

Warren County School District

Refinancing Discussion

August 26, 2019

Prepared by:

Jamie Doyle

Managing Director

&

Melissa Hughes

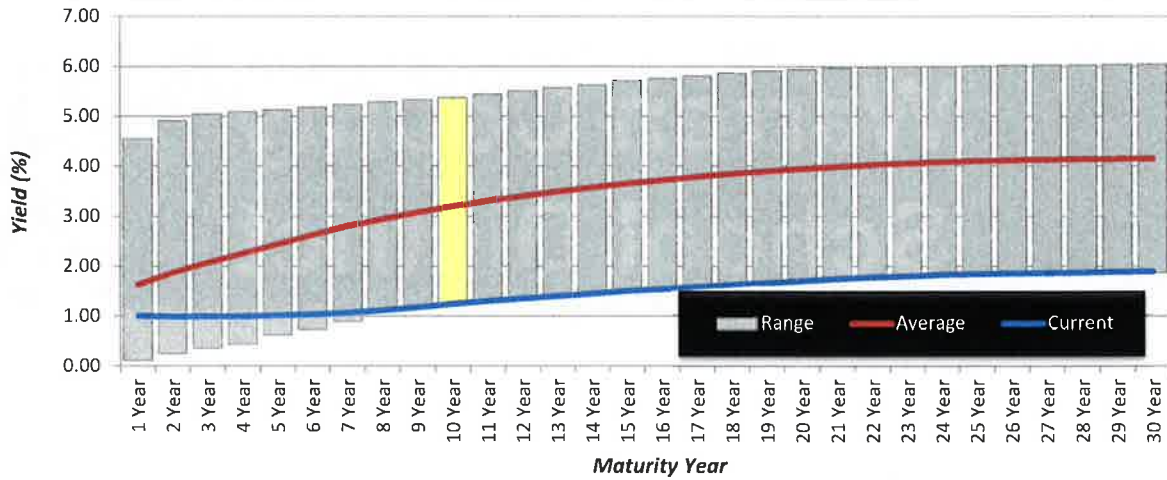
Senior Analyst



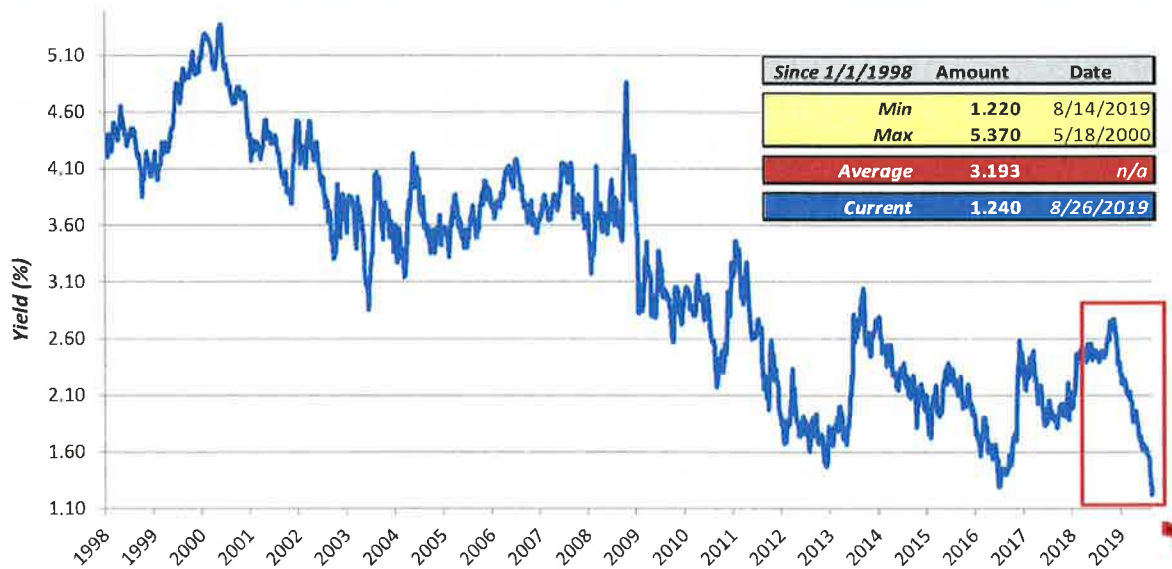
pfm

PFM Financial Advisors LLC
213 Market Street
Harrisburg, PA 17101
717.232.2723 (P)
717.232.8610 (F)
www.pfm.com

