



West Contra Costa USD

Refunding & Restructuring Policy 7214.3

October 2016



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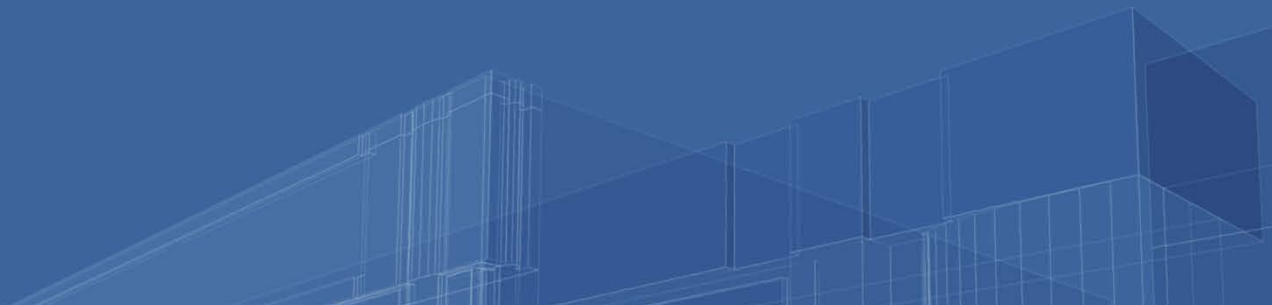
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A Division of Zions First National Bank

Overview

- Refunding & Restructuring Policy Overview
- Measure by Measure Summary
- Detailed Savings Analysis
- Refunding Summary & Breakeven Assessment
- Secured Tax Rate Estimates
- Recommendations
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I. Refunding Policy Overview



Refunding & Restructuring Policy- B.P. 7214.3

- Adopted on April 24, 2013

- Purpose of Refunding & Restructuring Policy:
 - Identify policy objectives relating to refunding transactions
 - Improve the quality of the decision making processes
 - Provide a basis for the determination of when it is advantageous for the District to issue refunding bonds

- Refunding Objectives:
 - Providing net present value debt service savings, and/or
 - To aid with tax rate management, and/or
 - Adjusting the debt service structure to meet identified objectives

B.P. 7214.3 (continued)

- Policy Guidelines include:
 - Current refundings should achieve present value savings of at least 4%;
 - Advance refunding should achieve present value savings of at least 4% with negative arbitrage not to exceed present value savings.
 - Refundings should achieve \$1 million of present value savings and a minimum of \$100,000 annual savings;
 - The term of the debt should not be extended;
 - Refundings should be structured to achieve level annual debt service savings, or to level out overall debt service, or to maintain tax rates; and
 - Refundings may be utilized to manage tax rate commitments to voters.

Introduction to Refunding Bonds

- ***Basic legal test (Govt. Code Sects. 53550 – 53569)*** – Refunding Bonds may be issued without voter approval only when the new debt service is less than the old and the term of the debt is not extended. Resulting savings are passed on to the taxpayers.
- ***Debt Restructuring*** - A refunding can be used to restructure debt, which can be useful for tax rate management.
- ***Current Refunding*** – A refunding transaction where the bonds being refunded will mature or be redeemed not more than 90 days after the issuance of the refunding bonds.
- ***Advance Refunding*** – A refunding transaction where the bonds being refunded will mature or be redeemed more than 90 days after the issuance of the refunding bonds.
 - ***Limited to One Advance Refunding*** – In a sequence of tax-exempt refundings of a given new money issue, only one can be an advance refunding; the number of current refundings in a sequence is unlimited.

Introduction to Refunding Bonds (continued)

- *Crossover Refunding*
 - Refunding escrow pays the debt service on the refunding bonds until the redemption date of the prior bonds (“crossover date”), plus funds redemption of the prior bonds.
 - Until the crossover date, the issuer continues to pay the debt service on the prior bonds, and after pays debt service on the refunding bonds.
 - Principal amortization of the refunding bonds typically begins after the crossover date.
 - Crossover refunding will generate more savings than a conventional advance refunding when the first optional call date of the prior bonds is multiple years in the future, but does not provide debt service savings prior to the crossover date.

