



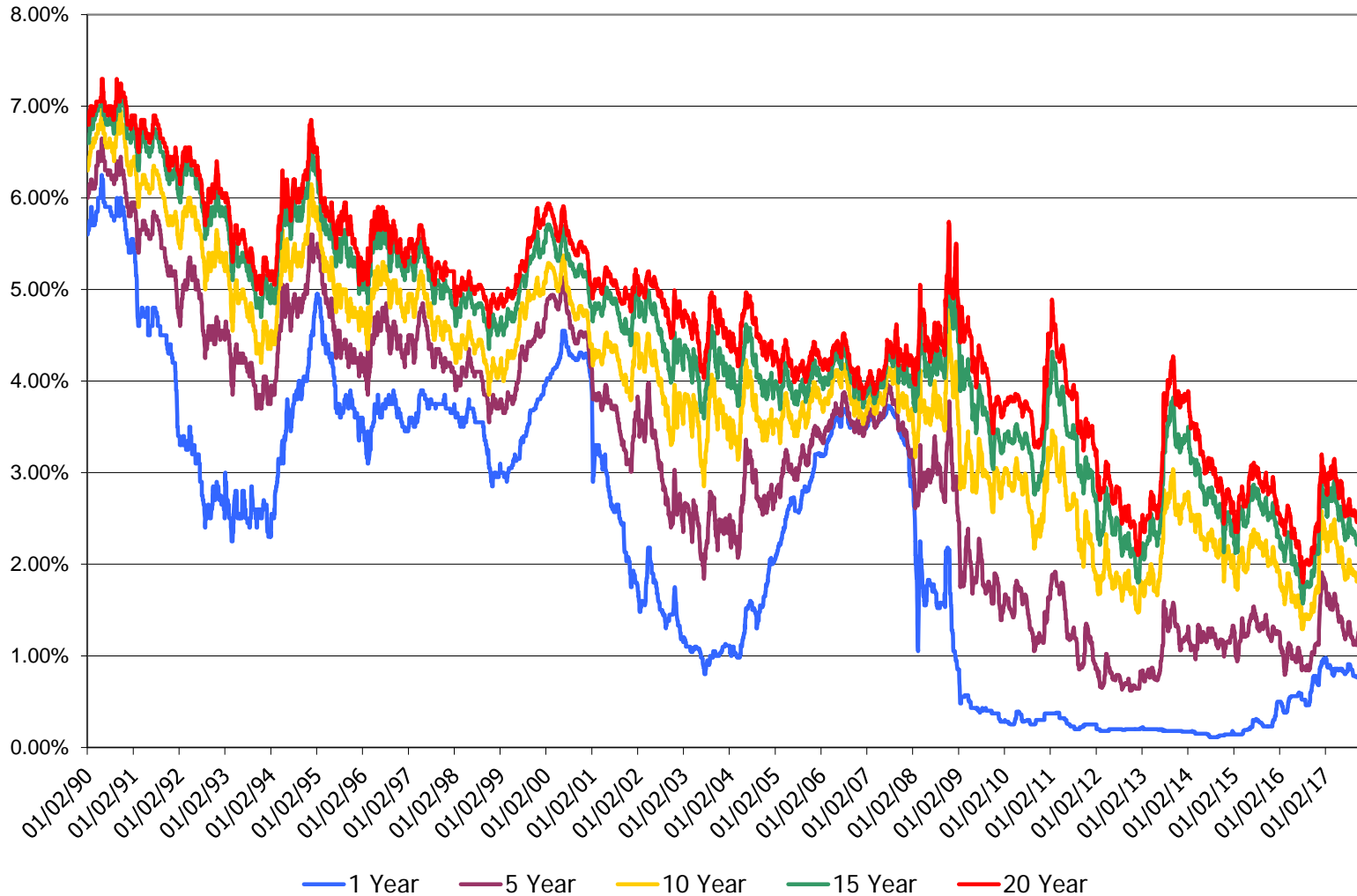
BARRINGTON CUSD 220

ROBERT LEWIS
SENIOR VICE PRESIDENT/MANAGING DIRECTOR
PMA SECURITIES, INC.