HISTORICAL MMD CURVE ILLUSTRATION - SINCE JANUARY 1, 1998



SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 1998



SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 2018



Warren County School District
Series A of 2019 Financing Plan Discussion

Refinancing Opportunity

- General Obligation Bonds, Series of 2013
 - \$9,675,000 currently outstanding
 - Coupons range from 2.40%-3.05%
 - Call date: May 15, 2018

SAMPLE MOTION

Resolved: The Board of School Directors of the Warren County School District does hereby authorize the Administration to work with PFM Financial Advisors LLC (as Independent Financial Advisor), Knox, McLaughlin Gornall & Sennett, P.C. (as Bond Counsel) and Stapleford & Byham, LLC (as Solicitor) to begin the process of issuing General Obligation Bonds, Series of 2019, for the purpose of refinancing all or a portion of the outstanding General Obligation Bonds, Series of 2013, with a minimum net savings target of \$50,000.

ESTIMATED TIMELINE

- | | |
|-------------------------------|----------------------|
| ➤ Discussion at Committee | August 26 |
| ➤ Authorization to Proceed | September 4 or later |
| ➤ Adopt Parameters Resolution | October 7 or later |
| ➤ Bond Sale (Lock in Rates) | October 9 or later |
| ➤ Settlement | November 13 or later |

**WARREN COUNTY SCHOOL DISTRICT
SUMMARY OF OUTSTANDING INDEBTEDNESS**

Debt Service Requirements													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Fiscal Year Ended	QZAB Series of 2011 (1)	QZAB Series of 2012(2)	G.O. Bonds Series of 2013	G.O. Bonds Series of 2014	QZAB Series of 2015	G.O. Notes Series of 2015	QZAB Series of 2016	G.O. Bonds Series of 2017	QZAB Series A of 2017	QZAB Series B of 2017	G.O. Bonds Series of 2018	G.O. Bonds Series of 2019	Total Debt Service
6/30/2020	1,366,058	1,272,235	295,583	16,170	125,521	710,807	159,000	351,246	172,000	346,000	309,768	333,320	5,457,706
6/30/2021	762,100	1,825,000	295,463	16,050	125,421	704,166	159,000	351,159	172,000	346,000	309,643	332,420	5,398,420
6/30/2022	789,000	1,764,254	295,343	15,900	125,321	706,321	168,000	351,071	172,000	346,000	309,516	336,445	5,379,172
6/30/2023	720,000	1,802,781	295,223	15,750	125,221	711,159	172,000	350,984	172,000	346,000	309,393	335,395	5,355,904
6/30/2024	702,000	1,797,494	295,103	35,300	125,121	705,745	172,000	350,878	172,000	346,000	309,268	334,345	5,345,252
6/30/2025	684,000	2,559,846	294,983	58,125	125,021		172,000	350,753	172,000	346,000	309,105	338,220	5,411,051
6/30/2026	666,000	2,016,867	792,273	96,863	124,921		172,000	350,628	172,000	346,000	308,943	341,945	5,388,438
6/30/2027	648,000	639,871	1,397,523	137,700	124,821		172,000	350,503	172,000	346,000	308,780	877,420	5,174,617
6/30/2028	630,000	599,733	1,363,323		124,721		172,000	350,378	172,000	346,000	308,618	1,081,345	5,148,116
6/30/2029	612,000	559,595	1,329,123		124,621		172,000	350,239	172,000	346,000	308,455	1,140,620	5,114,652
6/30/2030	594,000	514,639	1,294,923		124,521		173,000	350,086	172,000	346,000	308,293	1,217,045	5,094,506
6/30/2031		479,501	1,260,723		124,421		173,000	349,934	172,000	346,000	308,130	1,728,645	4,942,353
6/30/2032		439,363	1,231,448		124,321		173,000	349,781	172,000	346,000	322,968	1,775,158	4,934,037
6/30/2033		399,225	1,197,098		124,221			349,629			1,017,318	1,837,638	4,925,127
6/30/2034		359,087	1,162,461		284,121			349,476			1,223,723	1,437,640	4,816,507
6/30/2035					2,775,821			845,475			1,276,593		4,897,888
6/30/2036					2,777,821			847,275			1,276,058		4,900,953
6/30/2037					2,771,910			853,288			1,278,250		4,903,448
6/30/2038								2,892,200			2,041,813		4,934,013
6/30/2039								2,897,700			1,665,188		4,562,888
6/30/2040								2,894,788					2,894,788
6/30/2041													
TOTAL	8,173,158	17,029,489	12,800,586	392,858	10,357,662	3,538,198	2,209,000	16,487,468	2,236,000	4,498,000	13,809,818	13,447,600	104,979,836