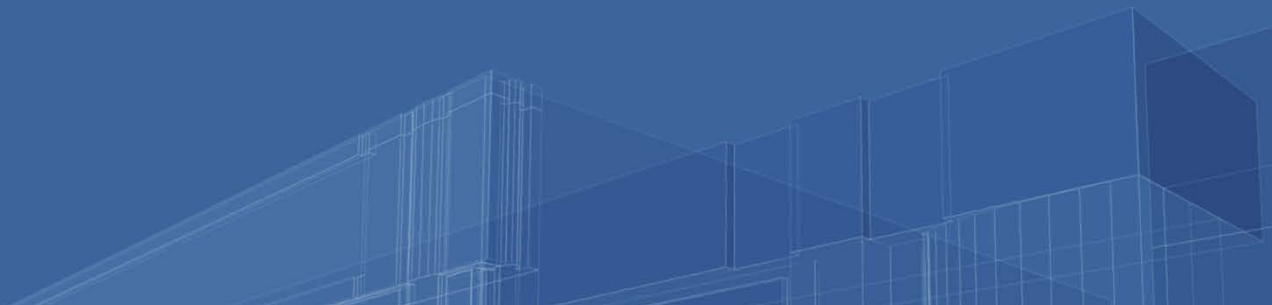
Summary of Prior Refunding Bonds - I

- The District has refinanced its bonds 5 times since 2009 for interest savings and to manage tax rates.
- These refundings are saving taxpayers a total of **\$59 million** over the life of the bonds, or **\$39 million** on a net present values basis.

Date	Amount	Series	Actual Savings	Present Value Savings*	PV Savings %*
9/3/2009	\$57,860,000	2009 GO Refunding Bonds	\$14,129,245	\$2,516,407	4.4
8/25/2011	\$85,565,000	2011 GO Refunding Bonds	\$8,130,709	\$7,370,086	8.6
7/10/2012	\$98,200,000	2012 GO Refunding Bonds	\$12,545,510	\$9,511,400	9.8
8/13/2014	\$77,460,000	2014 GO Refunding Bonds	\$10,305,384	\$9,602,569	11.1
3/15/2016	\$65,940,000	2016 GO Refunding Bonds	\$14,086,164	\$10,430,284	16.1
TOTAL			\$59,197,012	\$39,430,746	

*Present savings on respective dates of issue based on refunded par amount

II. Refunding Candidates



Candidate Selection Criteria

- In an environment of minimal earnings available for refunding escrows, issues with a first optional call date more than two to three years away are unlikely to be strong refunding candidate unless the differential between old rates and new rates are quite high.
- We evaluated potential refunding candidates with optional call dates of 8/1/2019 - 8/1/2021, the earliest available call dates for outstanding bonds. We assumed current rates plus 60 basis points, to allow for potential rate increases.
- The District has previously refunded all callable bonds with call dates prior to 8/1/2019, leaving all potential candidates as advance refundings at this time.
- Specific refunding candidates that meet relevant call provisions described above are highlighted on following pages.

1998 Measure E- \$ 40,000,000

Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election of 1998, Series A	8/18/1998	\$10,000,000	5.03%	2/1/1999	8/1/1999	8/1/2023	Refunded	
Election of 1998, Series B	2/9/1999	\$10,000,000	4.98%	2/1/2000	8/1/2000	8/1/2023	Refunded	
Election of 1998, Series C	2/7/2000	\$10,000,000	5.67%	2/1/2001	8/1/2002	8/1/2024	Refunded	
Election of 1998, Series D	8/9/2000	\$10,000,000	5.33%	2/1/2001	8/1/2002	8/1/2025	Refunded	
2001 Ref Bonds, Series A	11/6/2001	\$28,610,000	5.35%	2/1/2002	2/1/2002	8/1/2025	Outstanding	Non-callable
2001 Ref Bonds, Series B	11/6/2001	<u>\$10,255,000</u>	5.73%	2/1/2002	2/1/2002	8/1/2024	Outstanding	Non-callable
Total		\$78,865,000						
Less Refunding Bonds		<u>(\$38,865,000)</u>						
Issued From Authorization		<u>\$40,000,000</u>						

