BERKELEY SCHOOL DISTRICT 87

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PMA SECURITIES, INC.

Financing Discussion

September 24, 2018

PMA SECURITIES

BONDS 101

- Municipal Bonds are issued to provide funds to state and local governmental units to build public projects and infrastructure
- Represents a promise to repay investors an amount of money borrowed (principal) along with interest ("debt service"), according to a fixed schedule
  - Similar to a home mortgage
- Typically, an investor receives tax-free interest payments so it offers to buy Municipal Bonds at a lower interest rate
- Municipal Bonds usually mature between 1-20 years from issuance date (for most types of bonds, maximum 20 years per State statute)
- Debt service levy: Amount of property taxes requested to pay principal and interest on outstanding general obligation (GO) Municipal Bonds

- What are the primary variables that impact a school district's borrowing cost?
  - Credit rating
  - Debt structure
  - Market tone/timing

CREDIT RATINGS

WHAT IS A CREDIT RATING?

- Opinion about credit risk
  - Ability and willingness of an issuer to meet its financial obligations in full and on time
  - Likelihood of default

- Helps investors determine whether to invest in a school district's bond issue

- Key variables in a credit rating analysis
  - Management
  - Local economy
  - Financial position
  - Debt position

- Higher credit rating = lower cost of borrowing

- Communicating the District's immediate and long-term financial picture is paramount to a successful credit rating presentation

CREDIT RATING SCALES

The District's current credit rating

	Moody's	S&P	Fitch	Kroll	
Investment Grade	Aaa	AAA	AAA	AAA	Extremely strong capacity to meet financial obligations.
	Aa1	AA+	AA+	AA+	
	Aa2	AA	AA	AA	Very strong capacity to meet obligations.
	Aa3	AA-	AA-	AA-	
	A1	A+	A+	A+	
	A2	A	A	A	Strong financial capacity but susceptible to adversity.
	A3	A-	A-	A-	
	Baa1	BBB+	BBB+	BBB+	
	Baa2	BBB	BBB	BBB	Adequate financial capacity but adverse conditions will lead to weakness.
	Baa3	BBB-	BBB-	BBB-	
Non-Investment Grade	Ba1	BB+	BB+	BB+	
	Ba2	BB	BB	BB	Non-Investment Grade Speculative
	Ba3	BB-	BB-	BB-	
	B1	B+	B+	B+	
	B2	B	B	B	Highly Speculative
	B3	B-	B-	B-	
	Caa	CCC+		CCC+	
	Ca	CCC	CCC	CCC	Extremely Speculative
	C	CCC-		CCC-	
			DDD	CC	
			DD	C	
		D	D	D	Default

THE DISTRICT'S CREDIT RATING HISTORY

9/24/09	A1 rating affirmed
4/6/10	Rating recalibrated to Aa2
8/9/12	Aa2 rating affirmed
11/27/12	Aa2 rating affirmed
3/12/15	Rating downgraded from Aa2 to A1; negative outlook assigned
8/10/16	A1 rating and negative outlook affirmed
3/23/18	**A1 rating affirmed – negative outlook removed**

PMA SECURITIES

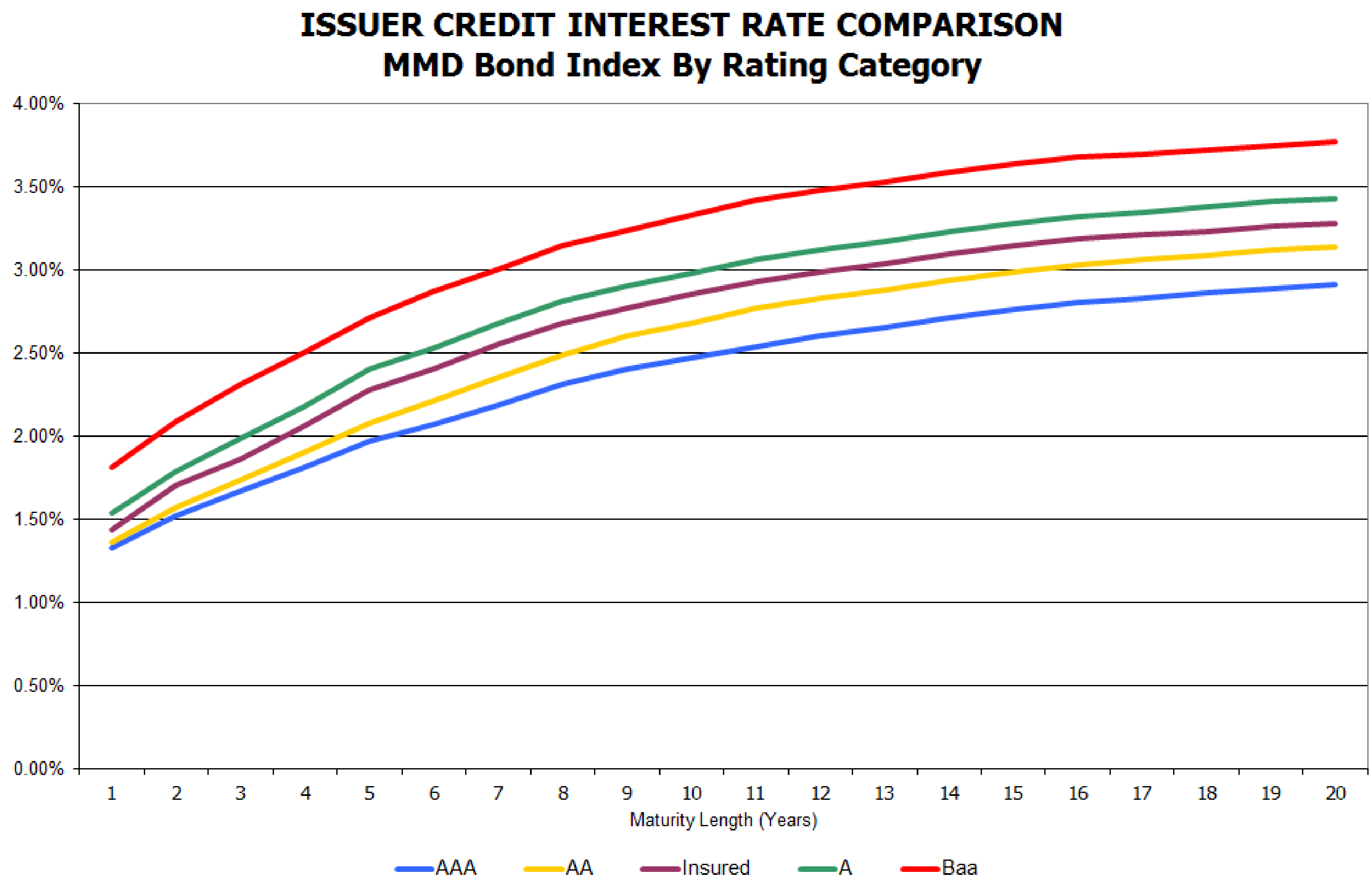
FUND BALANCE HISTORY

Summary of Operating Funds and Debt Service Fund

(Years Ended June 30)

	Educational Fund	Operations and Maintenance Fund	Combined Educational Fund and Operations and Maintenance Fund	Transportation Fund	Working Cash Fund	IMRF/Social Security Fund	Tort Fund	Debt Service Fund	Combined Operating Funds and Debt Service Fund
2013									
Receipts	$ 23,547,296	$ 2,962,076	$ 26,509,372	$ 1,450,955	$ 36,482	$ 958,732	$ 13,102	$ 1,990,862	$ 30,959,505
Disbursements	25,155,251	2,987,728	28,142,979	1,086,864	-	813,207	7,287	12,175,859	42,226,196
Net Surplus (Deficit)	(1,607,955)	(25,652)	(1,633,607)	364,091	36,482	145,525	5,815	(10,184,997)	(11,266,691)
Other Sources (Uses)	(83,151)	386,670	303,519	-	2,934,086	-	-	10,227,476	13,465,081
Beginning Fund Balance	10,828,993	1,231,399	12,060,392	1,052,199	5,049,396	1,031,691	29,653	1,323,286	20,546,617
Ending Fund Balance	$ 9,137,887	$ 1,592,417	$ 10,730,304	$ 1,416,290	$ 8,019,964	$ 1,177,216	$ 35,468	$ 1,365,765	$ 22,745,007
2014									
Receipts	$ 24,831,113	$ 2,763,719	$ 27,594,832	$ 1,246,597	$ 49,504	$ 747,637	$ 12,502	$ 2,044,391	$ 31,695,463
Disbursements	26,133,970	2,858,395	28,992,365	1,011,268	-	833,508	11,353	2,123,783	32,972,277
Net Surplus (Deficit)	(1,302,857)	(94,676)	(1,397,533)	235,329	49,504	(85,871)	1,149	(79,392)	(1,276,814)
Other Sources (Uses)	(69,986)	8,960	(61,026)	547	(2,039,761)	-	-	100,240	(2,000,000)
Beginning Fund Balance	9,137,887	1,592,417	10,730,304	1,416,290	8,019,964	1,177,216	35,468	1,365,765	22,745,007
Ending Fund Balance	$ 7,765,044	$ 1,506,701	$ 9,271,745	$ 1,652,166	$ 6,029,707	$ 1,091,345	$ 36,617	$ 1,386,613	$ 19,468,193
2015									
Receipts	$ 26,931,460	$ 2,844,363	$ 29,775,823	$ 1,517,726	$ (9,716)	$ 546,264	$ 200	$ 1,984,530	$ 33,814,827
Disbursements	27,008,171	3,669,821	30,677,992	1,296,210	-	818,390	3,457	2,106,694	34,902,743
Net Surplus (Deficit)	(76,711)	(825,458)	(902,169)	221,516	(9,716)	(272,126)	(3,257)	(122,164)	(1,087,916)
Other Sources (Uses)	478,766	309,230	787,996	(400,000)	(635,748)	-	-	96,862	(150,890)
Beginning Fund Balance	7,765,044	1,506,701	9,271,745	1,652,166	6,029,707	1,091,345	36,617	1,386,613	19,468,193
Ending Fund Balance	$ 8,167,099	$ 990,473	$ 9,157,572	$ 1,473,682	$ 5,384,243	$ 819,219	$ 33,360	$ 1,361,311	$ 18,229,387
2016									
Receipts	$ 27,145,659	$ 2,768,290	$ 29,913,949	$ 1,593,017	$ 13,676	$ 793,456	$ (485)	$ 2,083,675	$ 34,397,288
Disbursements	26,950,658	3,101,444	30,052,102	1,092,801	-	801,036	1,541	2,108,353	34,055,833
Net Surplus (Deficit)	195,001	(333,154)	(138,153)	500,216	13,676	(7,580)	(2,026)	(24,678)	341,455
Other Sources (Uses)	(70,320)	7,841	(62,479)	-	(326,448)	-	-	88,927	(300,000)
Beginning Fund Balance	8,167,099	990,473	9,157,572	1,473,682	5,384,243	819,219	33,360	1,361,311	18,229,387
Ending Fund Balance	$ 8,291,780	$ 665,160	$ 8,956,940	$ 1,973,898	$ 5,071,471	$ 811,639	$ 31,334	$ 1,425,560	$ 18,270,842
2017									
Receipts	$ 29,166,636	$ 3,315,229	$ 32,481,865	$ 2,292,527	$ 27,579	$ 816,350	$ 21,280	$ 2,101,618	$ 37,741,219
Disbursements	27,915,082	2,983,924	30,899,006	2,362,184	-	825,328	9,379	2,128,015	36,223,912
Net Surplus (Deficit)	1,251,554	331,305	1,582,859	(69,657)	27,579	(8,978)	11,901	(26,397)	1,517,307
Other Sources (Uses)	(68,704)	9,384	(59,320)	-	(28,064)	-	-	87,384	-
Beginning Fund Balance	8,291,780	665,160	8,956,940	1,973,898	5,071,471	811,639	31,334	1,425,560	18,270,842
Ending Fund Balance	$ 9,474,630	$ 1,005,849	$ 10,480,479	$ 1,904,241	$ 5,070,986	$ 802,661	$ 43,235	$ 1,486,547	$ 19,788,149
Fund Balance as % of Disbursements			33.92%						54.63%

- **3/23/18 (A1 rating affirmed and negative outlook removed)**
  - The District "maintains solid fund balance and liquidity relative to its budget"
  - The tax base is showing signs of stabilization
  - "Following deficits in fiscal 2013 through fiscal 2015, the District closed each of the last two fiscal years with operating fund balance, growing operating fund balance…"
  - "The District identified specific expenditure reductions to improve performance"
  - Low debt burden
  - High dependence on general state aid
  - Exposure to an underfunded statewide teachers' pension plan