Local Effort Requirements													
15	16	17	18	19	20	21	22	23	24	25	26	27	28
Fiscal Year Ended	QZAB Series of 2011 (1)	QZAB Series of 2012(2)	G.O. Bonds Series of 2013	G.O. Bonds Series of 2014	QZAB Series of 2015	G.O. Notes Series of 2015	QZAB Series of 2016	G.O. Bonds Series of 2017	QZAB Series A of 2017	QZAB Series B of 2017	G.O. Bonds Series of 2018	G.O. Bonds Series of 2019	Total Local Effort
6/30/2020	1,025,608	1,027,787	245,070	15,470	106,075	538,398	134,368	303,807	137,913	268,179	240,096	318,900	4,361,671
6/30/2021	572,169	1,474,344	244,970	15,356	105,990	533,367	134,368	303,731	137,913	268,179	239,999	318,039	4,348,425
6/30/2022	592,365	1,425,269	244,871	15,212	105,906	535,000	141,973	303,655	137,913	268,179	239,902	321,890	4,332,136
6/30/2023	540,561	1,456,394	244,771	15,069	105,821	538,664	145,354	303,580	137,913	268,179	239,805	320,885	4,316,996
6/30/2024	527,047	1,452,122	244,672	33,773	105,737	534,564	145,354	303,488	137,913	268,179	239,708	319,881	4,312,438
6/30/2025	513,533	2,067,996	244,572	56,567	105,652		145,354	303,380	137,913	268,179	239,582	323,588	4,406,317
6/30/2026	500,019	1,629,345	656,880	92,672	105,568		145,354	303,271	137,913	268,179	239,456	327,152	4,405,810
6/30/2027	486,505	516,926	1,158,697	131,743	105,483		145,354	303,163	137,913	268,179	239,330	839,462	4,332,756
6/30/2028	472,991	484,500	1,130,342		105,399		145,354	303,055	137,913	268,179	239,204	1,034,565	4,321,502
6/30/2029	459,477	452,074	1,101,986		105,314		145,354	302,935	137,913	268,179	239,078	1,091,276	4,303,587
6/30/2030	445,963	415,756	1,073,631		105,230		146,199	302,803	137,913	268,179	238,953	1,164,394	4,299,020
6/30/2031		387,369	1,045,275		105,145		146,199	302,671	137,913	268,179	238,827	1,653,862	4,285,440
6/30/2032		354,943	1,021,003		105,061		146,199	302,540	137,913	268,179	250,327	1,698,362	4,284,526
6/30/2033		322,517	992,523		104,976			302,408			788,506	1,758,139	4,269,070
6/30/2034		290,092	963,806		240,105			302,276			948,488	1,375,446	4,120,212
6/30/2035					2,345,789			731,284			989,466		4,066,539
6/30/2036					2,347,310			732,841			989,052		4,069,203
6/30/2037					2,342,484			738,042			990,751		4,071,277
6/30/2038								2,501,577			1,582,576		4,084,153
6/30/2039								2,506,334			1,290,660		3,796,994
6/30/2040								2,503,815					2,503,815
6/30/2041													
TOTAL	6,136,242	13,757,435	10,613,071	375,862	8,753,047	2,679,994	1,866,780	14,260,657	1,792,866	3,486,327	10,703,766	12,865,842	87,291,888

