	14 bps	to customer
			80,000	1.830%	14 bps	to customer
7/1/2022	5.00%	1/29/2019	1,050,000	1.850%	14 bps	to customer
			2,230,000	1.850%	14 bps	to customer
7/1/2023	5.00%	1/29/2019	2,415,000	1.920%	17 bps	to customer
			1,025,000	1.920%	17 bps	to customer
7/1/2024	5.00%	1/29/2019	3,615,000	2.000%	19 bps	to customer
7/1/2025	5.00%	1/29/2019	2,970,000	2.080%	21 bps	to customer
			825,000	2.080%	21 bps	to customer
7/1/2026	5.00%	1/29/2019	3,985,000	2.160%	22 bps	to customer
7/1/2027	5.00%	1/29/2019	2,885,000	2.250%	22 bps	to customer
			1,300,000	2.250%	22 bps	to customer
7/1/2028	5.00%	1/29/2019	4,395,000	2.360%	24 bps	to customer
7/1/2029	5.00%	1/29/2019	4,610,000	2.460%	24 bps	to customer
-		2/4/2019	25,000	2.584%	40 bps	inter-dealer
		-	25,000	2.611%	43 bps	from customer
		3/1/2019	25,000	2.360%	23 bps	to customer
7/1/2030	5.00%	1/29/2019	4,720,000	2.570%	23 bps	to customer
	/		125,000	2.570%	23 bps	to customer
7/1/2031	5.00%	1/29/2019	5,085,000	2.690%	26 bps	to customer
., ., 2001	0.0070	2/26/2019	5,085,000	2.510%	20 bps 22 bps	from customer
		3/4/2019	50,000	2.520%	18 bps	to customer
		0,7,2013	50,000	2.520%	18 bps	inter-dealer
		3/6/2019	5,000,000	2.530%	21 bps	to customer

7/1/2032	5.00%	1/29/2019	3,090,000	2.750%	25 bps	inter-dealer
1/1/2002	0.0070	1/20/2010	3,090,000	2.743%	23 bps 24 bps	inter-dealer
			2,250,000	2.750%	25 bps	to customer
		2/11/2019	3,090,000	2.617%	22 bps	inter-dealer
			3,090,000	2.610%	21 bps	inter-dealer
		2/21/2019	3,090,000	2.590%	17 bps	inter-dealer
			3,090,000	2.597%	18 bps	inter-dealer
		2/22/2019	3,090,000	2.600%	20 bps	to customer
7/1/2033	5.00%	1/29/2019	5,605,000	2.830%	26 bps	to customer
		2/22/2019	5,605,000	2.690%	22 bps	to customer
			5,605,000	2.701%	23 bps	from customer
7/1/2034	5.00%	1/29/2019	5,860,000	2.890%	26 bps	to customer
			25,000	2.890%	26 bps	to customer
7/1/2035	5.00%	1/29/2019	6,180,000	2.960%	26 bps	to customer
7/1/2036	5.00%	1/29/2019	6,490,000	3.020%	26 bps	to customer
7/1/2037	5.00%	1/29/2019	6,815,000	3.080%	26 bps	to customer
7/1/2038	5.00%	1/29/2019	7,155,000	3.140%	26 bps	to customer
., .,	0.0070	2/19/2019	7,155,000	2.980%	21 bps	from customer
		2/20/2019	50,000	2.797%	4 bps	to customer
			50,000	2.797%	4 bps	to customer
			500,000	2.950%	19 bps	inter-dealer
			2,500,000	2.950%	19 bps	inter-dealer
			3,000,000	2.956%	20 bps	inter-dealer
		2/21/2019	60,000	2.705%	-8 bps	to customer
			50,000	2.700%	-5 bps	to customer
			50,000	2.700%	-5 bps	to customer
			100,000	2.950%	20 bps	inter-dealer
		2/26/2019	25,000	2.725%	1 bps	to customer
		2/27/2019	40,000	2.700%	-3 bps	to customer
			25,000	2.732%	0 bps	to customer
			4,055,000	2.940%	21 bps	to customer
		3/4/2019	10,000	2.687%	-8 bps	to customer
		3/5/2019	30,000	2.902%	13 bps	inter-dealer
			30,000	2.644%	-13 bps	to customer
		3/6/2019	50,000	2.607%	-14 bps	to customer
		3/12/2019	545,000	2.628%	-4 bps	to customer
			150,000	2.628%	-4 bps	to customer
			45,000	2.628%	-4 bps	to customer
			50,000	2.628%	-4 bps	to customer
			150,000	2.628%	-4 bps	to customer
			50,000	2.628%	-4 bps	to customer
			500,000	2.628%	-4 bps	to customer
			1,000,000	2.628%	-4 bps	to customer
7/1/2039	5.00%	1/29/2019	7,510,000	3.190%	26 bps	inter-dealer
		1/30/2019	1,510,000	3.080%	15 bps	to customer
		1/31/2019	5,000,000	3.040%	18 bps	to customer
		2/6/2019	1,000,000	3.010%	14 bps	to customer
7/1/2040	5.00%	1/29/2019	7,890,000	3.230%	26 bps	to customer
		2/13/2019	7,890,000	3.140%	24 bps	to customer
			7,890,000	3.140%	24 bps	inter-dealer
			7,890,000	3.150%	25 bps	inter-dealer
			7,890,000	3.150%	25 bps	from customer

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7/1/2041	5.00%	1/29/2019	8,280,000	3.250%	26 bps	inter-dealer
		2/14/2019	85,000	2.935%	4 bps	to customer
			85,000	3.084%	18 bps	inter-dealer
			85,000	3.070%	17 bps	inter-dealer
		2/22/2019	8,195,000	3.120%	23 bps	inter-dealer
		3/4/2019	8,195,000	3.160%	26 bps	to customer
7/1/2042	5.00%	1/31/2019	8,695,000	3.220%	28 bps	to customer
7/1/2043	5.00%	1/31/2019	9,130,000	3.240%	28 bps	to customer
		2/22/2019	9,130,000	3.160%	23 bps	to customer
			9,130,000	3.170%	24 bps	inter-dealer
			9,130,000	3.170%	24 bps	from customer
7/1/2047	5.00%	1/31/2019	20,000,000	3.280%	28 bps	to customer
		2/5/2019	50,000	3.104%	7 bps	to customer
			50,000	3.104%	7 bps	to customer
			100,000	3.277%	25 bps	inter-dealer
			100,000	3.270%	24 bps	inter-dealer
		2/7/2019	11,225,000	3.231%	25 bps	to customer
			11,225,000	3.260%	28 bps	inter-dealer
			3,000,000	3.260%	28 bps	to customer
			7,000,000	3.260%	28 bps	to customer
		2/8/2019	13,775,000	3.191%	24 bps	to customer
			3,775,000	3.200%	25 bps	inter-dealer
			3,775,000	3.210%	26 bps	from customer
			10,000,000	3.220%	27 bps	inter-dealer
			10,000,000	3.230%	28 bps	from customer