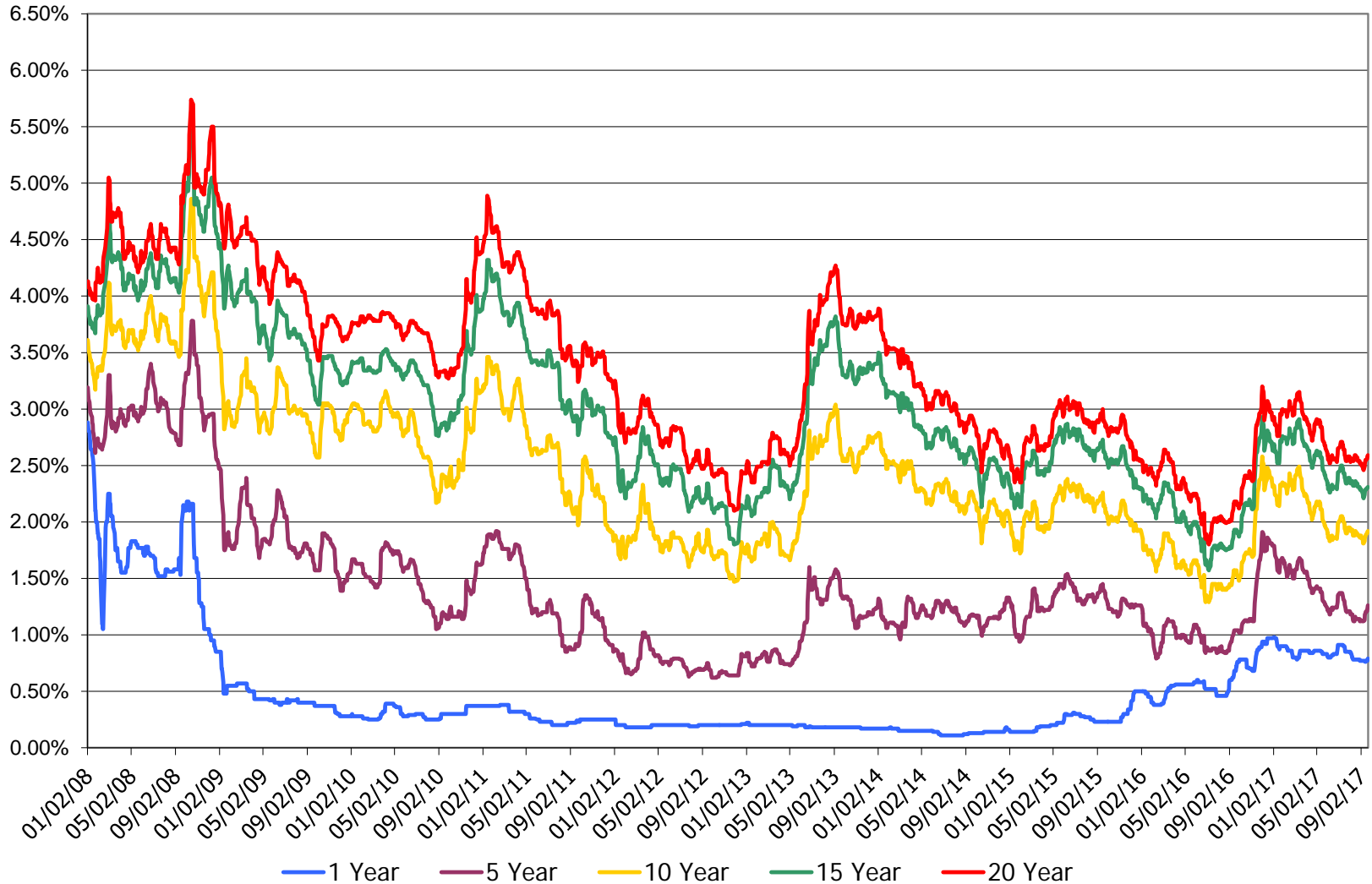
Market Update, School Bond Finance Overview and District Debt Review

October 3, 2017

MARKET UPDATE



*The Municipal Market Data "MMD" is a AAA municipal bond market index produced by TM3. As of September 20, 2017.