Principal *	16,200,000	23,180,000	9,675,000	320,000	8,449,000	3,373,000	2,209,000	9,915,000	2,236,000	4,498,000	8,455,000	9,945,000	98,455,000
PE%:	35.89%	27.67%	24.61%	6.23%	22.31%	34.93%	22.31%	19.45%	28.54%	32.39%	32.39%	6.23%	
PE% Status:	Temporary	Permanent	Temporary	Temporary	Temporary	Permanent	Temporary	Estimated	Temporary	Estimated	Estimated	Temporary	
AR%:	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	69.44%	
Call Date:	Non-Callable	Non-Callable	5/15/2018	5/15/2019	9/1/2025	Anytime	Anytime	9/1/2022	Noncallable	Noncallable	11/1/2023	5/15/2024	
Purpose:	New Money	New Money	New Money	New Money	New Money	Cur Ref 2010	New Money	New Money	New Money	New Money	New Money	Cur Ref 2014	

* Outstanding as of August 26, 2019

(1) QZAB debt service is net of Fed. Reimbursement Subsidy 5.138% & est. sinking fund earnings of 2.00%

(1G) Assumes Fed. Reimbursement Subsidy for 9/1/2019 payment reduced by 6.20% (\$25,803.04 per payment)

(1H) Assumes Fed. Reimbursement Subsidy for 3/1/2020 payment reduced by 5.90% (\$24,554.04 per payment)

(2) QZAB debt service is net of Fed. Reimbursement Subsidy 4.185% & sinking fund earnings of 3.14%

(2G) Assumes Fed. Reimbursement Subsidy for 11/1/2019 & 5/1/2020 payments reduced by 5.90% (\$28,617.45 per payment)

WARREN COUNTY SCHOOL DISTRICT
SERIES OF 2013

Optional Redemption: May 15, 2018

1	2	3	4	5	6	7	8
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>	<u>State Aid</u>	<u>Local Effort</u>
11/15/2019	5,000	2.400	145,321.25	150,321.25			
5/15/2020			145,261.25	145,261.25	295,582.50	50,512.64	245,069.86
11/15/2020	5,000	2.400	145,261.25	150,261.25			
5/15/2021			145,201.25	145,201.25	295,462.50	50,492.13	244,970.37
11/15/2021	5,000	2.400	145,201.25	150,201.25			
5/15/2022			145,141.25	145,141.25	295,342.50	50,471.62	244,870.88
11/15/2022	5,000	2.400	145,141.25	150,141.25			
5/15/2023			145,081.25	145,081.25	295,222.50	50,451.12	244,771.38
11/15/2023	5,000	2.400	145,081.25	150,081.25			
5/15/2024			145,021.25	145,021.25	295,102.50	50,430.61	244,671.89
11/15/2024	5,000	2.400	145,021.25	150,021.25			
5/15/2025			144,961.25	144,961.25	294,982.50	50,410.10	244,572.40
11/15/2025	510,000	3.000	144,961.25	654,961.25			
5/15/2026			137,311.25	137,311.25	792,272.50	135,392.91	656,879.59
11/15/2026	1,140,000	3.000	137,311.25	1,277,311.25			
5/15/2027			120,211.25	120,211.25	1,397,522.50	238,825.19	1,158,697.31
11/15/2027	1,140,000	3.000	120,211.25	1,260,211.25			
5/15/2028			103,111.25	103,111.25	1,363,322.50	232,980.69	1,130,341.81
11/15/2028	1,140,000	3.000	103,111.25	1,243,111.25			
5/15/2029			86,011.25	86,011.25	1,329,122.50	227,136.19	1,101,986.31
11/15/2029	1,140,000	3.000	86,011.25	1,226,011.25			
5/15/2030			68,911.25	68,911.25	1,294,922.50	221,291.69	1,073,630.81
11/15/2030	1,140,000	3.000	68,911.25	1,208,911.25			
5/15/2031			51,811.25	51,811.25	1,260,722.50	215,447.19	1,045,275.31
11/15/2031	1,145,000	3.000	51,811.25	1,196,811.25			
5/15/2032			34,636.25	34,636.25	1,231,447.50	210,444.33	1,021,003.17
11/15/2032	1,145,000	3.000	34,636.25	1,179,636.25			
5/15/2033			17,461.25	17,461.25	1,197,097.50	204,574.19	992,523.31
11/15/2033	1,145,000	3.050	17,461.25	1,162,461.25			
5/15/2034					1,162,461.25	198,655.14	963,806.11
TOTALS	9,675,000		3,125,586.25	12,800,586.25	12,800,586.25	2,187,515.74	10,613,070.51

