Avon Grove School District

Capital Project Financing Review

October 18, 2018

Kenneth A. Phillips Managing Director RBC Capital Markets 2101 Oregon Pike Lancaster, PA 17601 Tel: (717) 519-6001 ken.phillips@rbccm.com

John Frey Director PFM Financial Advisors LLC One Keystone Plaza, Suite 300 Harrisburg, PA 17101 Tel: (717) 232-2723 freyj@pfm.com Allison Macchi Vice President RBC Capital Markets 2101 Oregon Pike Lancaster, PA 17601 Tel: (717) 519-6002 allison.macchi@rbccm.com

Wes Hall Senior Analyst PFM Financial Advisors LLC One Keystone Plaza, Suite 300 Harrisburg, PA 17101 Tel: (717) 232-2723 hallw@pfm.com





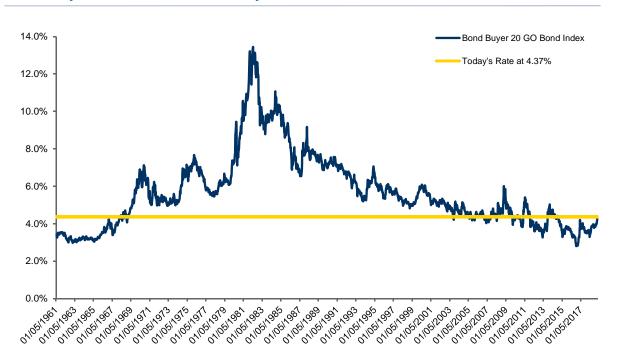
RBC Capital Markets



Bond Buyer 20 General Obligation Bond Index

57 Year Historical Perspective

Bond Buyer 20 GO Index since January 1961



% of Time in Each Range Since 1961

Yield Range	
Less than 3.50%	10.10%
3.50% -4. 00%	10.43%
4.01% -4. 50%	10.80%
4.51% - _{5.} 00%	10.07%
5.01% - _{5.} 50%	14.03%
5.51% - ₆ . 00%	9.77%
6.01% - ₆ . 50%	7.57%
6.51% -7. 00%	6.90%
7.01% -7. 50%	6.23%
7.51% -8. 00%	3.67%
Greater than 8.00%	10.43%
Total	100.00%

Source: Bloomberg as of October 11, 2018
Weekly yields and indexes released by the Bond Buyer. Updated every Thursday at approximately 6:00pm EST. 20 Bond General Obligation
Yield with 20 year maturity, rated Aa2 by Moody's Arithmetic Average of 20 bonds' yield to maturity.

Principal and Gross Outstanding Debt Service

Avon Grove School District Summary of Debt Outstanding - 2018-19

Principal

Fiscal Yr. Ended	G.O. Bonds Series of 2012	G.O. Bonds Series A of 2012	G.O. Bonds Series of 2014	G.O. Bonds Series of 2015	Total Issued Debt Service	Current	Long Term
06/30/2019	210,000	580,000	1,460,000	665,000	2,915,000	2,915,000	Long Term
06/30/2019	,	•		,	, ,	2,915,000	2 000 000
	205,000	595,000	1,500,000	700,000	3,000,000		3,000,000
06/30/2021	215,000	605,000	1,545,000	730,000	3,095,000		3,095,000
06/30/2022	225,000	620,000	775,000	750,000	2,370,000		2,370,000
06/30/2023	225,000	635,000	=	-	860,000		860,000
06/30/2024	-	645,000	-	-	645,000		645,000
06/30/2025	-	655,000	=	-	655,000		655,000
06/30/2026	-	670,000	-	-	670,000		670,000
06/30/2027	-	690,000	=	-	690,000		690,000
06/30/2028	-	705,000	=	-	705,000		705,000
Princ @ 6/30/2018	1,080,000	6,400,000	5,280,000	2,845,000	15,605,000	915,000	2,690,000
Less 2018/19 Princ	(210,000)	(580,000)	(1,460,000)	(665,000)	(2,915,000)	0	0
As of 6/30/2019	870,000	5,820,000	3,820,000	2,180,000	12,690,000	2,915,000	12,690,000
					2,	1	