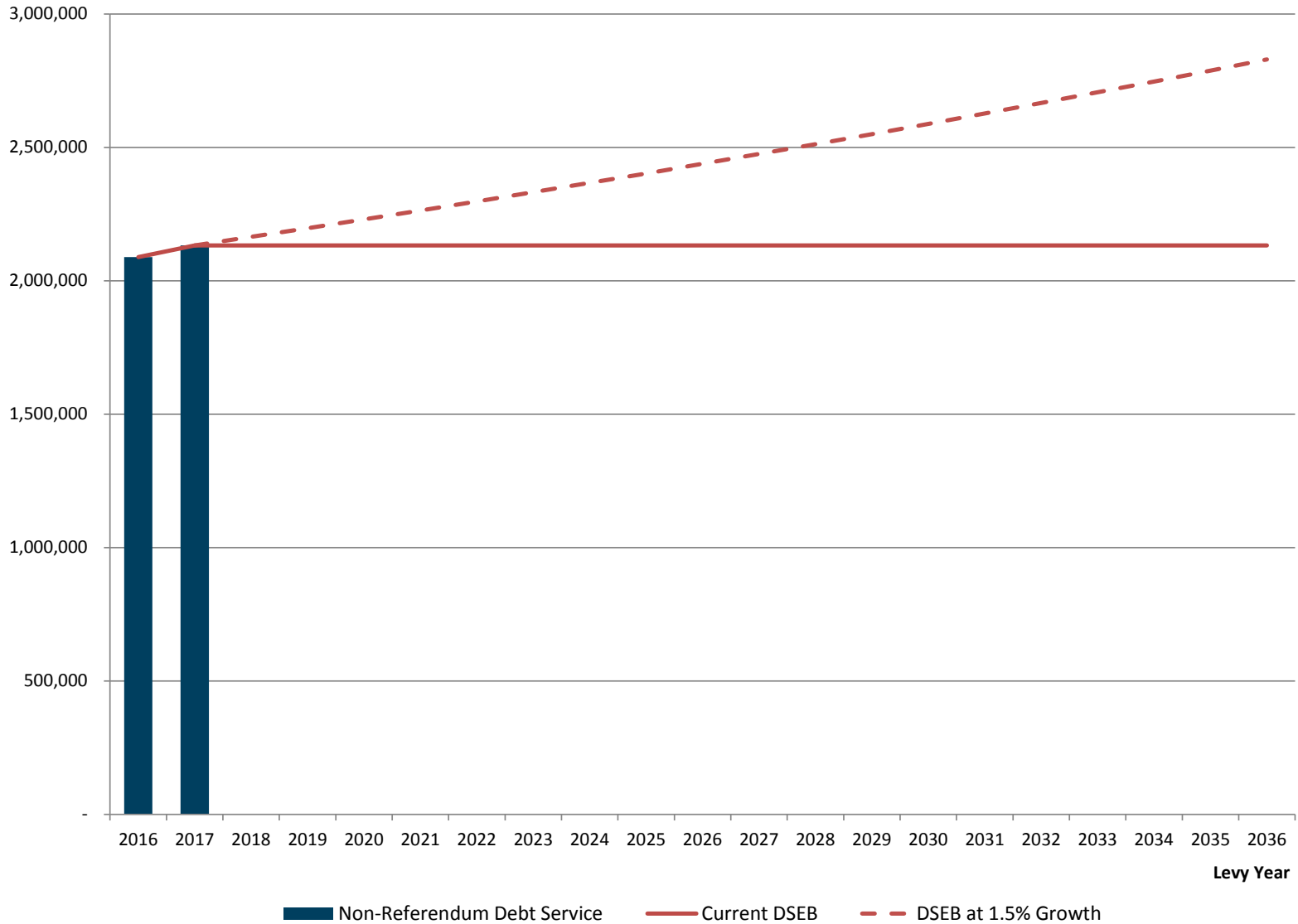


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Overview of Illinois School District Borrowing Options