ISSUER CREDIT INTEREST RATE COMPARISON
MMD Bond Index By Rating Category
4.00%
3.50%
3.00%
2.50%
2.00%
1.50%
1.00%
0.50%
0.00%
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Maturity Length (Years)
AAA
AA
Insured
A
Baa

PMA SECURITIES

EXISTING DEBT

DEBT CAPACITY

Levy Year	2017	2018	2019	2020	2021	2022	2023	2024
Collection Year	2018	2019	2020	2021	2022	2023	2024	2025
Fiscal Year Ending 6/30	2019	2020	2021	2022	2023	2024	2025	2026
Direct Debt, Beginning of Period (1)	$ 10,025,000	$ 8,275,000	$ 6,480,000	$ 4,630,000	$ 4,280,000	$ 3,920,000	$ 3,550,000	$ 3,165,000
Principal Paydown, Series 2007 (2)	(175,000)	(45,000)	(45,000)	(45,000)	(50,000)	(20,000)	-	-
Principal Paydown, Series 2012A (2)	(1,430,000)	(1,465,000)	(1,510,000)	-	-	-	-	-
Principal Paydown, Series 2012B (2)	(120,000)	(260,000)	(270,000)	(275,000)	(285,000)	(325,000)	-	-
Principal Paydown, Series 2013A (2)	(25,000)	(25,000)	(25,000)	(30,000)	(25,000)	(25,000)	(385,000)	(395,000)
Direct Debt, End of Period (1)	$ 8,275,000	$ 6,480,000	$ 4,630,000	$ 4,280,000	$ 3,920,000	$ 3,550,000	$ 3,165,000	$ 2,770,000
Equalized Assessed Valuation	$ 452,312,172	$ 461,358,415	$ 470,585,584	$ 517,644,142	$ 527,997,025	$ 538,556,965	$ 592,412,662	$ 604,260,915
Assumed EAV Increase		2.00%	2.00%	10.00%	2.00%	2.00%	10.00%	2.00%
Statutory Debt Limit @ 6.90%	$ 31,209,540	$ 31,833,731	$ 32,470,405	$ 35,717,446	$ 36,431,795	$ 37,160,431	$ 40,876,474	$ 41,694,003
Direct Debt, End of Period as % of EAV	1.83%	1.40%	0.98%	0.83%	0.74%	0.66%	0.53%	0.46%
Statutory Debt Margin at End of Period (1)	$ 22,934,540	$ 25,353,731	$ 27,840,405	$ 31,437,446	$ 32,511,795	$ 33,610,431	$ 37,711,474	$ 38,924,003

(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.

- The District's current debt capacity will be nearly $23 million on December 1, 2018

OUTSTANDING PRINCIPAL

Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$7,955,000 GO Refunding Bonds, Series 2012A	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Ending Principal Balance	Cumulative Principal Retirement as Percent of Total
2017	2019	$ 175,000	$ 1,430,000	$ 120,000	$ 25,000	$ 1,750,000	$ 8,275,000	17.46%
2018	2020	45,000	1,465,000	260,000	25,000	1,795,000	6,480,000	35.36%
2019	2021	45,000	1,510,000	270,000	25,000	1,850,000	4,630,000	53.82%
2020	2022	45,000	-	275,000	30,000	350,000	4,280,000	57.31%
2021	2023	50,000	-	285,000	25,000	360,000	3,920,000	60.90%
2022	2024	20,000	-	325,000	25,000	370,000	3,550,000	64.59%
2023	2025	-	-	-	385,000	385,000	3,165,000	68.43%
2024	2026	-	-	-	395,000	395,000	2,770,000	72.37%
2025	2027	-	-	-	410,000	410,000	2,360,000	76.46%
2026	2028	-	-	-	420,000	420,000	1,940,000	80.65%
2027	2029	-	-	-	435,000	435,000	1,505,000	84.99%
2028	2030	-	-	-	445,000	445,000	1,060,000	89.43%
2029	2031	-	-	-	460,000	460,000	600,000	94.01%
2030	2032	-	-	-	475,000	475,000	125,000	98.75%
2031	2033	-	-	-	125,000	125,000	-	100.00%
2032	2034	-	-	-	-	-	-	100.00%
2033	2035	-	-	-	-	-	-	100.00%
Totals:		$ 380,000	$ 4,405,000	$ 1,535,000	$ 3,705,000	$ 10,025,000		
Purpose:		Working Cash AR of 2001	CR of 2004	AR of 2007	Working Cash			
Callable:		12/01/16	Noncallable	12/01/22	12/01/22			

CR = Current Refunding AR = Advance Refunding

EXISTING DEBT SERVICE ON BONDS

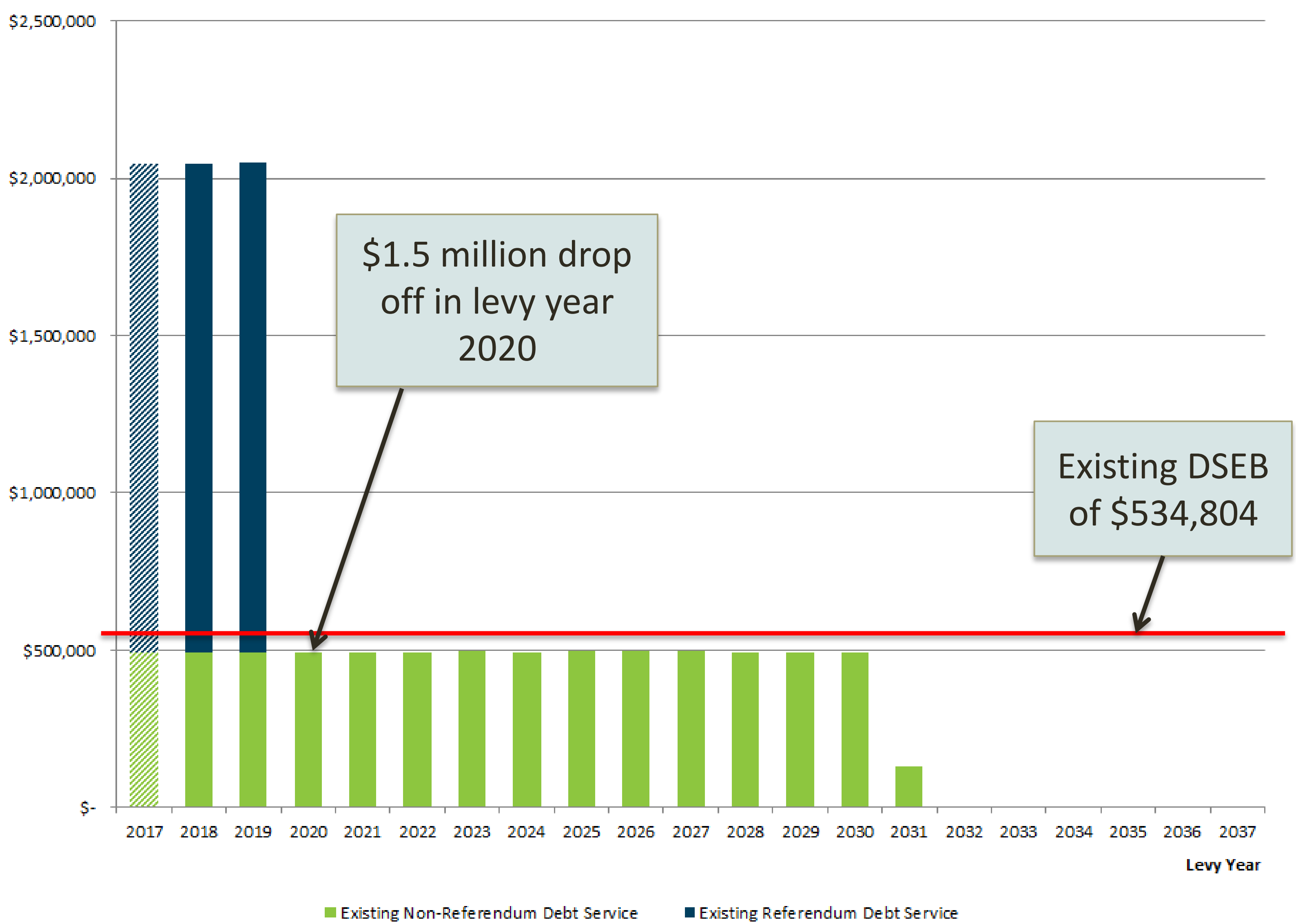
Debt service and the B&I rate will drop in levy year 2020

		Non-Referendum Debt Service						Referendum Debt Service							
Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	$7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~0.94%~~	~~0.5440~~
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~
2017	2019	190,498	162,200	140,688	493,385	523,804	30,419	1,555,000	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755
2018	2020	53,498	299,800	139,938	493,235	534,804	41,569	1,554,250	-	1,554,250	2,047,485	2,149,859	461,358,415	2.00%	0.4660
2019	2021	51,653	303,300	139,188	494,140	534,804	40,664	1,555,300	-	1,555,300	2,049,440	2,151,912	470,585,584	2.00%	0.4573
2020	2022	49,796	301,550	143,438	494,784	534,804	40,020	-	-	-	494,784	519,523	517,644,142	10.00%	0.1004
2021	2023	52,940	303,300	137,538	493,778	534,804	41,026	-	-	-	493,778	518,466	527,997,025	2.00%	0.0982
2022	2024	20,840	334,750	136,788	492,378	534,804	42,426	-	-	-	492,378	516,996	538,556,965	2.00%	0.0960
2023	2025	-	-	496,038	496,038	534,804	38,766	-	-	-	496,038	520,839	592,412,662	10.00%	0.0879
2024	2026	-	-	494,488	494,488	534,804	40,316	-	-	-	494,488	519,212	604,260,915	2.00%	0.0859
2025	2027	-	-	497,638	497,638	534,804	37,166	-	-	-	497,638	522,519	616,346,134	2.00%	0.0848
2026	2028	-	-	495,338	495,338	534,804	39,466	-	-	-	495,338	520,104	677,980,747	10.00%	0.0767
2027	2029	-	-	497,738	497,738	534,804	37,066	-	-	-	497,738	522,624	691,540,362	2.00%	0.0756
2028	2030	-	-	493,600	493,600	534,804	41,204	-	-	-	493,600	518,280	705,371,169	2.00%	0.0735
2029	2031	-	-	494,138	494,138	534,804	40,666	-	-	-	494,138	518,844	775,908,286	10.00%	0.0669
2030	2032	-	-	494,188	494,188	534,804	40,616	-	-	-	494,188	518,897	791,426,452	2.00%	0.0656
2031	2033	-	-	128,750	128,750	534,804	406,054	-	-	-	128,750	135,188	807,254,981	2.00%	0.0167
2032	2034	-	-	-	-	534,804	534,804	-	-	-	-	-	887,980,479	10.00%	0.0000
2033	2035	-	-	-	-	534,804	534,804	-	-	-	-	-	905,740,088	2.00%	0.0000
2034	2036	-	-	-	-	534,804	534,804	-	-	-	-	-	923,854,890	2.00%	0.0000
2035	2037	-	-	-	-	534,804	534,804	-	-	-	-	-	1,016,240,379	10.00%	0.0000
2036	2038	-	-	-	-	534,804	534,804	-	-	-	-	-	1,036,565,187	2.00%	0.0000
2037	2039	-	-	-	-	534,804	534,804	-	-	-	-	-	1,057,296,491	2.00%	0.0000
Total DS From Current FY:		$ 419,224	$ 1,704,900	$ 4,929,488	$ 7,053,611			$ 4,664,550	$ -	$ 4,664,550	$ 11,718,161	$ 12,304,069			