Avon Grove School District Summary of Debt Outstanding - 2018-19

Total Principal and Interest

	G.O. Bonds Series of	G.O. Bonds Series A of	G.O. Bonds Series of	G.O. Bonds Series of	Total Issued Debt		
Fiscal Yr. Ended	2012	2012	2014	2015	Service	Current	Long Term
06/30/2019	229,500	710,040	1,576,850	753,600	3,269,990	3,269,990	
06/30/2020	220,350	713,290	1,571,400	761,300	3,266,340		3,266,340
06/30/2021	226,150	711,290	1,575,950	762,700	3,276,090		3,276,090
06/30/2022	231,750	714,040	782,750	759,050	2,487,590		2,487,590
06/30/2023	227,250	716,490	-	-	943,740		943,740
06/30/2024	-	713,368	-	-	713,368		713,368
06/30/2025	-	709,554	-	-	709,554		709,554
06/30/2026	-	709,975	-	-	709,975		709,975
06/30/2027	-	714,503	-	-	714,503		714,503
06/30/2028		713,284	-	-	713,284		713,284
Total P&I @ 6/30/2018	1,135,000	7,125,833	5,506,950	3,036,650	16,804,433	3,269,990	13,534,443
Less 2018/19 Payment	(229,500)	(710,040)	(1,576,850)	(753,600)	(3,269,990)	0	0
As of 6/30/2019	905,500	6,415,793	3,930,100	2,283,050	13,534,443	3,269,990	13,534,443

Reimbursement Amounts -R evenue

	G.O. Bonds	G.O. Bonds	G.O. Bonds	G.O. Bonds	
	Series of	Series A of	Series of	Series of	Total
Fiscal Yr. Ended	2012	2012	2014	2015	Reimb
06/30/2019	23,727	-	210,038	109,963	343,729
06/30/2020	22,781	-	209,312	111,087	343,180
06/30/2021	23,381	-	209,918	111,291	344,590
06/30/2022	23,960	-	104,263	110,759	238,982
06/30/2023	23,495	-	-	-	23,495
Total	117,344	-	733,531	443,100	1,293,975
PE%	19.35%	0.00%	24.93%	27.31%	
PE% Status	Perm	Est	Perm	Perm	
AR% (2018-19)	53.43%	53.43%	53.43%	53.43%	

Net Debt

	G.O. Bonds	G.O. Bonds	G.O. Bonds	G.O. Bonds	Total Net
	Series of	Series A of	Series of	Series of	Debt
Fiscal Yr. Ended	2012	2012	2014	2015	Service
06/30/2019	205,773	710,040	1,366,812	643,637	2,926,261
06/30/2020	197,569	713,290	1,362,088	650,213	2,923,160
06/30/2021	202,769	711,290	1,366,032	651,409	2,931,500
06/30/2022	207,790	714,040	678,487	648,291	2,248,608
06/30/2023	203,755	716,490	-	-	920,245
06/30/2024	-	713,368	-	-	713,368
06/30/2025	-	709,554	-	-	709,554
06/30/2026	-	709,975	-	-	709,975
06/30/2027	-	714,503	-	-	714,503
06/30/2028	-	713,284	-	-	713,284
Total	1,017,656	7,125,833	4,773,419	2,593,550	15,510,457

Hypothetical Financing Plan to Generate \$127 Million of Project Funds

Avon Grove School District

Financing to Generate \$127 Million of Project Funds

 $Millage\ Requirement\ Study\ -p_T\ oposed\ Series\ of\ 2018,\ \$9,630,000,\ Proposed\ Series\ of\ 2019,\ \$9,240,000,\ Proposed\ Series\ of\ 2020,\ \$33,330,000,\ Proposed\ Series\ of\ 2021,\ \$33,345,000\ and\ Proposed\ Series\ of\ 2022\ \$35,625,000$