- The IL School Code prescribes very specific methods for school districts to issue municipal bonds which are as follows:
- Types of General Obligation (GO) School Bonds
 - GO School Building Bonds
 - Authorized via referendum
 - Non-referendum GO Bonds
 - Described in more detail on the next two slides
- Other borrowing options mechanisms
 - Alternate revenue bonds
 - Debt or lease certificates
 - Capital leases
 - These three types of obligations are payable from operating dollars and not from a separate tax levy like a GO bond
- Tax Anticipation Warrants (TAWs) for short-term cash flow needs

- Since the District is subject to tax caps, the annual debt service (principal and interest) payments on non-referendum GO bonds are limited by the District's Debt Service Extension Base (DSEB)
- Original DSEB was determined in tax year 1994 and was equal to the amount of non-referendum debt service levied for that year
 - The types of non-referendum bonds are described on the next slide
- Public Act 96-0501, enacted in 2009, increases a district's DSEB annually by the Consumer Price Index (CPI)
 - Original DSEB: \$1,854,693
 - DSEB for levy year 2017: \$2,132,468



- The following types of non-referendum GO bonds are available to the District and the levy for these bonds needs to fit within the District's DSEB:
 - Working Cash (for capital projects or operating capital)
 - If for capital, funds are abated (permanent transfer) to the O&M fund and then transferred to the capital projects fund
 - Life Safety (issued in evidence of life safety approvals)
 - Funding (pays off a claim or liability like a land contract)
 - Tort
- All of these require a BINA (Bond Issue Notification Act) hearing
- Working Cash Bonds and Funding Bonds also require a back door referendum which is a 30-day petition process (10% of registered voters)

Working Cash Fund Bond Worksheet

MAXIMUM SIZE OF WORKING CASH FUND

Current equalized assessed valuation (Including TIF)			\$2,889,591,285.00
Times the maximum educational fund tax rate	\$4.0000	x	0.0400
Equals			<u>\$115,583,651.40</u>
Plus the lesser of the actual amount of replacement taxes received by the District during 2017 or the estimated amount of replacement taxes to be received by the District during 2018.		+	\$691,739.00
Equals			<u>\$116,275,390.40</u>
Times 85%		x	85%
Equals			<u>\$98,834,081.84</u>
Less the greater of working cash fund bonds outstanding OR the amount presently to the credit of the working cash fund (including amounts loaned to other funds)		-	\$2,158,693.00
			[Balance in Working Cash Fund]

TOTAL (Authorized Issue Size) \$96,675,388.84

If issued on a tax-exempt basis, the working cash fund bonds would constitute a working capital financing under the Internal Revenue Code of 1986 and the arbitrage and rebate regulations promulgated thereunder. If the bonds are to be issued on a tax-exempt basis, an analysis must be made of the District's anticipated cash flow deficits in its education or other funds to determine how the proceeds of the working cash fund bonds may be invested.

In general, in order to invest the bond proceeds at an unrestricted yield, the District must reasonably expect that the principal amount of the working cash fund bonds to be issued will not be greater than the sum (i) the projected cash flow deficit in its educational or other funds during the thirteen months following the issuance of the bonds and (ii) five percent of the expenditures from the education or other funds in the preceding fiscal year. This reasonably expected deficit must be evidenced by monthly cash flow estimates prepared by the District.