PE% 24.61% (Temporary)

CARF% 69.44% (2019-2020)

Net 17.09% Effective Reimbursement

WARREN COUNTY SCHOOL DISTRICT

SERIES OF 2013

Bonds to be Refunded

Optional Redemption: May 15, 2018

1	2	3	4	5	6	7	8
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>	<u>State Aid</u>	<u>Local Effort</u>
11/15/2019			144,661.25	144,661.25			
5/15/2020			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2020			144,661.25	144,661.25			
5/15/2021			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2021			144,661.25	144,661.25			
5/15/2022			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2022			144,661.25	144,661.25			
5/15/2023			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2023			144,661.25	144,661.25			
5/15/2024			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2024			144,661.25	144,661.25			
5/15/2025			144,661.25	144,661.25	289,322.50	49,442.85	239,879.65
11/15/2025	490,000	3.000	144,661.25	634,661.25			
5/15/2026			137,311.25	137,311.25	771,972.50	131,923.80	640,048.70
11/15/2026	1,140,000	3.000	137,311.25	1,277,311.25			
5/15/2027			120,211.25	120,211.25	1,397,522.50	238,825.19	1,158,697.31
11/15/2027	1,140,000	3.000	120,211.25	1,260,211.25			
5/15/2028			103,111.25	103,111.25	1,363,322.50	232,980.69	1,130,341.81
11/15/2028	1,140,000	3.000	103,111.25	1,243,111.25			
5/15/2029			86,011.25	86,011.25	1,329,122.50	227,136.19	1,101,986.31
11/15/2029	1,140,000	3.000	86,011.25	1,226,011.25			
5/15/2030			68,911.25	68,911.25	1,294,922.50	221,291.69	1,073,630.81
11/15/2030	1,140,000	3.000	68,911.25	1,208,911.25			
5/15/2031			51,811.25	51,811.25	1,260,722.50	215,447.19	1,045,275.31
11/15/2031	1,145,000	3.000	51,811.25	1,196,811.25			
5/15/2032			34,636.25	34,636.25	1,231,447.50	210,444.33	1,021,003.17
11/15/2032	1,145,000	3.000	34,636.25	1,179,636.25			
5/15/2033			17,461.25	17,461.25	1,197,097.50	204,574.19	992,523.31
11/15/2033	1,145,000	3.050	17,461.25	1,162,461.25			
5/15/2034					1,162,461.25	198,655.14	963,806.11
TOTALS	9,625,000		3,119,526.25	12,744,526.25	12,744,526.25	2,177,935.54	10,566,590.71

PE% 24.61% (Temporary)

CARF% 69.44% (2019-2020)