2000 Measure M- \$150,000,000

Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election 2000, Series A	5/15/2001	\$15,000,000	5.12%	2/1/2002	8/1/2003	8/1/2031	Refunded	
Election 2000, Series B	2/26/2002	\$40,000,000	4.87%	2/1/2003	8/1/2004	8/1/2031	Refunded	
Election 2000, Series C	4/22/2003	\$95,000,000	4.68%	2/1/2004	8/1/2005	8/1/2032	Refunded	
2009 Ref Bonds*	9/3/2009	\$47,215,000	3.62%	2/1/2010	8/1/2010	8/1/2017	Outstanding	8/1/2019 at par
2011 Ref Bonds	8/25/2011	\$33,960,000	3.26%	2/1/2012	8/1/2012	8/1/2024	Outstanding	8/1/2021 at par
2012 Ref Bonds*	7/10/2012	\$40,370,000	4.16%	2/1/2013	8/1/2021	8/1/2032	Outstanding	8/1/2022 at par
Total		\$271,545,000						
Less Ref Bonds		(\$121,545,000)						
Issued From Authorization		\$150,000,000						

* Partial advance refundings; part of these issues may only be current refunded, i.e., within 90 days of their call.

2002 Measure D- \$300,000,000

Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election of 2002, Series A	6/26/2002	\$30,000,000	4.94%	2/1/2003	8/1/2004	8/1/2031	Refunded	
Election of 2002, Series B	8/25/2003	\$100,000,000	4.86%	2/1/2004	8/1/2004	8/1/2032	Refunded	
Election of 2002, Series C CIBs	8/11/2004	\$40,000,000	4.93%	2/1/2005	8/1/2006	8/1/2034	Refunded	
Election of 2002, Series C CABs	8/11/2004	\$29,999,377	5.59%	CABs	8/1/2006	8/1/2034	Outstanding	Non-callable
Election of 2002, Series D	10/19/2005	\$99,998,106	4.95%	CABs	8/1/2007	8/1/2034	Outstanding	Non-callable
2011 Ref Bonds	8/25/2011	\$51,605,000	3.42%	2/1/2012	8/1/2012	8/1/2024	Outstanding	8/1/2021 at par
2012 Ref Bonds*	7/10/2012	\$57,830,000	4.12%	2/1/2013	8/1/2021	8/1/2032	Outstanding	8/1/2022 at par
GO Ref Bonds, 2014 Series A*	8/13/2014	<u>\$22,685,000</u>	3.63%	2/1/2015	8/1/2017	8/1/2034	Outstanding	8/1/2024 at par
Total		\$432,117,483						
Less Ref Bonds		(\$132,120,000)						
Issued From Authorization		\$299,997,483						

* Partial advance refundings; part of these issues may only be current refunded, i.e., within 90 days of their call.