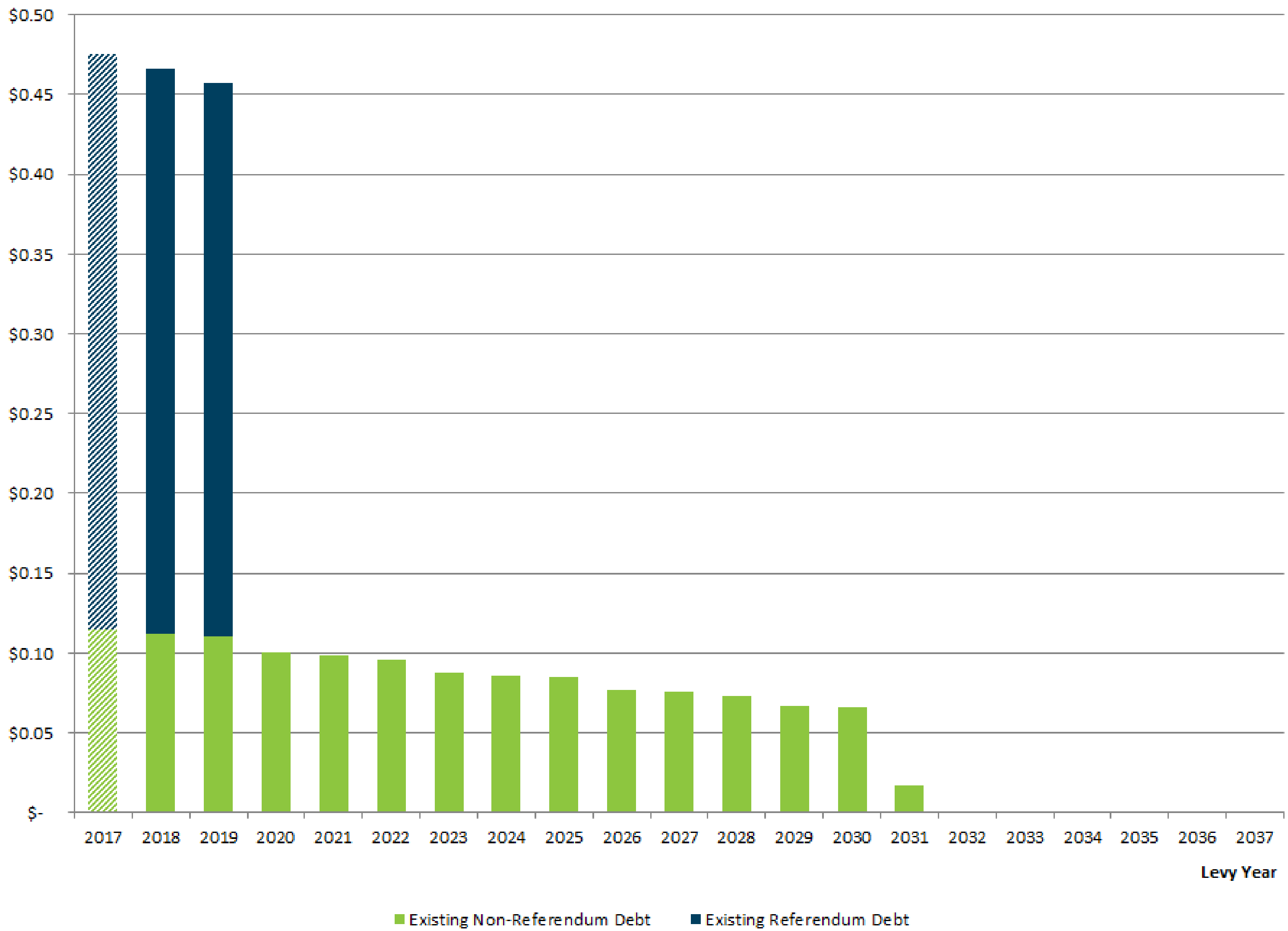
(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.
The applicable CPI increase has been applied to levy years 2009-2018, and assumed to be 0% per year thereafter.
If the District issues non-referendum bonds with debt 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.

PMA SECURITIES

EXISTING DEBT SERVICE ON BONDS



PROJECTED BOND & INTEREST TAX RATE ON EXISTING BONDS



- The IL School Code prescribes very specific methods for school districts to issue municipal debt for capital projects:

- 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 that are payable from operating dollars and not from a separate tax levy
  - Alternate revenue bonds
  - Debt or lease certificates
  - Capital leases

NON REFERENDUM DEBT OPTION
(AGAINST THE DEBT SERVICE EXTENSION BASE)

- 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: $455,573
  - DSEB for levy year 2015: $523,804

- 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)

MAXIMUM NON REFERENDUM BONDING CAPACITY AGAINST THE DSEB

		Non-Referendum Debt Service								Referendum Debt Service								
Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	PROPOSED $745,000 Taxable Limited Restructuring Bonds, Series 2019 (2)	PROPOSED $2.3 Million Limited School Bonds, Series 2019 (3)	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	$7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate	DSEB Growth Rate
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ -~~	~~$ -~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~-0.94%~~	~~0.5440~~	~~1.50%~~
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~-~~	~~-~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~	~~0.80%~~
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~-~~	~~-~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~	~~0.70%~~
2017	2019	190,498	162,200	140,688	-	-	493,385	523,804	30,419	1,555,000	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755	2.10%
2018	2020	20,820	297,325	120,675	24,218	69,600	532,638	534,804	2,166	1,554,250	-	1,554,250	2,086,888	2,191,232	461,358,415	2.00%	0.4750	2.10%
2019	2021	-	285,825	119,925	32,290	92,800	530,840	534,804	3,964	1,555,300	-	1,555,300	2,086,140	2,190,447	470,585,584	2.00%	0.4655	0.00%
2020	2022	-	284,450	124,175	32,290	92,800	533,715	534,804	1,089	-	-	-	533,715	560,401	517,644,142	10.00%	0.1083	0.00%
2021	2023	-	291,650	118,275	32,290	92,800	535,015	534,804	(211)	-	-	-	534,804	561,544	527,997,025	2.00%	0.1064	0.00%
2022	2024	-	288,400	117,525	32,290	92,800	531,015	534,804	3,789	-	-	-	531,015	557,566	538,556,965	2.00%	0.1035	0.00%
2023	2025	-	-	406,775	32,290	92,800	531,865	534,804	2,939	-	-	-	531,865	558,458	592,412,662	10.00%	0.0943	0.00%
2024	2026	-	-	407,325	32,290	92,800	532,415	534,804	2,389	-	-	-	532,415	559,036	604,260,915	2.00%	0.0925	0.00%
2025	2027	-	-	407,575	32,290	92,800	532,665	534,804	2,139	-	-	-	532,665	559,298	616,346,134	2.00%	0.0907	0.00%
2026	2028	-	-	407,525	32,290	92,800	532,615	534,804	2,189	-	-	-	532,615	559,246	677,980,747	10.00%	0.0825	0.00%
2027	2029	-	-	407,175	32,290	92,800	532,265	534,804	2,539	-	-	-	532,265	558,878	691,540,362	2.00%	0.0808	0.00%
2028	2030	-	-	405,638	32,290	92,800	530,728	534,804	4,076	-	-	-	530,728	557,264	705,371,169	2.00%	0.0790	0.00%
2029	2031	-	-	408,775	32,290	92,800	533,865	534,804	939	-	-	-	533,865	560,558	775,908,286	10.00%	0.0722	0.00%
2030	2032	-	-	406,425	32,290	92,800	531,515	534,804	3,289	-	-	-	531,515	558,091	791,426,452	2.00%	0.0705	0.00%
2031	2033	-	-	128,750	312,290	92,800	533,840	534,804	964	-	-	-	533,840	560,532	807,254,981	2.00%	0.0694	0.00%
2032	2034	-	-	-	440,250	92,800	533,050	534,804	1,754	-	-	-	533,050	559,703	887,980,479	10.00%	0.0630	0.00%
2033	2035	-	-	-	46,980	482,800	529,780	534,804	5,024	-	-	-	529,780	556,269	905,740,088	2.00%	0.0614	0.00%
2034	2036	-	-	-	-	532,200	532,200	534,804	2,604	-	-	-	532,200	558,810	923,854,890	2.00%	0.0605	0.00%
2035	2037	-	-	-	-	534,000	534,000	534,804	804	-	-	-	534,000	560,700	1,016,240,379	10.00%	0.0552	0.00%
2036	2038	-	-	-	-	530,000	530,000	534,804	4,804	-	-	-	530,000	556,500	1,036,565,187	2.00%	0.0537	0.00%
2037	2039	-	-	-	-	530,400	530,400	534,804	4,404	-	-	-	530,400	556,920	1,057,296,491	2.00%	0.0527	0.00%
2038	2040	-	-	-	-	-	-	534,804	534,804	-	-	-	-	-	1,163,026,140	10.00%	0.0000	0.00%
Total DS From Current FY:		$ 211,318	$ 1,609,850	$ 4,127,225	$ 1,211,218	$ 3,978,200	$11,137,810			$ 4,664,550	$ -	$ 4,664,550	$ 15,802,149	$ 16,592,256				

Estimated Net Proceeds: $ 2,080,000

Estimated Proceeds:

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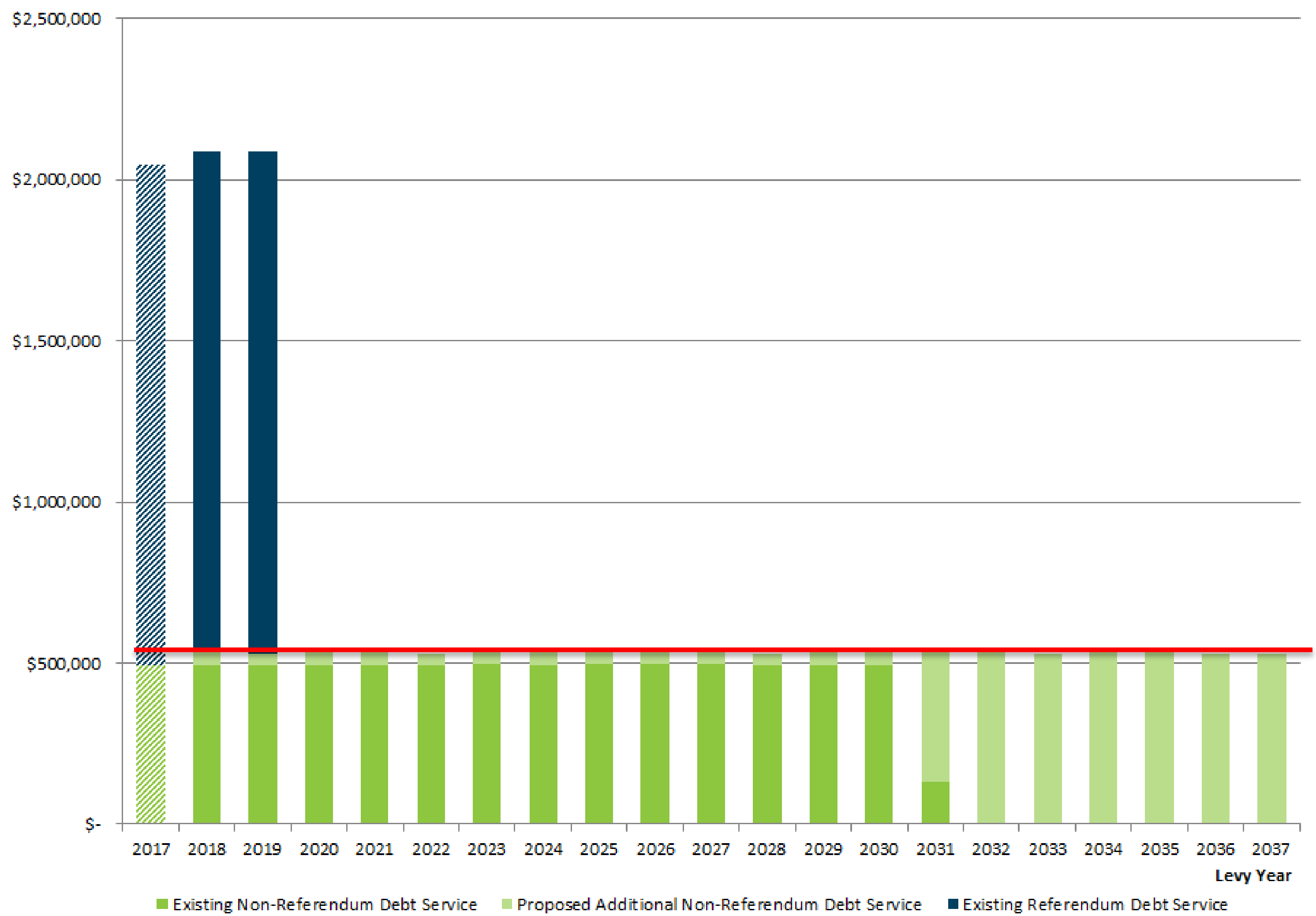
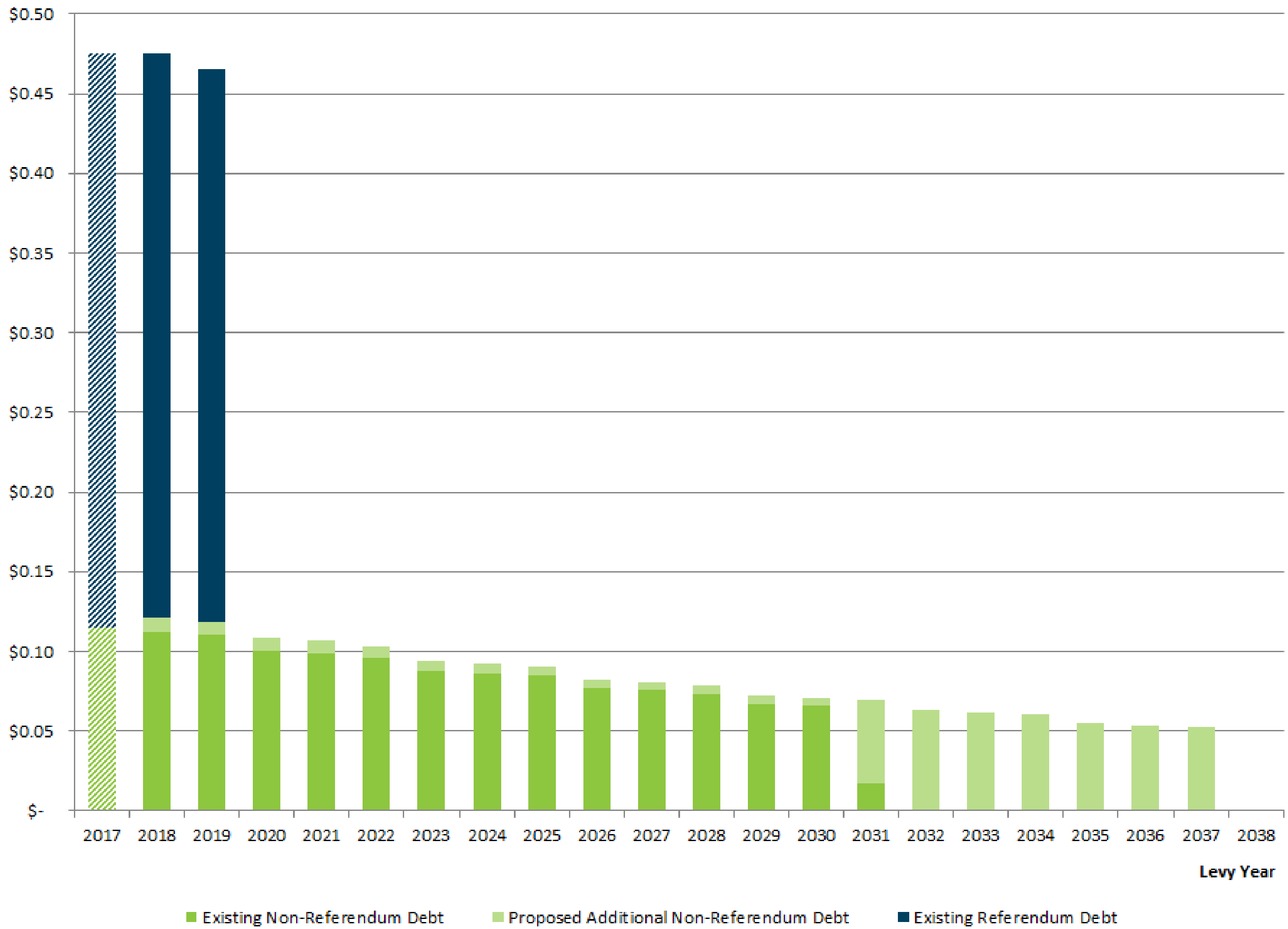
(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.
The applicable CPI increase has been applied to levy years 2009-2018, and assumed to be 0% per year thereafter.
(2) Rates based upon U.S. Treasury yields for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable. Estimated TIC = 4.43%.
(3) Rates based upon the "AAA" MMD index for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable. Estimated TIC = 3.94%.
NOTE: Scenarios where a greater portion of the overall debt is issued in advance of the expenditures of the proceeds will likely result in higher fees earned by the investment manager of the debt proceeds.