Net 17.09% Effective Reimbursement

WARREN COUNTY SCHOOL DISTRICT

SERIES OF 2013

Bonds Remaining After Refunding

Optional Redemption: May 15, 2018

1	2	3	4	5	6	7	8
<u>Date</u>	<u>Principal</u>	<u>Rate</u>	<u>Interest</u>	<u>Semi-Annual Debt Service</u>	<u>Fiscal Year Debt Service</u>	<u>State Aid</u>	<u>Local Effort</u>
11/15/2019	5,000	2.400	660.00	5,660.00			
5/15/2020			600.00	600.00	6,260.00	1,069.78	5,190.22
11/15/2020	5,000	2.400	600.00	5,600.00			
5/15/2021			540.00	540.00	6,140.00	1,049.28	5,090.72
11/15/2021	5,000	2.400	540.00	5,540.00			
5/15/2022			480.00	480.00	6,020.00	1,028.77	4,991.23
11/15/2022	5,000	2.400	480.00	5,480.00			
5/15/2023			420.00	420.00	5,900.00	1,008.26	4,891.74
11/15/2023	5,000	2.400	420.00	5,420.00			
5/15/2024			360.00	360.00	5,780.00	987.75	4,792.25
11/15/2024	5,000	2.400	360.00	5,360.00			
5/15/2025			300.00	300.00	5,660.00	967.25	4,692.75
11/15/2025	20,000	3.000	300.00	20,300.00			
5/15/2026					20,300.00	3,469.10	16,830.90
11/15/2026							
5/15/2027							
11/15/2027							
5/15/2028							
11/15/2028							
5/15/2029							
11/15/2029							
5/15/2030							
11/15/2030							
5/15/2031							
11/15/2031							
5/15/2032							
11/15/2032							
5/15/2033							
11/15/2033							
5/15/2034							
TOTALS	50,000		6,060.00	56,060.00	56,060.00	9,580.20	46,479.80

PE% 24.61% (Temporary)

CARF% 69.44% (2019-2020)

Net 17.09% Effective Reimbursement

WARREN COUNTY SCHOOL DISTRICT AMOUNT REQUIRED TO CALL BONDS
--

1 2 3 4 5

SERIES OF 2013

AMOUNT REQUIRED TO CALL BONDS				
Date	Principal	Interest	Escrow Agent	Required
11/13/2019	9,625,000.00	143,053.90		9,768,053.90
TOTALS	9,625,000.00	143,053.90	0.00	9,768,053.90