2005 Measure J- \$400,000,000

Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election of 2005, Series A	5/17/2006	\$70,000,000	4.76%	2/1/2007	8/1/2007	8/1/2035	Refunded	
Election of 2005, Series B	7/15/2008	\$120,000,000	5.47%	2/1/2009	8/1/2010	8/1/2035	Outstanding	Non-callable *
Election of 2005, Series C-1 (CABs)	9/3/2009	\$52,084,759	7.10%	CABs	8/1/2016	8/1/2033	Outstanding	Non-callable
Election of 2005, Series C-2 (BABs)	9/3/2009	\$52,825,000	5.50%	2/1/2010	8/1/2033	8/1/2034	Outstanding	8/1/2019 at par
2009 GO Ref Bonds	9/3/2009	\$10,645,000	5.26%	2/1/2010	8/1/2010	8/1/2031	Outstanding	8/1/2019 at par
Election of 2005, Series D-1 (QSCBs)	6/24/2010	\$25,000,000	1.15%	2/1/2011	8/1/2022	8/1/2024	Outstanding	"Make-whole"***
Election of 2005, Series D-2 (CABs)	6/24/2010	\$2,499,949	6.96%	2/1/2011	8/1/2035	8/1/2036	Outstanding	Non-callable
GO Refunding Bonds, 2014 Series A***	8/13/2014	\$54,775,000	3.63%	2/1/2015	8/1/2017	8/1/2035	Outstanding	8/1/2024 at par
GO Refunding Bonds, 2016 Series A	3/15/2016	\$65,940,000	3.40%	8/1/2016	8/1/2016	8/1/2035	Outstanding	8/1/2025 at par
Total		\$453,769,708						
Less Refunding Bonds		(\$131,360,000)						
Issued From Authorization		\$322,409,708						

*\$57,900,000 Serial Bonds maturing on or before 8/1/2028 are non-callable; the only callable bonds, the \$62,100,000 5.625% Term Bonds due August 1, 2035, were refunded.

** Extraordinary "make-whole" optional call at any time after "extraordinary event", such as reduction in federal subsidy payments, which has occurred. Make-whole calls, as in this issue, are typically designed to be so expensive as to constitute non-callable bonds.

*** Partial advance refundings; part of these issues may only be current refunded, i.e., within 90 days of their call.

2010 Measure D- \$380,000,000

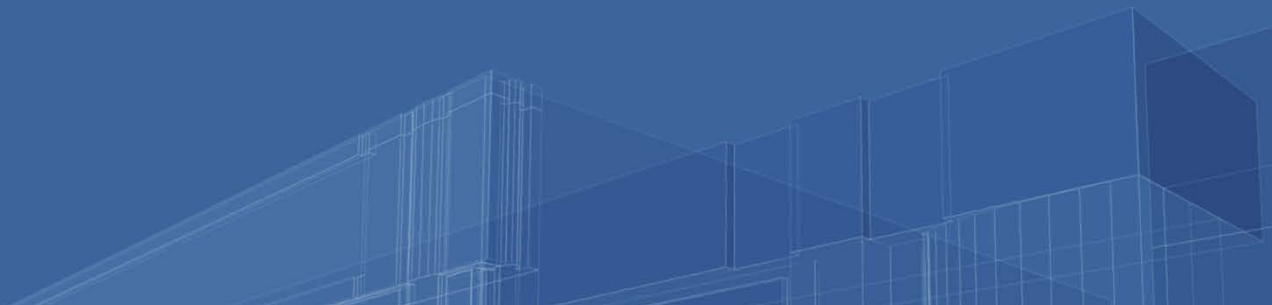
Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election of 2010, Series A	11/22/2011	\$79,000,000	4.95%	2/1/2012	8/1/2012	8/1/2041	Outstanding	8/1/2021 at par
Election of 2010, Series A-1 (QSCBs)	11/22/2011	\$21,000,000	1.34%	2/1/2011	8/1/2022	8/1/2030	Outstanding	"Make-whole"*
Election of 2010, Series B	10/31/2013	\$40,000,000	5.02%	2/1/2014	8/1/2014	8/1/2045	Outstanding	8/1/2023 at par
Election of 2010, Series C	3/12/2015	\$50,000,000	3.99%	8/1/2015	8/1/2016	8/1/2054	Outstanding	8/1/2025 at par
Election of 2010, Series D	3/15/2016	\$60,000,000	3.74%	8/1/2016	8/1/2016	8/1/2054	Outstanding	8/1/2025 at par
Total		\$250,000,000						
Issued From Authorization		\$250,000,000						

* Extraordinary "make-whole" optional call at any time after "extraordinary event", such as reduction in federal subsidy payments, which has occurred. Make-whole calls, as in this issue, are typically designed to be so expensive as to constitute non-callable bonds.