Non-Referendum Debt Service										Referendum Debt Service										
Ley Year	Fiscal Year	\$2,063,400		\$2,107,000		PROPOSED GO Limited Bonds, Series 2019 (2)	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy		Remaining Margin	\$28,195,000		\$290,000		Total General Obligation Debt	1.0% County Loss/Cost	Growth Rate	B&I Tax Rate		
		Taxable Limited Bonds, Series 2017	Taxable Limited Bonds, Series 2018	Series 2012B Refunding School Bonds, Series 2016	GO Refunding School Refunding Debt Service			Series 1998 GO Refunding School Bonds	Series 2002 GO Refunding Bonds		Refunding School Bonds, Series 2016	Refunding School Debt Service								
2010	2012	\$ 1,853,000	\$ -	\$ -	\$ 1,853,000	\$ 1,906,674	\$ 53,674	\$ 8,730,275	\$ 937,910	\$ 1,496,698	\$ -	\$ -	\$ 11,164,883	\$ 13,017,883	\$ 13,148,061	\$ 3,434,199,296	4.98%	0.3829		
2011	2013	-1,854,550	-	-	-1,854,550	-1,935,275	-80,725	-4,391,838	-5,288,610	-1,494,580	-	-	-11,175,028	-13,029,578	-13,159,873	-3,108,106,597	-9.50%	0.4234		
2012	2014	-1,990,764	-	-	-1,990,764	-1,993,333	-2,568	-8,975,794	-557,865	-1,497,380	-121,139	-	-11,152,178	-13,142,942	-13,274,371	-2,871,267,734	-7.62%	0.4623		
2013	2015	-1,992,281	-	-	-1,992,281	-2,027,219	-34,938	-8,946,519	-557,865	-1,494,890	-115,488	-	-11,084,762	-13,077,043	-13,207,813	-2,650,005,961	-7.71%	0.4984		
2014	2016	-2,057,500	-	-	-2,057,500	-2,057,628	-38	-8,946,744	-557,865	-1,497,340	-119,039	-	-11,090,988	-13,148,577	-13,280,063	-2,629,696,532	-0.77%	0.5050		
2015	2017	-2,073,996	-	-	-2,073,996	-2,074,089	-93	-8,695,775	-557,865	-1,494,513	-152,521	-	-11,223,910	-13,097,579	-13,228,555	-2,639,750,847	0.38%	0.5011		
2016	2018	-	2,088,532	-	-	2,088,532	2,088,607	76	-	9,412,865	1,496,653	5,520	349,240	11,264,278	13,352,809	13,486,337	2,889,591,285	9.46%	0.4667	
2017	2019	-	-	2,132,376	-	2,132,376	92	-	-	10,723,538	150,520	349,421	11,223,479	13,355,855	13,489,414	2,947,383,111	2.00%	0.4577		
2018	2020	-	-	-	2,131,613	2,132,468	856	-	-	10,730,288	148,519	349,523	11,228,330	13,359,942	13,493,541	3,006,330,773	2.00%	0.4488		
2019	2021	-	-	-	2,131,450	2,132,468	1,018	-	-	8,441,050	111,518	-	11,033,564	11,143,900	3,066,457,388	2.00%	0.3634			
2020	2022	-	-	-	2,129,650	2,132,468	2,818	-	-	-	-	-	1,574,490	1,574,490	3,704,140	3,741,181	3,127,786,536	2.00%	0.1196	
2021	2023	-	-	-	2,131,450	2,132,468	1,018	-	-	-	-	-	-	2,131,450	2,152,765	3,190,342,267	2.00%	0.0675		
2022	2024	-	-	-	2,131,650	2,132,468	818	-	-	-	-	-	-	-	2,131,650	2,152,967	3,254,149,112	2.00%	0.0662	
2023	2025	-	-	-	2,130,250	2,132,468	2,218	-	-	-	-	-	-	-	2,130,250	2,151,553	3,319,232,094	2.00%	0.0648	
2024	2026	-	-	-	2,132,250	2,132,468	218	-	-	-	-	-	-	-	2,132,250	2,153,573	3,385,616,736	2.00%	0.0636	
2025	2027	-	-	-	2,132,450	2,132,468	18	-	-	-	-	-	-	-	2,132,450	2,153,775	3,453,329,071	2.00%	0.0624	
2026	2028	-	-	-	2,130,850	2,132,468	1,618	-	-	-	-	-	-	-	2,130,850	2,152,159	3,522,395,652	2.00%	0.0611	
2027	2029	-	-	-	2,127,450	2,132,468	5,018	-	-	-	-	-	-	-	2,127,450	2,148,725	3,592,843,566	2.00%	0.0598	
2028	2030	-	-	-	2,127,250	2,132,468	5,218	-	-	-	-	-	-	-	2,127,250	2,148,523	3,664,700,437	2.00%	0.0586	
2029	2031	-	-	-	2,132,000	2,132,468	468	-	-	-	-	-	-	-	2,132,000	2,153,320	3,737,994,446	2.00%	0.0576	
2030	2032	-	-	-	2,128,250	2,132,468	4,218	-	-	-	-	-	-	-	2,128,250	2,149,533	3,812,754,334	2.00%	0.0564	
2031	2033	-	-	-	2,131,250	2,132,468	1,218	-	-	-	-	-	-	-	2,131,250	2,152,563	3,889,009,421	2.00%	0.0553	
2032	2034	-	-	-	2,130,500	2,132,468	1,968	-	-	-	-	-	-	-	2,130,500	2,151,805	3,966,789,610	2.00%	0.0542	
2033	2035	-	-	-	2,131,000	2,132,468	1,468	-	-	-	-	-	-	-	2,131,000	2,152,310	4,046,125,402	2.00%	0.0532	
2034	2036	-	-	-	2,127,500	2,132,468	4,968	-	-	-	-	-	-	-	2,127,500	2,148,775	4,127,047,910	2.00%	0.0521	
2035	2037	-	-	-	2,130,000	2,132,468	2,468	-	-	-	-	-	-	-	2,130,000	2,151,300	4,209,588,868	2.00%	0.0511	
2036	2038	-	-	-	2,128,000	2,132,468	4,468	-	-	-	-	-	-	-	2,128,000	2,149,280	4,293,780,645	2.00%	0.0501	
2037	2039	-	-	-	2,131,500	2,132,468	968	-	-	-	-	-	-	-	2,131,500	2,152,815	4,379,656,258	2.00%	0.0492	
Total DS From																				
Current FY:		\$ -	\$ 2,088,532	\$ 2,132,376	\$ 42,606,313	\$ 46,827,221		\$ -	\$ 9,412,865	\$ 31,391,528	\$ 416,077	\$ 2,972,220	\$ 44,192,690	\$ 91,019,910	\$ 91,930,109					
Estimated Net Proceeds:					\$ 29,600,000															