Порозец	501105 01 2021, 4	Series 2018	Series 2019	Series 2020	Series 2021	Series 2022	Less:							
	Total Net	\$9,630,000	\$9,240,000	\$33,330,000	\$33,345,000	\$35,625,000	Interest	Total	Value of	Total		Total		Budget
	Outstanding	Par Amount	Earnings/	Net	1 Mill	Mills	New	Mills in	Dollars	Surplus				
Date	D/S (1)	Debt Service (2)	Debt Service (3)	Debt Service (4)	Debt Service (5)	Debt Service (6)	SD Reserves	Debt	(7)	Required	Mills	Place	Appropriated	
2015	4,573,814							4,573,814	1,845,000	2.48	0.000	2.44	4,499,955	-73,859
2016	3,693,812							3,693,812	1,845,000	2.00	0.000	2.44	4,499,955	806,143
2017	2,935,443							2,935,443	1,845,000	1.59	0.000	2.44	4,499,955	1,564,512
2018	2,933,412							2,933,412	1,845,000	1.59	0.000	2.44	4,499,955	1,566,543
2019	2,926,261	147,958	152,537					3,226,756	1,850,000	1.74	0.580	3.02	5,585,150	2,358,394
2020	2,923,160	396,594	466,399					3,786,152	1,850,000	2.05	0.580	3.60	6,658,150	2,871,998
2021	2,931,500	396,474	466,279	1,531,864				5,326,116	1,850,000	2.88	0.580	4.18	7,731,150	2,405,034
2022	2,248,608	1,077,551	466,154	1,670,536	1,529,031			6,991,881	1,850,000	3.78	0.570	4.75	8,785,650	1,793,769
2023	920,245	2,407,190	465,990	1,670,391	1,667,441	2,694,414		9,825,672	1,850,000	5.31	0.570	5.32	9,840,150	14,478
2024	713,368	2,612,720	465,820	1,670,218	1,667,268	2,696,681		9,826,074	1,850,000	5.31	0.000	5.32	9,840,150	14,076
2025	709,554	2,613,500	465,625	1,670,039	1,667,089	2,697,080		9,822,886	1,850,000	5.31	0.000	5.32	9,840,150	17,264
2026	709,975	2,096,125	982,125	1,669,878	1,666,928	2,699,885		9,824,915	1,850,000	5.31	0.000	5.32	9,840,150	15,235
2027	714,503		3,071,125	1,669,710	1,666,760	2,705,113		9,827,210	1,850,000	5.31	0.000	5.32	9,840,150	12,940
2028	713,284		3,072,375	1,669,538	1,666,588	2,705,150		9,826,934	1,850,000	5.31	0.000	5.32	9,840,150	13,216
2029	0		3,203,125	1,669,350	2,053,500	2,898,875		9,824,850	1,850,000	5.31	0.000	5.32	9,840,150	15,300
2030	0			3,482,625	3,439,500	2,903,125		9,825,250	1,850,000	5.31	0.000	5.32	9,840,150	14,900
2031	0			3,482,000	3,440,125	2,903,375		9,825,500	1,850,000	5.31	0.000	5.32	9,840,150	14,650
2032	0			3,481,500	3,440,875	2,904,500		9,826,875	1,850,000	5.31	0.000	5.32	9,840,150	13,275
2033	0			3,480,875	3,441,500	2,901,375		9,823,750	1,850,000	5.31	0.000	5.32	9,840,150	16,400
2034	0			3,479,875	3,446,625	2,898,875		9,825,375	1,850,000	5.31	0.000	5.32	9,840,150	14,775
2035	0			3,483,125	3,441,125	2,901,625		9,825,875	1,850,000	5.31	0.000	5.32	9,840,150	14,275
2036	0			3,480,375	3,444,750	2,899,375		9,824,500	1,850,000	5.31	0.000	5.32	9,840,150	15,650
2037	0			3,481,375	3,442,125	2,901,875		9,825,375	1,850,000	5.31	0.000	5.32	9,840,150	14,775
2038	0			3,480,750	3,443,000	2,898,875		9,822,625	1,850,000	5.31	0.000	5.32	9,840,150	17,525
2039	0			3,483,125	3,442,000	2,900,125		9,825,250	1,850,000	5.31	0.000	5.32	9,840,150	14,900
2040	0			3,483,125	3,443,750	2,900,250		9,827,125	1,850,000	5.31	0.000	5.32	9,840,150	13,025
2041	0			3,480,500	3,442,875	2,903,875		9,827,250		5.31	0.000	5.32	9,840,150	12,900
2042	0			3,479,875	3,444,000	2,900,750		9,824,625	1,850,000	5.31	0.000	5.32	9,840,150	15,525
2043	0							0	1,850,000	0.00	0.000	5.32	9,840,150	9,840,150
2044	0							0	1,850,000	0.00	0.000	5.32	9,840,150	9,840,150
TOTAL	29,646,938	11,748,111	13,277,554	60,150,648	58,336,854	56,815,198	0	229,975,302			2.880			

⁽¹⁾ Annual Net Debt Service for Series of $_2$ 012, 2012A, $_2$ 014, and 2015 Bonds.

⁽²⁾ Proposed Series of 2018, \$9,630,000 dated December 15, 2018. Average Coupon 4.24%, TIC 3.24% (current rates + 25bps). Local Effort 100%. Project fund deposit = \$10MM.

 $^{(3) \} Proposed \ Series \ of \ 2019, \$9,240,000 \ dated \ January \ 2, 2019. \ Average \ Coupon \ 5.00\%, \ TIC \ 3.77\% \ (current \ rates + 25bps). \ Local \ Effort \ 100\%. \ Project \ fund \ deposite = \$10MM.$

⁽⁴⁾ Proposed Series of 2020, \$33,330,000 dated June 1, 2020. Average Coupon 5.00%, TIC 4.53% (current rates + 60bps). Local Effort 100%. Project fund deposit = \$35MM.