2012 Measure E- \$360,000,000

Issue	Issue Date	Par Value	Interest Rate (True Interest Cost)	First Interest Payment	First Principal Payment	Final Maturity	Status	First Optional Call
Election of 2012, Series A	10/31/2013	\$85,000,000	4.95%	2/1/2014	8/1/2014	8/1/2045	Outstanding	8/1/2023 at par
Election of 2012, Series B	3/12/2015	\$85,000,000	4.06%	8/1/2015	8/1/2016	8/1/2054	Outstanding	8/1/2025 at par
Election of 2012, Series C	3/15/2016	\$65,000,000	3.73%	8/1/2016	8/1/2016	8/1/2054	Outstanding	8/1/2026 at par
Total		<u>\$235,000,000</u>						
Issued From Authorization		<u>\$235,000,000</u>						

III. Refunding Analysis



Refunding of 2005 Measure J Series C-2 Build America Bonds for Debt Service Savings

	Prior Debt Service	Federal BAB Subsidy	Net Prior Debt Service	Refunding Debt Service	Crossover Escrow Receipts	From August 1, 2019 Crossover Date		
						Net Refunding Debt Service	Actual Savings/(Loss)	PV Savings at 2.933% (a)
6/30/2018	\$4,468,995.00	(\$1,457,786.16)	\$3,011,208.84	\$1,540,275.00	(\$1,540,275.00)			
6/30/2019	4,468,995.00	(1,457,786.16)	3,011,208.84	1,680,300.00	(1,680,300.00)			
6/30/2020	4,468,995.00	(1,457,786.16)	3,011,208.84	1,680,300.00	(840,150.00)	\$840,150.00	\$665,454.42	\$611,266.83
6/30/2021	4,468,995.00	(1,457,786.16)	3,011,208.84	1,990,575.00		1,990,575.00	1,020,633.84	915,202.21
6/30/2022	4,468,995.00	(1,457,786.16)	3,011,208.84	1,986,050.00		1,986,050.00	1,025,158.84	892,852.70
6/30/2023	4,468,995.00	(1,457,786.16)	3,011,208.84	1,986,300.00		1,986,300.00	1,024,908.84	866,952.15
6/30/2024	4,468,995.00	(1,457,786.16)	3,011,208.84	1,986,250.00		1,986,250.00	1,024,958.84	842,049.92
6/30/2025	4,468,995.00	(1,457,786.16)	3,011,208.84	1,985,900.00		1,985,900.00	1,025,308.84	818,102.97
6/30/2026	4,468,995.00	(1,457,786.16)	3,011,208.84	1,990,175.00		1,990,175.00	1,021,033.84	791,214.79
6/30/2027	4,468,995.00	(1,457,786.16)	3,011,208.84	1,989,075.00		1,989,075.00	1,022,133.84	769,280.37
6/30/2028	4,468,995.00	(1,457,786.16)	3,011,208.84	1,987,675.00		1,987,675.00	1,023,533.84	748,173.16
6/30/2029	4,468,995.00	(1,457,786.16)	3,011,208.84	1,985,975.00		1,985,975.00	1,025,233.84	727,857.45
6/30/2030	4,468,995.00	(1,457,786.16)	3,011,208.84	1,988,900.00		1,988,900.00	1,022,308.84	704,867.70
6/30/2031	4,468,995.00	(1,457,786.16)	3,011,208.84	1,986,450.00		1,986,450.00	1,024,758.84	686,233.17
6/30/2032	4,468,995.00	(1,457,786.16)	3,011,208.84	1,988,625.00		1,988,625.00	1,022,583.84	665,046.17
6/30/2033	4,468,995.00	(1,457,786.16)	3,011,208.84	1,990,350.00		1,990,350.00	1,020,858.84	644,795.22
6/30/2034	24,484,925.00	(1,169,402.53)	23,315,522.47	22,001,900.00		22,001,900.00	1,313,622.47	810,340.84
6/30/2035	33,275,427.50	(440,509.45)	32,834,918.05	30,795,100.00		30,795,100.00	2,039,818.05	1,228,345.30
	<u>\$129,264,272.50</u>	<u>(\$24,934,490.54)</u>	<u>\$104,329,781.96</u>	<u>\$83,540,175.00</u>	<u>(\$4,060,725.00)</u>	<u>\$79,479,450.00</u>	<u>\$17,322,309.86</u>	<u>\$12,722,580.95</u>
PV savings from cash flows:			\$12,722,580.95					
Plus refunding funds on hand:			4,105.04					
Net present value savings:			<u>\$12,726,685.99</u>					
PV savings, percent of bonds refunded:			24.09%					
Negative arbitrage in escrow:			(\$2,663,209.94)					