(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.

The applicable CPI increase has been applied to levy years 2009-2017, and assumed to be 0% per year thereafter.

If the District issues non-referendum bonds with debt service structured assuming a growing DSEB, it will need to pass resolutions, perhaps annually, to capture the additional DSEB levy available from CPI growth.

If the CPI growth is less than estimated on average, the District will have to pay debt service in excess of the DSEB from funds on hand.

(2) Rates based upon the AAA MMD index for August 29, 2017 and recent bond sales PMA believes to be accurate and reliable plus 0.50%. Estimated TIC: 3.71%.

Outstanding Debt Review

Levy Year	2016	2017	2018	2019	2020
Collection Year	2017	2018	2019	2020	2021
Fiscal Year Ending 6/30	2018	2019	2020	2021	2022
Direct Debt, Beginning of Period (1)	\$ 43,410,400	\$ 32,117,000	\$ 20,255,000	\$ 10,000,000	\$ 1,550,000
Principal Paydown, Series 1998 (2)	(8,855,000)	-	-	-	-
Principal Paydown, Series 2002 (2)	(70,000)	(9,300,000)	(9,795,000)	(8,020,000)	-
Principal Paydown, Series 2012 (3)	-	-	-	-	-
Principal Paydown, Series 2012B (3)	-	(145,000)	(145,000)	(110,000)	-
Principal Paydown, Series 2016 Ref (2)	(305,000)	(310,000)	(315,000)	(320,000)	(1,550,000)
Principal Paydown, Series 2017 (2)	(2,063,400)	-	-	-	-
Principal Paydown, Series 2018 (2)	-	(2,107,000)	-	-	-
Direct Debt, End of Period (1)	<u>\$ 32,117,000</u>	<u>\$ 20,255,000</u>	<u>\$ 10,000,000</u>	<u>\$ 1,550,000</u>	<u>\$ -</u>
Equalized Assessed Valuation	\$ 2,889,591,285	\$ 2,947,383,111	\$ 3,006,330,773	\$ 3,066,457,388	\$ 3,127,786,536
Assumed EAV Increase		2.00%	2.00%	2.00%	2.00%
Statutory Debt Limit @ 13.80%	\$ 398,763,597	\$ 406,738,869	\$ 414,873,647	\$ 423,171,120	\$ 431,634,542
Direct Debt, End of Period as % of EAV	1.11%	0.69%	0.33%	0.05%	0.00%
Statutory Debt Margin at End of Period (1)	<u>\$ 366,646,597</u>	<u>\$ 386,483,869</u>	<u>\$ 404,873,647</u>	<u>\$ 421,621,120</u>	<u>\$ 431,634,542</u>