MAXIMUM NON REFERENDUM BONDING CAPACITY AGAINST THE DSEB
MAXIMUM PROCEEDS: $2,080,000
ESTIMATED ANNUAL DEBT SERVICE



MAXIMUM NON REFERENDUM BONDING CAPACITY AGAINST THE DSEB
MAXIMUM PROCEEDS: $2,080,000
PROJECTED BOND & INTEREST TAX RATE



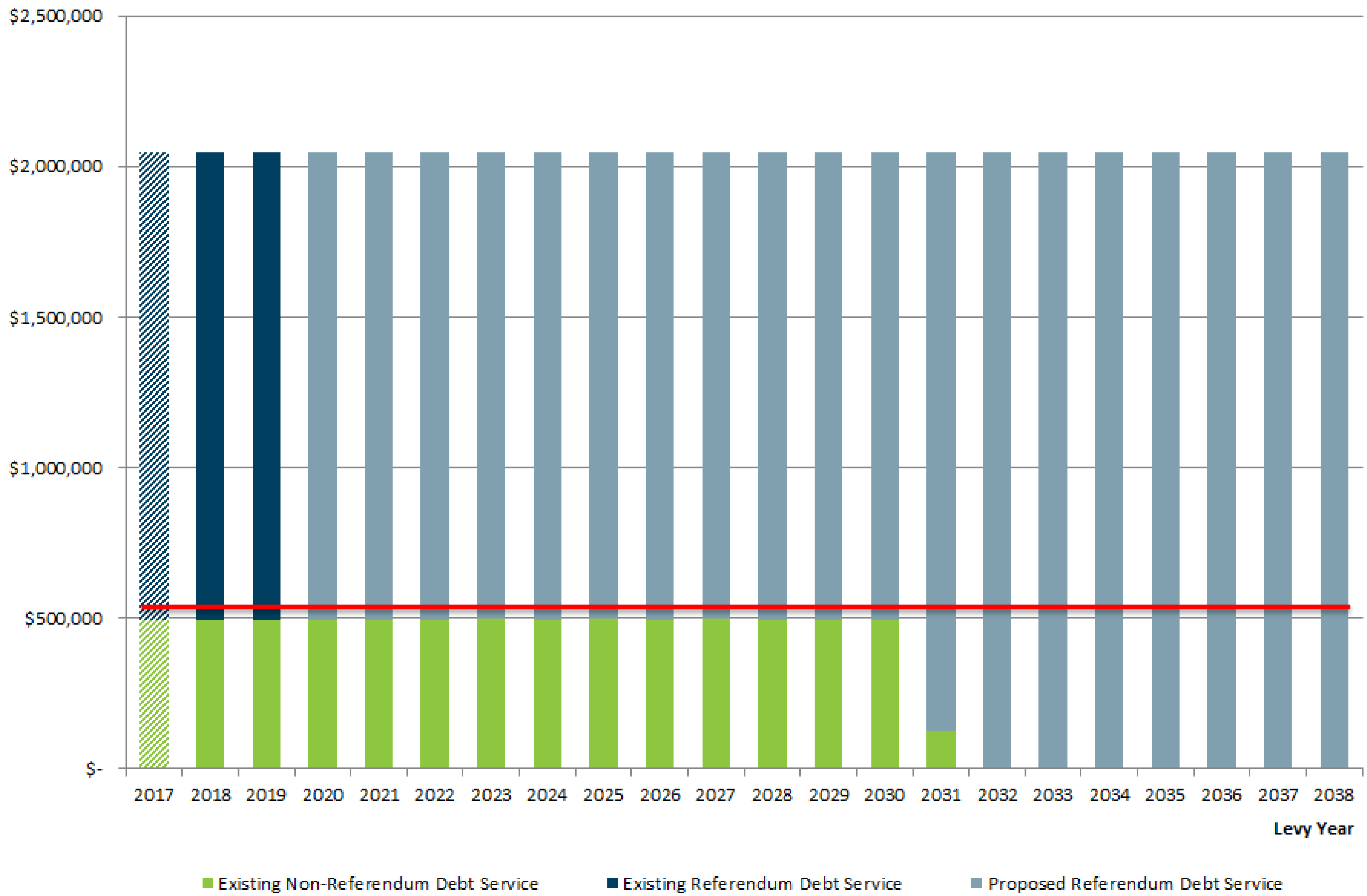
REFERENDUM OPTIONS

OPTION 1A - MARCH 2020 REFERENDUM
TOTAL LEVEL DEBT SERVICE PAYMENTS OF $2.05 MILLION FOR 20 YEARS
MAX PROCEEDS= $20.9 MILLION

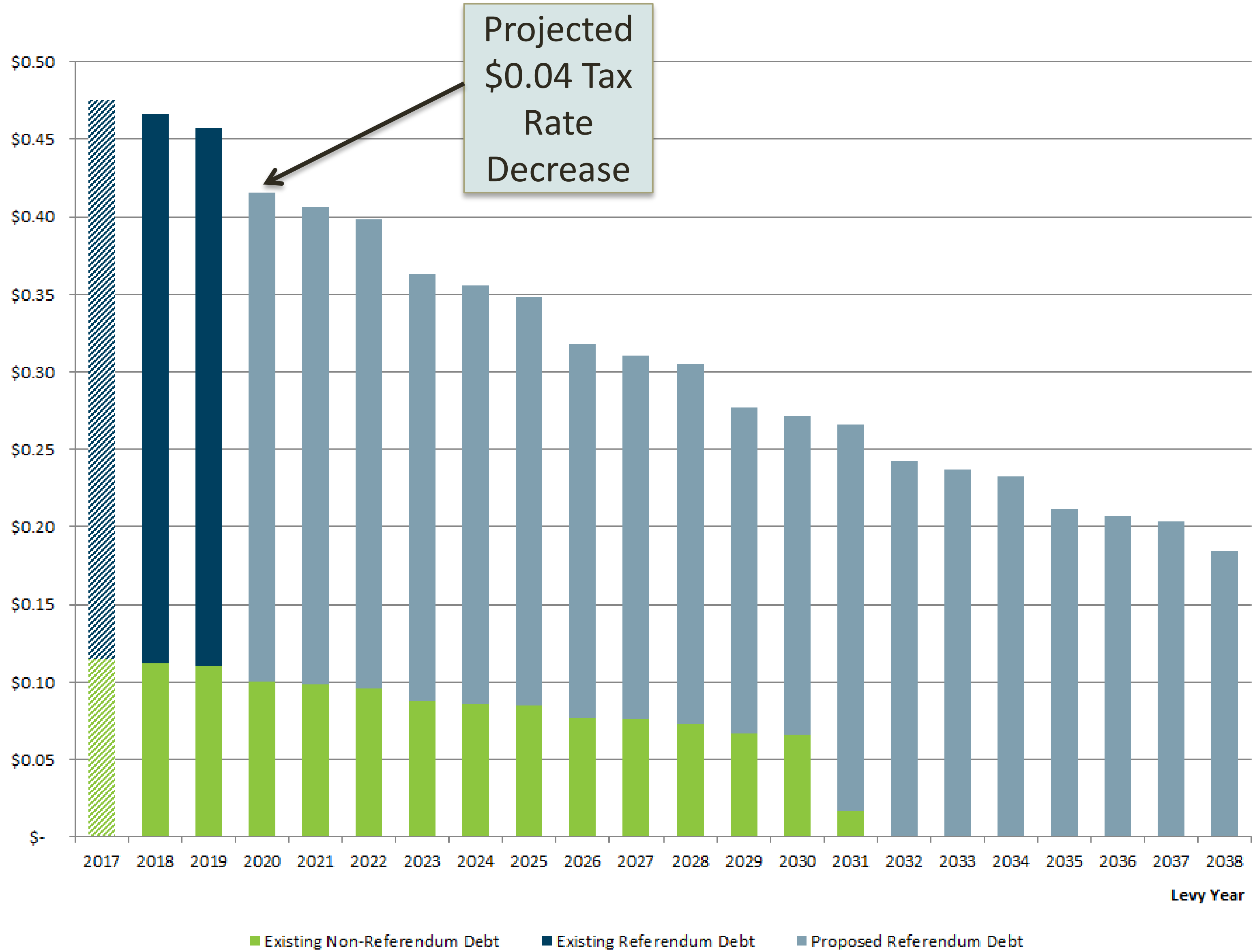
Levy Year	Fiscal Year	Non-Referendum Debt Service: $4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	Referendum Debt Service: $7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	PROPOSED Referendum Bonds, Series 2020 (2)	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate	Estimated B&I Tax Rate Change vs. Prior Year (3)	Estimated B&I Tax Payment Increase/ (Decrease) for $200,000 Homeowner (3)
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ -~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~-0.94%~~	~~0.5440~~		
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~		
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~		
2017	2019	190,498	162,200	140,688	493,385	523,804	30,419	1,555,000	-	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755		
2018	2020	53,498	299,800	139,938	493,235	534,804	41,569	1,554,250	-	-	1,554,250	2,047,485	2,149,859	461,358,415	2.00%	0.4660		
2019	2021	51,653	303,300	139,188	494,140	534,804	40,664	1,555,300	-	-	1,555,300	2,049,440	2,151,912	470,585,584	2.00%	0.4573		
2020	2022	49,796	301,550	143,438	494,784	534,804	40,020	-	-	1,552,238	1,552,238	2,047,021	2,149,372	517,644,142	10.00%	0.4152	(0.0421)	($21)
2021	2023	52,940	303,300	137,538	493,778	534,804	41,026	-	-	1,551,075	1,551,075	2,044,853	2,147,095	527,997,025	2.00%	0.4066		
2022	2024	20,840	334,750	136,788	492,378	534,804	42,426	-	-	1,552,575	1,552,575	2,044,953	2,147,200	538,556,965	2.00%	0.3987		
2023	2025	-	-	496,038	496,038	534,804	38,766	-	-	1,552,575	1,552,575	2,048,613	2,151,043	592,412,662	10.00%	0.3631		
2024	2026	-	-	494,488	494,488	534,804	40,316	-	-	1,551,075	1,551,075	2,045,563	2,147,841	604,260,915	2.00%	0.3554		
2025	2027	-	-	497,638	497,638	534,804	37,166	-	-	1,548,075	1,548,075	2,045,713	2,147,998	616,346,134	2.00%	0.3485		
2026	2028	-	-	495,338	495,338	534,804	39,466	-	-	1,553,575	1,553,575	2,048,913	2,151,358	677,980,747	10.00%	0.3173		
2027	2029	-	-	497,738	497,738	534,804	37,066	-	-	1,547,075	1,547,075	2,044,813	2,147,053	691,540,362	2.00%	0.3105		
2028	2030	-	-	493,600	493,600	534,804	41,204	-	-	1,554,075	1,554,075	2,047,675	2,150,059	705,371,169	2.00%	0.3048		
2029	2031	-	-	494,138	494,138	534,804	40,666	-	-	1,550,838	1,550,838	2,044,975	2,147,224	775,908,286	10.00%	0.2767		
2030	2032	-	-	494,188	494,188	534,804	40,616	-	-	1,550,938	1,550,938	2,045,125	2,147,381	791,426,452	2.00%	0.2713		
2031	2033	-	-	128,750	128,750	534,804	406,054	-	-	1,919,138	1,919,138	2,047,888	2,150,282	807,254,981	2.00%	0.2664		
2032	2034	-	-	-	-	534,804	534,804	-	-	2,047,863	2,047,863	2,047,863	2,150,256	887,980,479	10.00%	0.2422		
2033	2035	-	-	-	-	534,804	534,804	-	-	2,047,563	2,047,563	2,047,563	2,149,941	905,740,088	2.00%	0.2374		
2034	2036	-	-	-	-	534,804	534,804	-	-	2,048,938	2,048,938	2,048,938	2,151,384	923,854,890	2.00%	0.2329		
2035	2037	-	-	-	-	534,804	534,804	-	-	2,046,750	2,046,750	2,046,750	2,149,088	1,016,240,379	10.00%	0.2115		
2036	2038	-	-	-	-	534,804	534,804	-	-	2,046,000	2,046,000	2,046,000	2,148,300	1,036,565,187	2.00%	0.2073		
2037	2039	-	-	-	-	534,804	534,804	-	-	2,046,450	2,046,450	2,046,450	2,148,773	1,057,296,491	2.00%	0.2032		
2038	2040	-	-	-	-	534,804	534,804	-	-	2,047,863	2,047,863	2,047,863	2,150,256	1,163,026,140	10.00%	0.1849		
Total DS From Current FY:		$ 419,224	$ 1,704,900	$ 4,929,488	$ 7,053,611			$ 4,664,550	$ -	$ 33,314,675	$ 37,979,225	$ 45,032,836	$ 47,284,478					
									Estimated Proceeds:	$ 20,900,000								