WARREN COUNTY SCHOOL DISTRICT

SERIES A OF 2019
REFUNDS THE SERIES OF 2013

Settle 11/13/2019
Dated 11/13/2019

1	2	3	4	5	6	7	8	9	10
Date	Principal	Rate	Interest	Semi-Annual Debt Service	Fiscal Year Debt Service	State Aid	Proposed Local Effort	Existing Local Effort	Savings
5/15/2020	25,000	2.270	129,442.19	154,442.19	154,442.19	26,392.91	128,049.28	239,879.65	111,830.36
11/15/2020	35,000	2.270	127,736.00	162,736.00					
5/15/2021			127,338.75	127,338.75	290,074.75	49,571.41	240,503.34	239,879.65	(623.70)
11/15/2021	35,000	2.270	127,338.75	162,338.75					
5/15/2022			126,941.50	126,941.50	289,280.25	49,435.63	239,844.62	239,879.65	35.03
11/15/2022	40,000	2.280	126,941.50	166,941.50					
5/15/2023			126,485.50	126,485.50	293,427.00	50,144.28	243,282.72	239,879.65	(3,403.07)
11/15/2023	40,000	2.280	126,485.50	166,485.50					
5/15/2024			126,029.50	126,029.50	292,515.00	49,988.43	242,526.57	239,879.65	(2,646.93)
11/15/2024	40,000	2.290	126,029.50	166,029.50					
5/15/2025			125,571.50	125,571.50	291,601.00	49,832.23	241,768.77	239,879.65	(1,889.12)
11/15/2025	530,000	2.310	125,571.50	655,571.50					
5/15/2026			119,450.00	119,450.00	775,021.50	132,444.85	642,576.65	640,048.70	(2,527.95)
11/15/2026	1,175,000	2.370	119,450.00	1,294,450.00					
5/15/2027			105,526.25	105,526.25	1,399,976.25	239,244.52	1,160,731.73	1,158,697.31	(2,034.42)
11/15/2027	1,165,000	2.430	105,526.25	1,270,526.25					
5/15/2028			91,371.50	91,371.50	1,361,897.75	232,737.21	1,129,160.54	1,130,341.81	1,181.27
11/15/2028	1,160,000	2.490	91,371.50	1,251,371.50					
5/15/2029			76,929.50	76,929.50	1,328,301.00	226,995.80	1,101,305.20	1,101,986.31	681.11
11/15/2029	1,155,000	2.560	76,929.50	1,231,929.50					
5/15/2030			62,145.50	62,145.50	1,294,075.00	221,146.86	1,072,928.14	1,073,630.81	702.67
11/15/2030	1,150,000	2.630	62,145.50	1,212,145.50					
5/15/2031			47,023.00	47,023.00	1,259,168.50	215,181.62	1,043,986.88	1,045,275.31	1,288.43
11/15/2031	1,150,000	2.680	47,023.00	1,197,023.00					
5/15/2032			31,613.00	31,613.00	1,228,636.00	209,963.87	1,018,672.13	1,021,003.17	2,331.04
11/15/2032	1,150,000	2.730	31,613.00	1,181,613.00					
5/15/2033			15,915.50	15,915.50	1,197,528.50	204,647.85	992,880.65	992,523.31	(357.35)
11/15/2033	1,145,000	2.780	15,915.50	1,160,915.50					
5/15/2034					1,160,915.50	198,390.99	962,524.51	963,806.11	1,281.59
11/15/2034									

TOTALS	9,995,000	2,621,860.19	12,616,860.19	12,616,860.19	2,156,118.45	10,460,741.74	10,566,590.71	105,848.97
---------------	------------------	---------------------	----------------------	----------------------	---------------------	----------------------	----------------------	-------------------

PE%	24.61%	(Estimated)						
CARF%	69.44%	(2019-2020)					Present Value of 0.10%=	87,272.11

Net 17.09% Effective Reimbursement

Savings Allocation	Amount	Percentage
School District's Share	105,848.97	1.10%
State's Share	21,817.09	0.23%
Total Savings	127,666.06	1.33%



Disclosures:

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. This material is for general information purposes only and is not intended to provide or give a specific recommendation. Financial advisory services are provided by PFM Financial Advisors LLC and Public Financial Management Inc. Both are registered municipal advisors with the Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) under the Dodd-Frank Act of 2010. Investment advisory services are provided by PFM Asset Management LLC which is registered with the SEC under the Investment Advisers Act of 1940. Additional applicable regulatory information is available upon request. Swap advisory services are provided by PFM Swap Advisors LLC which is registered as a municipal advisor with both the MSRB and SEC, a commodity trading advisor with the Commodity Futures Trading Commission, and a member of the National Futures Association. Consulting services are provided through PFM Group Consulting LLC. PFM financial modeling platform for strategic forecasting is provided through PFM Solutions LLC. For more information regarding PFM's services or entities, please visit www.pfm.com.

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 PFM. The information and any analyses in these materials reflect prevailing conditions and PFM'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. Opinions, results, and data presented are not indicative of future performance. Actual rates may vary based upon market conditions at the time of pricing. The printed presentation is incomplete without reference to the oral presentation or other written materials that supplement it. To the extent permitted by applicable law, no employee or officer of PFM's financial advisory business, nor any of PFM's affiliated companies, accept any liability whatsoever for any direct or consequential loss arising from negligence or from any use of this presentation or its contents. Any municipal financial product or financial strategy referenced may involve significant risks, including, but not limited to: market, interest rate, or credit risk, and may not be suitable for all clients. The ultimate decision to proceed with any transaction rest solely with the client.