(1) Assumes that the principal due in the current year is paid or that the funds are set aside for payment. Does not include leases.

(2) Principal paid on December 1 of the fiscal year.

(3) Principal paid on July 1 of the fiscal year.

Lew Year	Fiscal Year	\$72,110,000	\$28,195,000	\$870,000 GO	\$2,900,000	\$2,063,400	\$2,107,000	Total	Ending Principal Balance	Cumulative Principal Retirement as Percent of Total
		GO School Bonds, Series 1998	GO Refunding School Bonds, Series 2002	Refunding School Bonds, Series 2012B	GO Refunding School Bonds, Series 2016	Taxable GO Limited Bonds, Series 2017	Taxable GO Limited Bonds, Series 2018			
2016	2018	\$ 8,855,000	\$ 70,000	\$ -	\$ 305,000	\$ 2,063,400	\$ -	\$ 11,293,400	\$ 32,117,000	26.02%
2017	2019	-	9,300,000	145,000	310,000	-	2,107,000	11,862,000	20,255,000	53.34%
2018	2020	-	9,795,000	145,000	315,000	-	-	10,255,000	10,000,000	76.96%
2019	2021	-	8,020,000	110,000	320,000	-	-	8,450,000	1,550,000	96.43%
2020	2022	-	-	-	1,550,000	-	-	1,550,000	-	100.00%
2021	2023	-	-	-	-	-	-	-	-	100.00%
2022	2024	-	-	-	-	-	-	-	-	100.00%
2023	2025	-	-	-	-	-	-	-	-	100.00%
2024	2026	-	-	-	-	-	-	-	-	100.00%
2025	2027	-	-	-	-	-	-	-	-	100.00%
2026	2028	-	-	-	-	-	-	-	-	100.00%
2027	2029	-	-	-	-	-	-	-	-	100.00%
Total:		<u>\$ 8,855,000</u>	<u>\$ 27,185,000</u>	<u>\$ 400,000</u>	<u>\$ 2,800,000</u>	<u>\$ 2,063,400</u>	<u>\$ 2,107,000</u>	<u>\$ 43,410,400</u>		

Purpose:	NM - BD	AR	CR	CR	WC	WC
Callable:	AR	Noncallable	Noncallable	Noncallable	Noncallable	Noncallable