(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 2009-2018, and assumed to be 0% per year thereafter.
(2) Rates based upon the "AAA" MMD index for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable plus 0.75%. Estimated TIC = 4.41%.
(3) Actual tax rates and payments may vary based on EAV growth, State Law changes, property tax rate initiatives, Cook County equalization factor and other factors. Includes $10,000 homeowner exemption.
NOTE: Scenarios where a greater portion of the overall debt is issued in advance of the expenditures of the proceeds will likely result in higher fees earned by the investment manager of the debt proceeds.

OPTION 1A – ESTIMATED ANNUAL DEBT SERVICE – $20.9 MILLION REFERENDUM IN MARCH 2020



OPTION 1A – PROJECTED BOND & INTEREST TAX RATE
$20.9 MILLION REFERENDUM IN MARCH 2020



OPTION 1B - MARCH 2020 REFERENDUM
TOTAL LEVEL DEBT SERVICE PAYMENTS OF $2.05 MILLION FOR 11 YEARS
LEAVES ROOM FOR FUTURE DSEB ISSUE
MAX PROCEEDS = $18.65 MILLION

		Non-Referendum Debt Service						Referendum Debt Service										
Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	$7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	PROPOSED Referendum Bonds, Series 2020 (2)	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate	Estimated B&I Tax Rate Change vs. Prior Year (3)	Estimated B&I Tax Payment Increase/ (Decrease) for $200,000 Homeowner (3)
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ -~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~-0.94%~~	~~0.5440~~		
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~		
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~		
2017	2019	190,498	162,200	140,688	493,385	523,804	30,419	1,555,000	-	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755		
2018	2020	53,498	299,800	139,938	493,235	534,804	41,569	1,554,250	-	-	1,554,250	2,047,485	2,149,859	461,358,415	2.00%	0.4660		
2019	2021	51,653	303,300	139,188	494,140	534,804	40,664	1,555,300	-	-	1,555,300	2,049,440	2,151,912	470,585,584	2.00%	0.4573		
2020	2022	49,796	301,550	143,438	494,784	534,804	40,020	-	-	1,512,206	1,512,206	2,006,990	2,107,339	517,644,142	10.00%	0.4071	(0.0502)	($25)
2021	2023	52,940	303,300	137,538	493,778	534,804	41,026	-	-	1,513,388	1,513,388	2,007,165	2,107,523	527,997,025	2.00%	0.3992		
2022	2024	20,840	334,750	136,788	492,378	534,804	42,426	-	-	1,516,138	1,516,138	2,008,515	2,108,941	538,556,965	2.00%	0.3916		
2023	2025	-	-	496,038	496,038	534,804	38,766	-	-	1,512,138	1,512,138	2,008,175	2,108,584	592,412,662	10.00%	0.3559		
2024	2026	-	-	494,488	494,488	534,804	40,316	-	-	1,516,638	1,516,638	2,011,125	2,111,681	604,260,915	2.00%	0.3495		
2025	2027	-	-	497,638	497,638	534,804	37,166	-	-	1,514,138	1,514,138	2,011,775	2,112,364	616,346,134	2.00%	0.3427		
2026	2028	-	-	495,338	495,338	534,804	39,466	-	-	1,514,888	1,514,888	2,010,225	2,110,736	677,980,747	10.00%	0.3113		
2027	2029	-	-	497,738	497,738	534,804	37,066	-	-	1,513,638	1,513,638	2,011,375	2,111,944	691,540,362	2.00%	0.3054		
2028	2030	-	-	493,600	493,600	534,804	41,204	-	-	1,515,388	1,515,388	2,008,988	2,109,437	705,371,169	2.00%	0.2991		
2029	2031	-	-	494,138	494,138	534,804	40,666	-	-	1,512,163	1,512,163	2,006,300	2,106,615	775,908,286	10.00%	0.2715		
2030	2032	-	-	494,188	494,188	534,804	40,616	-	-	1,512,038	1,512,038	2,006,225	2,106,536	791,426,452	2.00%	0.2662		
2031	2033	-	-	128,750	128,750	534,804	406,054	-	-	1,514,775	1,514,775	1,643,525	1,725,701	807,254,981	2.00%	0.2138		
2032	2034	-	-	-	-	534,804	534,804	-	-	1,515,138	1,515,138	1,515,138	1,590,894	887,980,479	10.00%	0.1792		
2033	2035	-	-	-	-	534,804	534,804	-	-	1,513,125	1,513,125	1,513,125	1,588,781	905,740,088	2.00%	0.1754		
2034	2036	-	-	-	-	534,804	534,804	-	-	1,513,738	1,513,738	1,513,738	1,589,424	923,854,890	2.00%	0.1720		
2035	2037	-	-	-	-	534,804	534,804	-	-	1,516,738	1,516,738	1,516,738	1,592,574	1,016,240,379	10.00%	0.1567		
2036	2038	-	-	-	-	534,804	534,804	-	-	1,516,888	1,516,888	1,516,888	1,592,732	1,036,565,187	2.00%	0.1537		
2037	2039	-	-	-	-	534,804	534,804	-	-	1,514,188	1,514,188	1,514,188	1,589,897	1,057,296,491	2.00%	0.1504		
2038	2040	-	-	-	-	534,804	534,804	-	-	1,513,638	1,513,638	1,513,638	1,589,319	1,163,026,140	10.00%	0.1367		
Total DS From Current FY:		$ 419,224	$ 1,704,900	$ 4,929,488	$ 7,053,611			$ 4,664,550	$ -	$ 28,770,981	$ 33,435,531	$ 40,489,142	$ 42,513,600					
									Estimated Proceeds:	$ 18,650,000								

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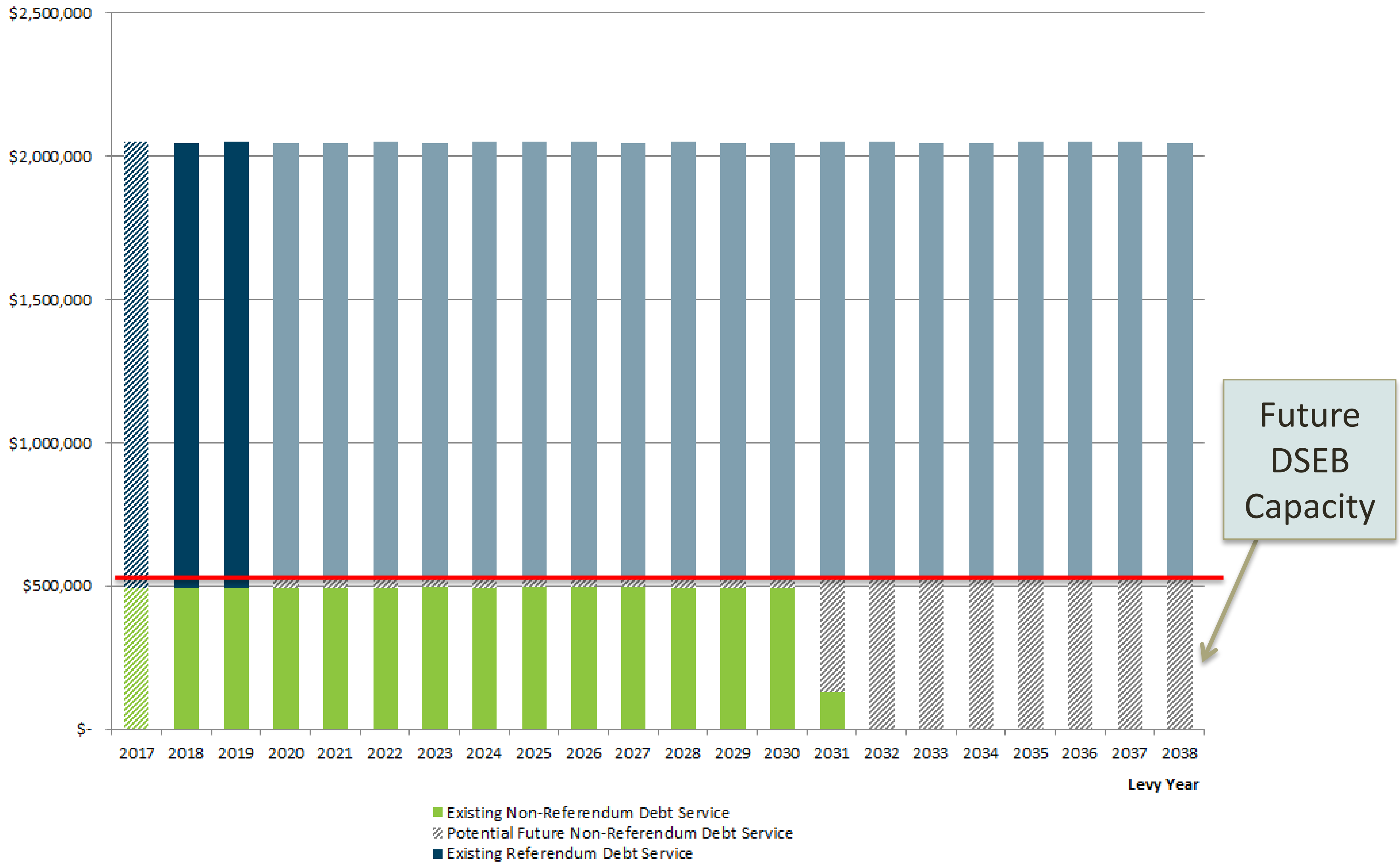
(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.
The applicable CPI increase has been applied to levy years 2009-2018, and assumed to be 0% per year thereafter.