(a) Present value ("PV") calculated to 3/1/2017 bond closing date.

- First callable on 8/1/2019 @ Par.
- Assumes a 3/1/17 bond closing.
- Strongest refunding candidate.
- Refunding with tax-exempt bonds ends federal BAB subsidy (not a loss overall due to high interest rate savings).
- Crossover refunding scenario to maximize savings.

Refunding of 2009 Refunding Bonds (2005 Measure J)

- First callable on 8/1/2019 @ Par.
- Assumes a 3/1/2017 bond closing.
- Only the portion of the 2009 Refunding Bonds allocated to refunding the Election of 2000 Series A and B Bonds may be advance refunded.
- Too small to meet District policy as a stand-alone refunding, but a benefit to annual debt service savings if combined with another refunding issuance.

Year Ending,	Prior Debt Service	Refunding Debt Service	Crossover Escrow Receipts	From August 1, 2019 Crossover Date		
				Net Refunding Debt Service	Actual Savings/(Loss)	PV Savings at 2.47% (a)
6/30/2018	\$15,102,639.23	\$258,637.50	(\$258,637.50)			
6/30/2019	3,763,963.70	282,150.00	(282,150.00)			
6/30/2020	4,633,579.70	282,150.00	(141,075.00)	\$141,075.00	\$85,087.50	\$79,203.12
6/30/2021	1,020,362.50	942,100.00		942,100.00	78,262.50	71,026.80
6/30/2022	1,015,275.00	936,775.00		936,775.00	78,500.00	69,547.19
6/30/2023	1,013,087.50	935,925.00		935,925.00	77,162.50	66,725.64
6/30/2024	1,008,993.75	934,475.00		934,475.00	74,518.75	62,891.34
6/30/2025	998,050.00	922,575.00		922,575.00	75,475.00	62,211.57
6/30/2026	1,013,237.50	935,000.00		935,000.00	78,237.50	63,021.00
6/30/2027	1,009,518.75	931,600.00		931,600.00	77,918.75	61,315.70
6/30/2028	1,008,831.25	932,525.00		932,525.00	76,306.25	58,660.82
6/30/2029	1,010,912.50	932,700.00		932,700.00	78,212.50	58,764.18
6/30/2030	1,005,762.50	932,125.00		932,125.00	73,637.50	54,056.97
6/30/2031	1,007,668.75	930,800.00		930,800.00	76,868.75	55,171.01
6/30/2032	1,006,337.50	928,725.00		928,725.00	77,612.50	54,461.91
	<u>\$35,618,220.12</u>	<u>\$12,018,262.50</u>	<u>(\$681,862.50)</u>	<u>\$11,336,400.00</u>	<u>\$1,007,800.00</u>	<u>\$817,057.24</u>
PV savings from cash flows:				\$817,057.24		
Plus refunding funds on hand:				<u>4,007.99</u>		
Net present value savings:				<u>\$821,065.23</u>		
PV savings, percent of bonds refunded:				9.10%		
Negative arbitrage in escrow:				(\$357,331.23)		

(a) Present value ("PV") calculated to 3/1/2017 bond closing date.