⁽⁵⁾ Proposed Series of 2021, \$33,345,000 dated June 1, 2021. Average Coupon 5.00%, TIC 4.50% (current rates + 60bps). Local Effort 100%. Project fund deposit = \$35MM

⁽⁶⁾ Proposed Series of 2022, \$35,625,000 dated March 1, 2022. Average Coupon 4.93%, TIC 4.44% (current rates + 60bps). Local Effort 100%. Project fund deposit = \$37M M.

 $⁽⁷⁾ FY2018-19 \ collect \ mill \ is \ worth \$1,850,000 \ and \ it \ remains \ constant \ (per \ the \ administration \ January \ 2018)$

⁽⁸⁾ Budget surplus (about \$13.7MM) will be transferred to capital reserve to use for phasing in mills for the projects.

Take advantage of 2018 bank qualified eligibility by preparing to issue \$10MM by calendar year end to fund design fees and other early project costs

Board action required: No legal action or advertising is necessary

- On May 25, 2006 (pre Act 1) the Board passed a Parameters Resolution & Bond Purchase Agreement (BPA) for \$60 million.
 - The BPA currently has \$39.3 million of par amount left outstanding maturing through 2028.
- The proposed 2018 and 2019 financings can be funded within the 2006 Resolution and BPA.
 - The Board would not have to take any further action to issue the proposed 2018 and 2019 Bonds under the 2006 documents allowing for a pricing and closing of the 2018 bonds by calendar year end.
 - The District has already incurred the costs to advertise and file the 2006 documents and as such there would be a cost savings versus passing a new Resolution.
- In order to facilitate pricing of the 2018 and potentially the 2019 bonds the Board could pass a motion at the October 25th School Board meeting to authorize the finance team to proceed.
 - Should the District wish to issue more than \$20 million in 2018/19 a new master parameters
 Resolution and BPA would need to be passed at the November 15th Board meeting.

Series 2018 Bonds

October 25, 2018	Board authorizes finance team to proceed
Mid- November 2018	2018 Bonds priced (rates locked)
Mid-December 2018	Close 2018 Bonds (fund \$10MM to project fund)

Series 2019 Bonds

October 25, 2018	Board authorizes finance team to proceed
Early December 2018	2019 Bonds priced (rates locked)
Early January 2019	Close 2019 Bonds (fund \$10MM to project fund)

Disclaimer

RBC Capital Markets, LLC (RBC CM), seeks to serve as an underwriter on a future transaction and not as a financial advisor or municipal advisor. The information provided is for discussion purposes only in anticipation of being engaged to serve as an underwriter. The primary role of an underwriter is to purchase securities with a view to distribution in an arm's-length commercial transaction with the issuer. The underwriter has financial and other interests that differ from those of the Issuer. RBC CM is not recommending an action to you as the municipal entity or obligated person; (b) RBC CM is not acting as an advisor to you and does not owe a fiduciary duty pursuant to Section 15B of the Exchange Act to you with respect to the information and material contained in this communication; (c) RBC CM is acting for its own interests; and (d) you should discuss any information and material contained in this communication with any and all internal or external advisors and experts that you deem appropriate before acting on this information or material.

Disclaimer:

This presentation was prepared exclusively for the benefit of and internal use by the recipient for the purpose of considering the transaction or transactions contemplated herein. This presentation is confidential and proprietary to RBC Capital Markets, LLC ("RBC CM") and may not be disclosed, reproduced, distributed or used for any other purpose by the recipient without RBCCM's express written consent.

By acceptance of these materials, and notwithstanding any other express or implied agreement, arrangement, or understanding to the contrary, RRC CM, its affiliates and the recipient agree that the recipient (and its employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the tax treatment, structure or strategy of the transaction and any fact that may be relevant to understanding such treatment, structure or strategy, and all materials of any kind (including opinions or other tax analyses) that are provided to the recipient relating to such tax treatment, structure, or strategy.

The information and any analyses contained in this presentation are taken from, or based upon, information obtained from the recipient or from publicly available sources, the completeness and accuracy of which has not been independently verified, and cannot be assured by RBC CM. The information and any analyses in these materials reflect prevailing conditions and RBC CM's views as of this date, all of which are subject to change.

To the extent projections and financial analyses are set forth herein, they may be based on estimated financial performance prepared by or in consultation with the recipient and are intended only to suggest reasonable ranges of results. The printed presentation is incomplete without reference to the oral presentation or other written materials that supplement it.

IRS Circular 230 Disclosure: RBC CM and its affiliates do not provide tax advice and nothing contained herein should be construed as tax advice. Any discussion of U.S. tax matters contained herein (including any attachments) (i) was not intended or written to be used, and cannot be used, by you for the purpose of avoiding tax penalties; and (ii) was written in connection with the promotion or marketing of the matters addressed herein. Accordingly, you should seek advice based upon your particular circumstances from an independent tax advisor.