(2) Rates based upon the "AAA" MMD index for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable plus 0.75%. Estimated TIC = 4.34%.

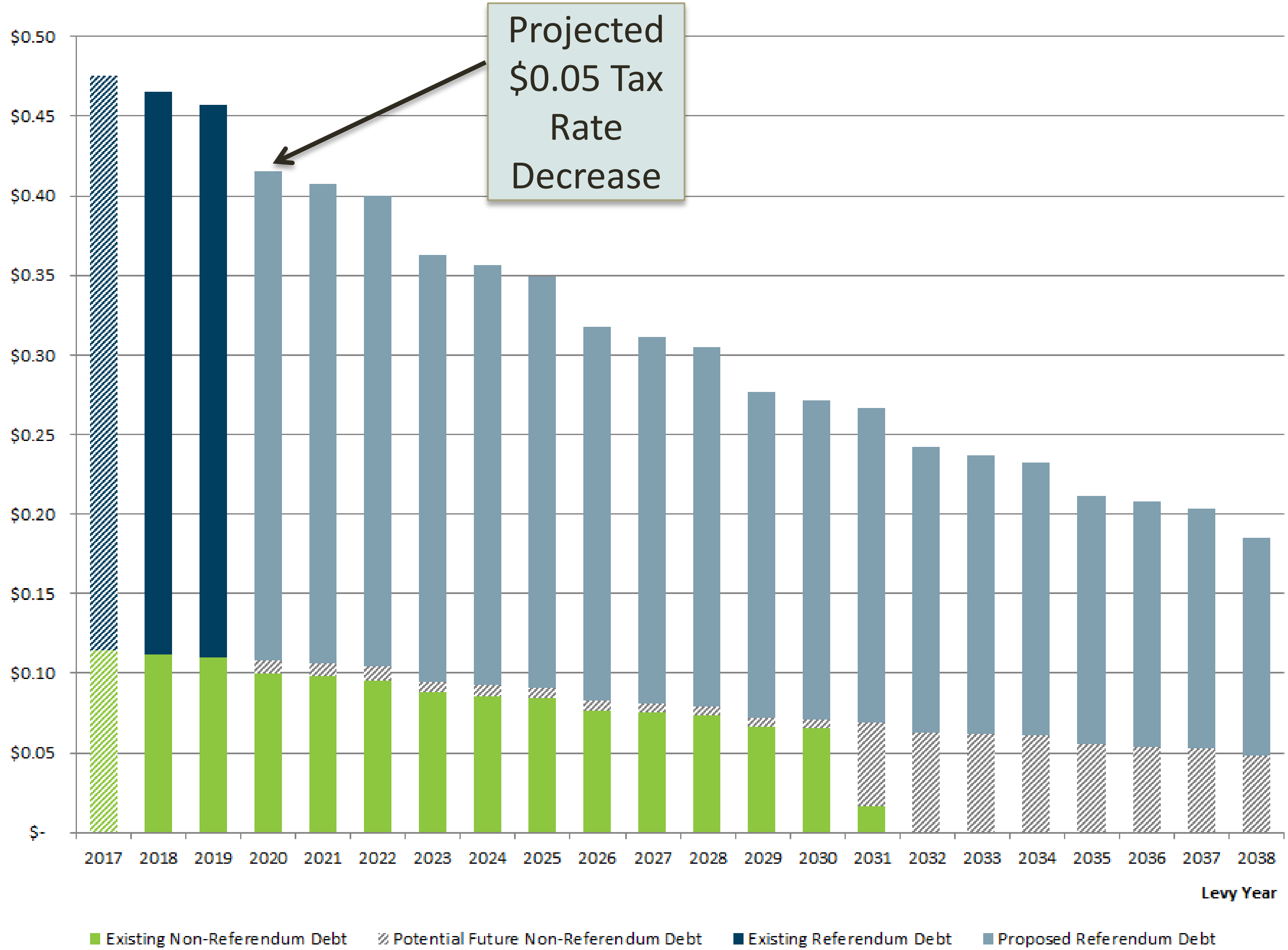
(3) Actual tax rates and payments may vary based on EAV growth, State Law changes, property tax rate initiatives, Cook County equalization factor and other factors. Includes $10,000 homeowner exemption.

NOTE: Scenarios where a greater portion of the overall debt is issued in advance of the expenditures of the proceeds will likely result in higher fees earned by the investment manager of the debt proceeds.

OPTION 1B – ESTIMATED ANNUAL DEBT SERVICE – $18.65 MILLION REFERENDUM IN MARCH 2020



OPTION 1B – PROJECTED BOND & INTEREST TAX RATE
$18.65 MILLION REFERENDUM IN MARCH 2020



OPTION 2A
$40 MILLION REFERENDUM IN MARCH 2020
LEVEL TOTAL DEBT SERVICE PAYMENTS OF $3.58 MILLION FOR 20 YEARS

PMA™ SECURITIES

		Non-Referendum Debt Service						Referendum Debt Service										
Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	$7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	PROPOSED Referendum Bonds, Series 2020 (2)	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate	Estimated B&I Tax Rate Change vs. Prior Year (3)	Estimated B&I Tax Payment Increase/ (Decrease) for $200,000 Homeowner (3)
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ -~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~-0.94%~~	~~0.5440~~		
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~		
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~		
2017	2019	190,498	162,200	140,688	493,385	523,804	30,419	1,555,000	-	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755		
2018	2020	53,498	299,800	139,938	493,235	534,804	41,569	1,554,250	-	-	1,554,250	2,047,485	2,149,859	461,358,415	2.00%	0.4660		
2019	2021	51,653	303,300	139,188	494,140	534,804	40,664	1,555,300	-	-	1,555,300	2,049,440	2,151,912	470,585,584	2.00%	0.4573		
2020	2022	49,796	301,550	143,438	494,784	534,804	40,020	-	-	3,087,200	3,087,200	3,581,984	3,761,083	517,644,142	10.00%	0.7266	0.2693	$133
2021	2023	52,940	303,300	137,538	493,778	534,804	41,026	-	-	3,086,050	3,086,050	3,579,828	3,758,819	527,997,025	2.00%	0.7119		
2022	2024	20,840	334,750	136,788	492,378	534,804	42,426	-	-	3,089,800	3,089,800	3,582,178	3,761,286	538,556,965	2.00%	0.6984		
2023	2025	-	-	496,038	496,038	534,804	38,766	-	-	3,085,300	3,085,300	3,581,338	3,760,404	592,412,662	10.00%	0.6348		
2024	2026	-	-	494,488	494,488	534,804	40,316	-	-	3,087,800	3,087,800	3,582,288	3,761,402	604,260,915	2.00%	0.6225		
2025	2027	-	-	497,638	497,638	534,804	37,166	-	-	3,081,800	3,081,800	3,579,438	3,758,409	616,346,134	2.00%	0.6098		
2026	2028	-	-	495,338	495,338	534,804	39,466	-	-	3,087,550	3,087,550	3,582,888	3,762,032	677,980,747	10.00%	0.5549		
2027	2029	-	-	497,738	497,738	534,804	37,066	-	-	3,084,300	3,084,300	3,582,038	3,761,139	691,540,362	2.00%	0.5439		
2028	2030	-	-	493,600	493,600	534,804	41,204	-	-	3,087,300	3,087,300	3,580,900	3,759,945	705,371,169	2.00%	0.5330		
2029	2031	-	-	494,138	494,138	534,804	40,666	-	-	3,085,363	3,085,363	3,579,500	3,758,475	775,908,286	10.00%	0.4844		
2030	2032	-	-	494,188	494,188	534,804	40,616	-	-	3,084,625	3,084,625	3,578,813	3,757,753	791,426,452	2.00%	0.4748		
2031	2033	-	-	128,750	128,750	534,804	406,054	-	-	3,449,850	3,449,850	3,578,600	3,757,530	807,254,981	2.00%	0.4655		
2032	2034	-	-	-	-	534,804	534,804	-	-	3,583,463	3,583,463	3,583,463	3,762,636	887,980,479	10.00%	0.4237		
2033	2035	-	-	-	-	534,804	534,804	-	-	3,580,438	3,580,438	3,580,438	3,759,459	905,740,088	2.00%	0.4151		
2034	2036	-	-	-	-	534,804	534,804	-	-	3,581,713	3,581,713	3,581,713	3,760,798	923,854,890	2.00%	0.4071		
2035	2037	-	-	-	-	534,804	534,804	-	-	3,581,813	3,581,813	3,581,813	3,760,903	1,016,240,379	10.00%	0.3701		
2036	2038	-	-	-	-	534,804	534,804	-	-	3,580,500	3,580,500	3,580,500	3,759,525	1,036,565,187	2.00%	0.3627		
2037	2039	-	-	-	-	534,804	534,804	-	-	3,582,538	3,582,538	3,582,538	3,761,664	1,057,296,491	2.00%	0.3558		
2038	2040	-	-	-	-	534,804	534,804	-	-	3,582,450	3,582,450	3,582,450	3,761,573	1,163,026,140	10.00%	0.3234		
Total DS From Current FY:		$ 419,224	$ 1,704,900	$ 4,929,488	$ 7,053,611			$ 4,664,550	$ -	$ 62,469,850	$ 67,134,400	$ 74,188,011	$ 77,897,412					

Estimated Proceeds: $ 40,000,000

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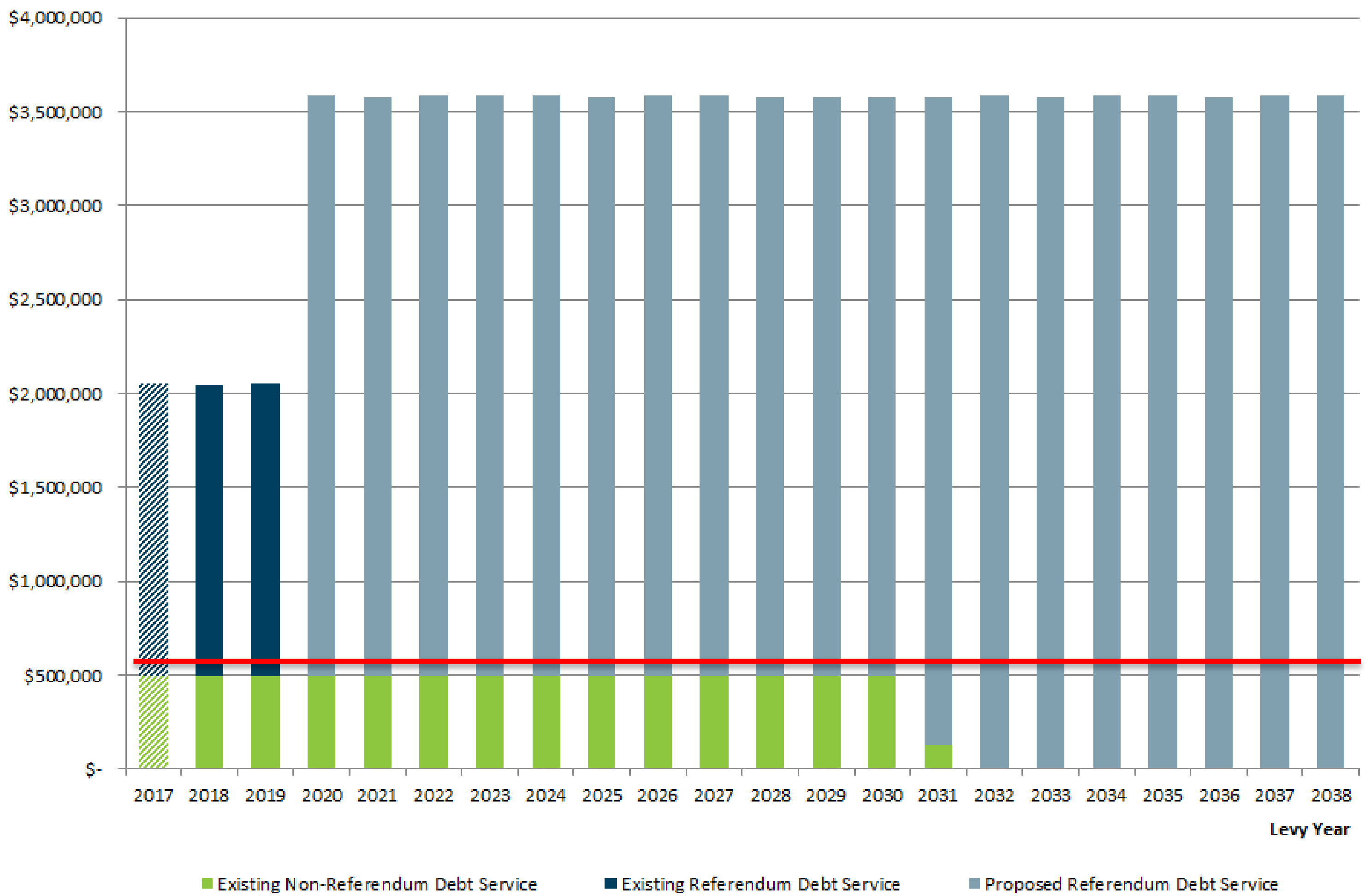
(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009. The applicable CPI increase has been applied to levy years 2009-2018, and assumed to be 0% per year thereafter.