Non-Referendum Debt Service

Referendum Debt Service

Ley Year	Fiscal Year	Non-Referendum Debt Service				Non Referendum Debt Service		Referendum Debt Service										B&I Tax Rate
		Prior Bonds	Limited Bonds, Series 2017	Limited Bonds, Series 2018	Taxable GO	Taxable GO	Extension Base Created W/1994 Levy	Remaining Margin	Series 1998 GO School Bonds	Series 2002 GO Refunding Bonds	Series 2012B GO School Refunding Bonds	Refunding Bonds, Series 2016	Total Refunding Debt Service	Total Obligation Bonds Debt Service	1.0% County Loss/Cost Debt Service	EAV	Growth Rate	
2010	2012	\$ 1,853,000	\$ -	\$ -	\$ 1,853,000	\$ 1,906,674	\$ 53,674	\$ 8,730,275	\$ 937,910	\$ 1,496,698	\$ -	\$ -	\$ 11,164,883	\$ 13,017,883	\$ 13,148,061	\$ 3,434,190,296	-4.98%	0.3829
2011	2013	1,854,550	-	-	1,854,550	1,935,275	80,725	4,304,838	5,288,610	1,494,580	-	-	11,176,028	13,029,578	13,159,873	3,408,406,597	-9.50%	0.4234
2012	2014	1,990,764	-	-	1,990,764	1,993,333	2,568	8,975,794	557,865	1,497,380	121,139	-	11,152,178	13,142,942	13,274,371	2,871,267,734	-7.62%	0.4623
2013	2015	1,992,281	-	-	1,992,281	2,027,219	34,938	8,916,519	557,865	1,494,890	115,488	-	11,084,762	13,077,043	13,207,813	2,650,005,961	-7.71%	0.4984
2014	2016	2,057,590	-	-	2,057,590	2,057,628	38	8,916,744	557,865	1,497,340	119,039	-	11,090,988	13,148,577	13,280,063	2,629,696,532	-0.77%	0.5050
2015	2017	2,073,996	-	-	2,073,996	2,074,089	93	8,695,775	557,865	1,494,513	152,521	122,910	11,023,584	13,097,579	13,228,555	2,639,750,847	0.38%	0.5011
2016	2018	-	2,088,532	-	2,088,532	2,088,607	76	-	9,412,865	1,496,653	5,520	349,240	11,264,278	13,352,809	13,486,337	2,889,591,285	9.46%	0.4667
2017	2019	-	-	2,132,376	2,132,376	2,132,468	92	-	-	10,723,538	150,520	349,421	11,223,479	13,355,855	13,489,414	2,947,383,111	2.00%	0.4577
2018	2020	-	-	-	-	2,132,468	2,132,468	-	-	10,730,288	148,519	349,523	11,228,330	13,355,855	13,489,414	3,006,330,773	2.00%	0.3772
2019	2021	-	-	-	-	2,132,468	2,132,468	-	-	8,441,050	111,518	349,546	8,902,114	8,902,114	8,991,135	3,066,457,388	2.00%	0.2932
2020	2022	-	-	-	-	2,132,468	2,132,468	-	-	-	-	1,574,490	1,574,490	1,574,490	1,590,235	3,127,786,536	2.00%	0.0508
2021	2023	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,190,342,267	2.00%	0.0000
2022	2024	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,254,149,112	2.00%	0.0000
2023	2025	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,319,232,094	2.00%	0.0000
2024	2026	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,385,616,736	2.00%	0.0000
2025	2027	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,453,329,071	2.00%	0.0000
2026	2028	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,522,395,652	2.00%	0.0000
2027	2029	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,592,843,566	2.00%	0.0000
2028	2030	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,664,700,437	2.00%	0.0000
2029	2031	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,737,994,446	2.00%	0.0000
2030	2032	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,812,754,334	2.00%	0.0000
2031	2033	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,889,009,421	2.00%	0.0000
2032	2034	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	3,966,789,610	2.00%	0.0000
2033	2035	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	4,046,125,402	2.00%	0.0000
2034	2036	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	4,127,047,910	2.00%	0.0000
2035	2037	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	4,209,588,868	2.00%	0.0000
2036	2038	-	-	-	-	2,132,468	2,132,468	-	-	-	-	-	-	-	-	4,293,780,645	2.00%	0.0000
Total DS From																		
Current FY:		\$ -	\$ 2,088,532	\$ 2,132,376	\$ 4,220,908			\$ -	\$ 9,412,865	\$ 31,391,528	\$ 416,077	\$ 2,972,220	\$ 44,192,690	\$ 48,413,598	\$ 48,897,734			

(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.

The applicable CPI increase has been applied to levy years 2009-2017, and assumed to be 0% per year thereafter.

If the District issues non-referendum bonds with debt service structured assuming a growing DSEB, it will need to pass resolutions, perhaps annually, to capture the additional DSEB levy available from CPI growth.

If the CPI growth is less than estimated on average, the District will have to pay debt service in excess of the DSEB from funds on hand.



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