(2) Rates based upon the "AAA" MMD index for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable plus 0.75%. Estimated TIC = 4.38%.

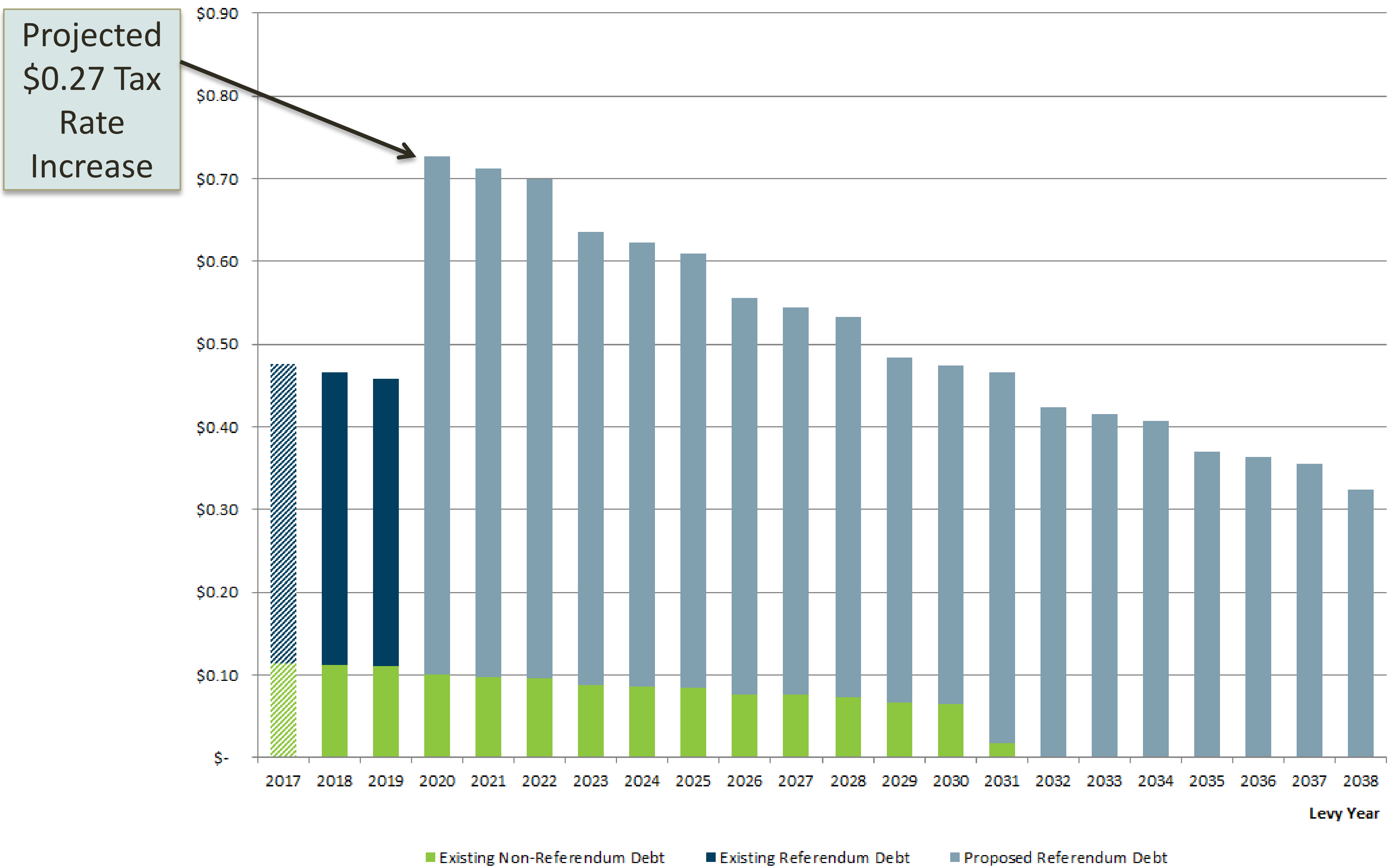
(3) Actual tax rates and payments may vary based on EAV growth, State Law changes, property tax rate initiatives, Cook County equalization factor and other factors. Includes $10,000 homeowner exemption.

NOTE: Scenarios where a greater portion of the overall debt is issued in advance of the expenditures of the proceeds will likely result in higher fees earned by the investment manager of the debt proceeds.

OPTION 2A –
ESTIMATED DEBT SERVICE PAYMENTS
$40 MILLION REFERENDUM



OPTION 2A – PROJECTED BOND & INTEREST TAX RATE $40 MILLION REFERENDUM



OPTION 2B
$40 MILLION REFERENDUM IN MARCH 2020
LEVEL TOTAL DEBT SERVICE PAYMENTS OF $3.73 MILLION FOR 11 YEARS
LEAVES ROOM FOR FUTURE DSEB ISSUE

		Non-Referendum Debt Service						Referendum Debt Service										
Levy Year	Fiscal Year	$4,540,000 Limited Tax School Bonds, Series 2007 (FSA)	$1,535,000 GO Limited Tax Refunding Bonds, Series 2012B	$3,835,000 GO Limited School Bonds, Series 2013A	Total	Non Referendum Debt Service Extension Base Created W/1994 Levy (1)	Remaining Margin (1)	$7,955,000 GO Refunding Bonds, Series 2012A	$2,435,000 GO Refunding School Bonds, Series 2013B	PROPOSED Referendum Bonds, Series 2020 (2)	Total	Total General Obligation Bonds Debt Service	5.0% County Loss/Cost Debt Service	EAV	Growth Rate	B&I Tax Rate	Estimated B&I Tax Rate Change vs. Prior Year (3)	Estimated B&I Tax Payment Increase/ (Decrease) for $200,000 Homeowner (3)
2014	2016	~~$ 312,073~~	~~$ 42,200~~	~~$ 142,938~~	~~$ 497,210~~	~~$ 505,420~~	~~$ 8,210~~	~~$ 807,800~~	~~$ 724,200~~	~~$ -~~	~~$ 1,532,000~~	~~$ 2,029,210~~	~~$ 2,130,671~~	~~$ 391,701,876~~	~~-0.94%~~	~~0.5440~~		
2015	2017	~~309,723~~	~~42,200~~	~~142,188~~	~~494,110~~	~~509,464~~	~~15,354~~	~~1,555,500~~	~~-~~	~~-~~	~~1,555,500~~	~~2,049,610~~	~~2,152,091~~	~~385,090,994~~	~~-1.69%~~	~~0.5589~~		
2016	2018	~~311,898~~	~~42,200~~	~~141,438~~	~~495,535~~	~~513,030~~	~~17,495~~	~~1,553,000~~	~~-~~	~~-~~	~~1,553,000~~	~~2,048,535~~	~~2,150,962~~	~~415,066,665~~	~~7.78%~~	~~0.5182~~		
2017	2019	190,498	162,200	140,688	493,385	523,804	30,419	1,555,000	-	-	1,555,000	2,048,385	2,150,804	452,312,172	8.97%	0.4755		
2018	2020	53,498	299,800	139,938	493,235	534,804	41,569	1,554,250	-	-	1,554,250	2,047,485	2,149,859	461,358,415	2.00%	0.4660		
2019	2021	51,653	303,300	139,188	494,140	534,804	40,664	1,555,300	-	-	1,555,300	2,049,440	2,151,912	470,585,584	2.00%	0.4573		
2020	2022	49,796	301,550	143,438	494,784	534,804	40,020	-	-	3,230,644	3,230,644	3,725,427	3,911,699	517,644,142	10.00%	0.7557	0.2984	$147
2021	2023	52,940	303,300	137,538	493,778	534,804	41,026	-	-	3,232,763	3,232,763	3,726,540	3,912,867	527,997,025	2.00%	0.7411		
2022	2024	20,840	334,750	136,788	492,378	534,804	42,426	-	-	3,228,763	3,228,763	3,721,140	3,907,197	538,556,965	2.00%	0.7255		
2023	2025	-	-	496,038	496,038	534,804	38,766	-	-	3,231,513	3,231,513	3,727,550	3,913,928	592,412,662	10.00%	0.6607		
2024	2026	-	-	494,488	494,488	534,804	40,316	-	-	3,230,513	3,230,513	3,725,000	3,911,250	604,260,915	2.00%	0.6473		
2025	2027	-	-	497,638	497,638	534,804	37,166	-	-	3,230,763	3,230,763	3,728,400	3,914,820	616,346,134	2.00%	0.6352		
2026	2028	-	-	495,338	495,338	534,804	39,466	-	-	3,232,013	3,232,013	3,727,350	3,913,718	677,980,747	10.00%	0.5773		
2027	2029	-	-	497,738	497,738	534,804	37,066	-	-	3,229,013	3,229,013	3,726,750	3,913,088	691,540,362	2.00%	0.5659		
2028	2030	-	-	493,600	493,600	534,804	41,204	-	-	3,231,763	3,231,763	3,725,363	3,911,631	705,371,169	2.00%	0.5545		
2029	2031	-	-	494,138	494,138	534,804	40,666	-	-	3,229,613	3,229,613	3,723,750	3,909,938	775,908,286	10.00%	0.5039		
2030	2032	-	-	494,188	494,188	534,804	40,616	-	-	3,233,188	3,233,188	3,727,375	3,913,744	791,426,452	2.00%	0.4945		
2031	2033	-	-	128,750	128,750	534,804	406,054	-	-	3,232,013	3,232,013	3,360,763	3,528,801	807,254,981	2.00%	0.4371		
2032	2034	-	-	-	-	534,804	534,804	-	-	3,231,088	3,231,088	3,231,088	3,392,642	887,980,479	10.00%	0.3821		
2033	2035	-	-	-	-	534,804	534,804	-	-	3,230,175	3,230,175	3,230,175	3,391,684	905,740,088	2.00%	0.3745		
2034	2036	-	-	-	-	534,804	534,804	-	-	3,229,038	3,229,038	3,229,038	3,390,489	923,854,890	2.00%	0.3670		
2035	2037	-	-	-	-	534,804	534,804	-	-	3,232,438	3,232,438	3,232,438	3,394,059	1,016,240,379	10.00%	0.3340		
2036	2038	-	-	-	-	534,804	534,804	-	-	3,229,900	3,229,900	3,229,900	3,391,395	1,036,565,187	2.00%	0.3272		
2037	2039	-	-	-	-	534,804	534,804	-	-	3,231,425	3,231,425	3,231,425	3,392,996	1,057,296,491	2.00%	0.3209		
2038	2040	-	-	-	-	534,804	534,804	-	-	3,231,538	3,231,538	3,231,538	3,393,114	1,163,026,140	10.00%	0.2917		
Total DS From Current FY:		$ 419,224	$ 1,704,900	$ 4,929,488	$ 7,053,611			$ 4,664,550	$ -	$ 61,388,156	$ 66,052,706	$ 73,106,317	$ 76,761,633					
									Estimated Proceeds:	$ 40,000,000								

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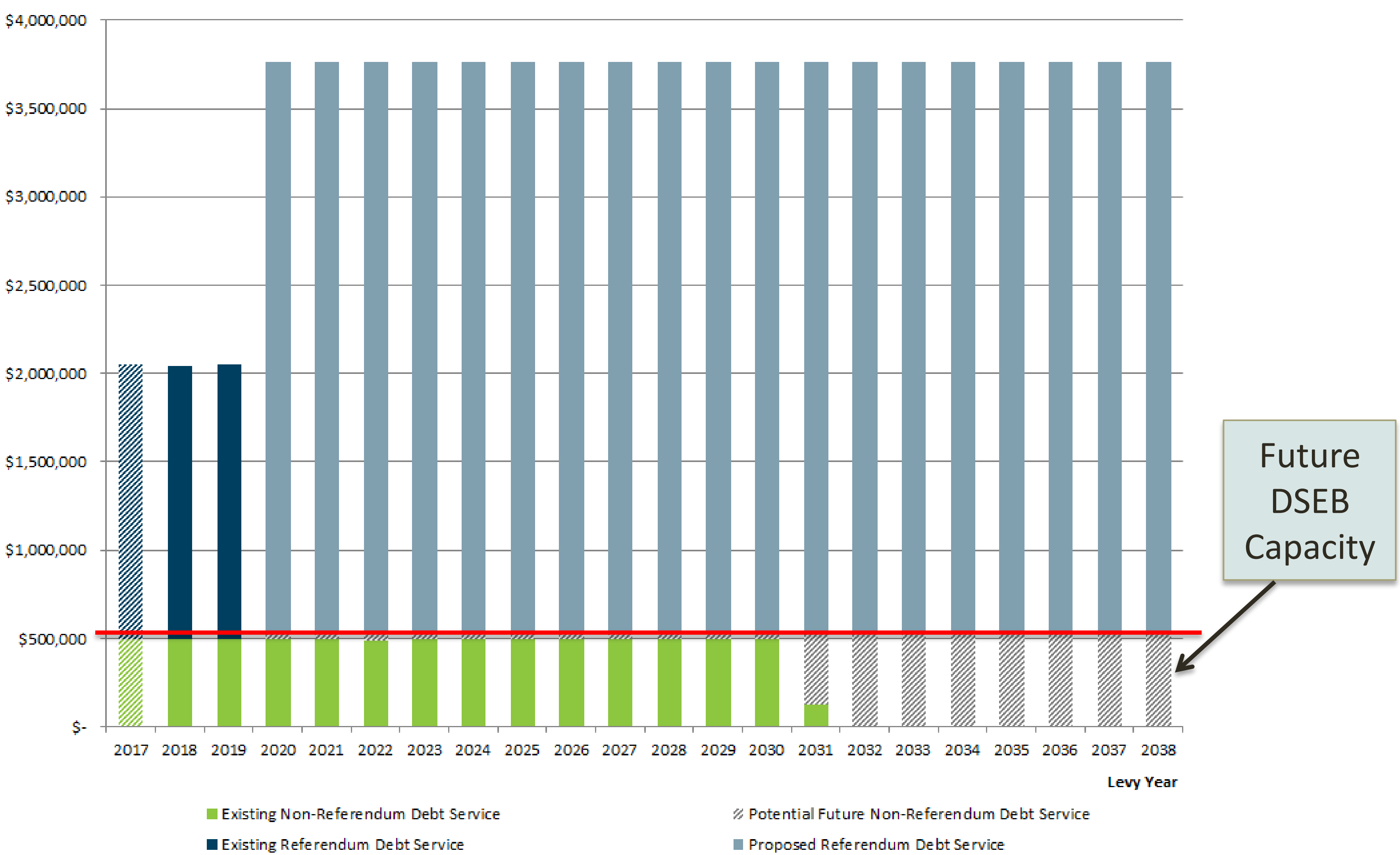
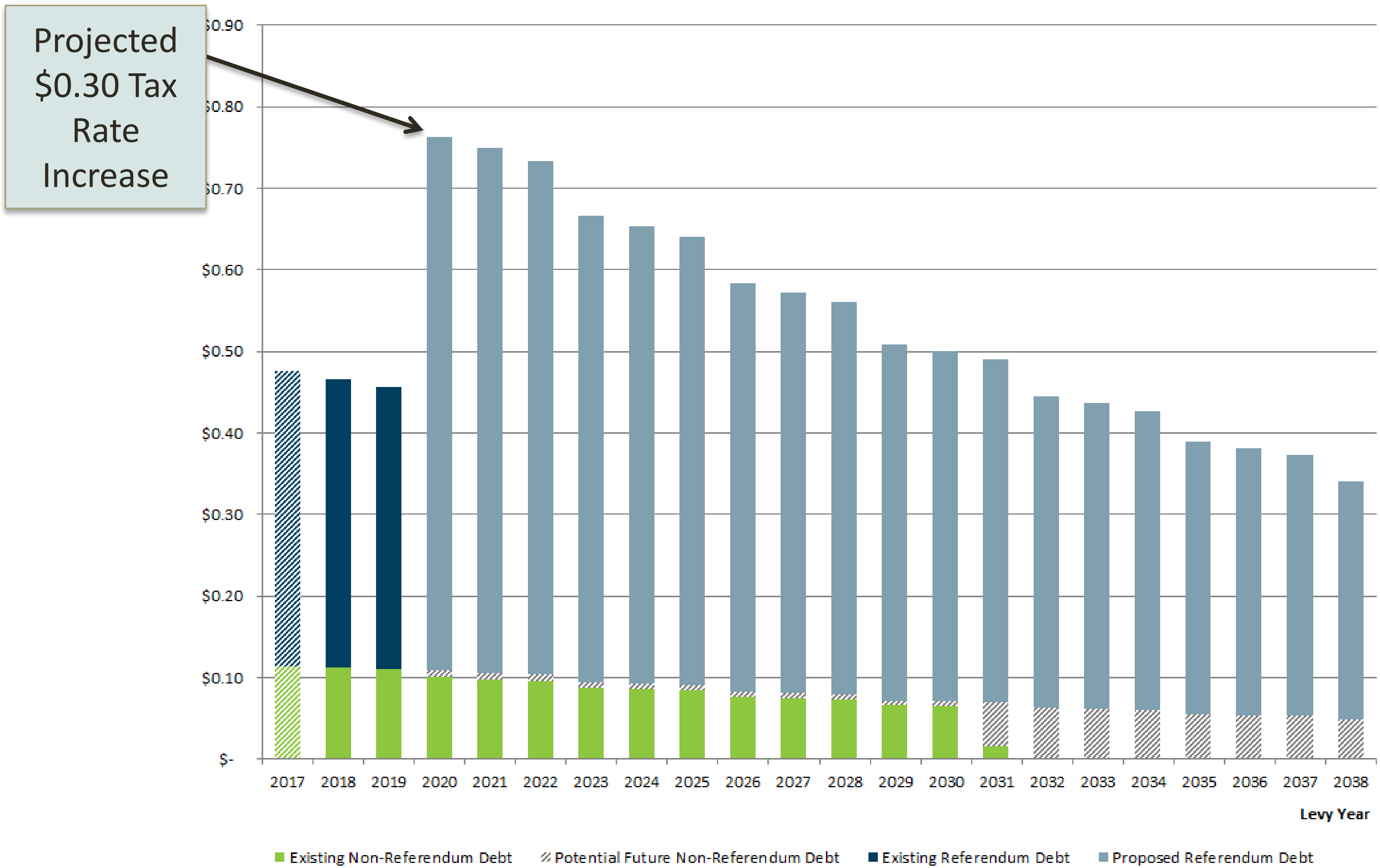
(1) Pursuant to Public Act 96-0501, the District's DSEB will increase by the lesser of CPI or 5% each year starting with levy year 2009.
The applicable CPI increase has been applied to levy years 2009-2018, and assumed to be 0% per year thereafter.
(2) Rates based upon the "AAA" MMD index for August 29, 2018 and recent bond sales which PMA believes to be accurate and reliable plus 0.75%. Estimated TIC = 4.34%.
(3) Actual tax rates and payments may vary based on EAV growth, State Law changes, property tax rate initiatives, Cook County equalization factor and other factors. Includes $10,000 homeowner exemption.
NOTE: Scenarios where a greater portion of the overall debt is issued in advance of the expenditures of the proceeds will likely result in higher fees earned by the investment manager of the debt proceeds.

PMA SECURITIES

OPTION 2B – ESTIMATED DEBT SERVICE PAYMENTS $40 MILLION REFERENDUM



OPTION 2B – PROJECTED BOND & INTEREST TAX RATE
$40 MILLION REFERENDUM



- Upon a successful building bond referendum, the District may lawfully exceed its statutory debt capacity if it secures legislative approval from the General Assembly

- Newly enacted Public Act 100-0503 requires the Board of Education to hold a public hearing prior to the sale of referendum bonds for an amount that exceeds the District's debt capacity

- Additional information must be included in the notice of the hearing, such as the estimated debt structure and homeowner impact

MUNICIPAL BOND MARKET CONDITIONS

VARIABLES THAT IMPACT THE MUNICIPAL BOND MARKET

FED Reserve Policy
Quantitative Easing
Fed Funds Rate

Global Political Events
Centered around
Washington, D.C.

Inflation Expectations

Health of National, State
and Local Economies

State of Illinois Fiscal
Challenges – Budget
Impasse

Bank Qualification

THE
MUNICIPAL
BOND MARKET

Municipal Bond
Supply and
Demand

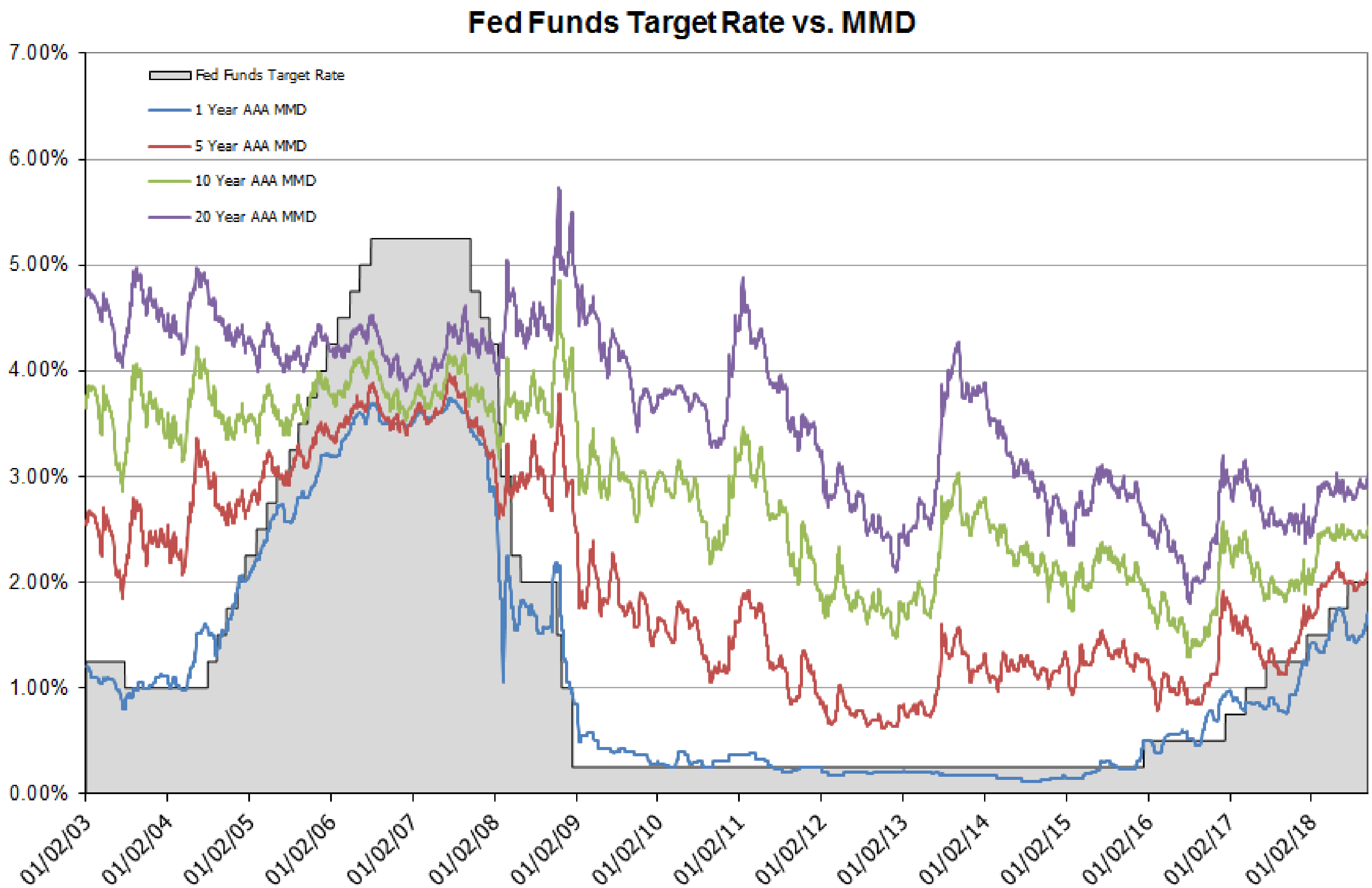
Europe

Chicago's Fiscal
Challenges – Pension
Issues

Municipal
Bankruptcies
(e.g. Detroit,
Puerto Rico)

Credit Ratings of State
and Local Governments

Level of Federal and
State Income Taxes



*The Municipal Market Data “MMD” is a AAA municipal bond market index produced by TM3. As of September 14, 2018.

REFERENDUM DEADLINES

PMA SECURITIES

Election Date	Election Type	Resolution Adoption Deadline	Resolution Filing Deadline*
March 17, 2020	General Primary	December 30, 2019	January 9, 2020
November 3, 2020	General	August 17, 2020	August 27, 2020

*Represents the date that the Board-adopted and signed resolution must be filed with the Cook County Clerk

PMA SECURITIES