Refunding of 2011 Refunding Bonds

- First callable on 8/1/2021 @ Par.
- Crossover advance refunding.
- Study assumes a 3/1/2017 bond closing.
- No savings, and probably too short remaining life to ever become a viable refunding candidate.

Year Ending,	Prior Debt Service	Refunding Debt Service	Crossover Escrow Receipts	From August 1, 2021 Crossover Date		
				Net Refunding Debt Service	Actual Savings/(Loss)	PV Savings at 2.47% (a)
6/30/2018	\$7,924,912.50	\$662,062.50	(\$662,062.50)			
6/30/2019	9,813,987.50	722,250.00	(722,250.00)			
6/30/2020	9,742,862.50	722,250.00	(722,250.00)			
6/30/2021	9,668,987.50	722,250.00	(722,250.00)			
6/30/2022	9,000,931.25	722,250.00	(361,125.00)	\$361,125.00	\$240,656.25	\$217,782.38
6/30/2023	9,524,256.25	9,710,375.00		9,710,375.00	(186,118.75)	(168,113.59)
6/30/2024	9,470,012.50	9,658,250.00		9,658,250.00	(188,237.50)	(165,753.04)
6/30/2025	5,572,537.50	5,684,000.00		5,684,000.00	(111,462.50)	(95,873.72)
	<u>\$70,718,487.50</u>	<u>\$28,603,687.50</u>	<u>(\$3,189,937.50)</u>	<u>\$25,413,750.00</u>	<u>(\$245,162.50)</u>	<u>(\$211,957.97)</u>
PV savings from cash flows:						(\$211,957.97)
Plus refunding funds on hand:						1,546.40
Net present value savings:						<u>(\$210,411.57)</u>
PV savings, percent of bonds refunded:						-0.92%
Negative arbitrage in escrow:						(\$959,930.76)

(a) Present value ("PV") calculated to 3/1/2017 bond closing date.

Refunding of 2010 Series A Bonds

- First callable on 8/1/2021 @ Par.
- Assumes a 3/1/2017 bond closing.
- Refundable at reasonable level of savings, but with high negative arbitrage.
- High negative arbitrage suggests waiting until closer to call date to refund. Not the best candidate now.

	Prior Debt Service	Refunding Debt Service	Crossover Escrow Receipts	From August 1, 2021 Crossover Date		
				Refunding Debt Service	Actual Savings/(Loss)	PV Savings at 2.968% (a)
6/30/2018	\$3,460,900.00	\$2,246,360.42	(\$2,246,360.42)			
6/30/2019	3,460,900.00	2,450,575.00	(2,450,575.00)			
6/30/2020	3,460,900.00	2,450,575.00	(2,450,575.00)			
6/30/2021	3,699,775.00	2,450,575.00	(2,450,575.00)			
6/30/2022	3,687,525.00	2,450,575.00	(1,225,287.50)	\$1,225,287.50	\$492,912.50	\$426,439.17
6/30/2023	3,787,400.00	3,282,900.00	0.00	3,282,900.00	504,500.00	423,890.50
6/30/2024	3,779,150.00	3,272,325.00	0.00	3,272,325.00	506,825.00	413,463.74
6/30/2025	3,775,275.00	3,266,225.00	0.00	3,266,225.00	509,050.00	403,205.61
6/30/2026	3,880,131.25	3,372,800.00	0.00	3,372,800.00	507,331.25	390,104.12
6/30/2027	3,883,243.75	3,376,825.00	0.00	3,376,825.00	506,418.75	378,038.01
6/30/2028	3,992,218.75	3,483,225.00	0.00	3,483,225.00	508,993.75	368,922.31
6/30/2029	3,989,187.50	3,482,000.00	0.00	3,482,000.00	507,187.50	356,920.85
6/30/2030	3,996,256.25	3,489,575.00	0.00	3,489,575.00	506,681.25	346,212.13
6/30/2031	4,108,075.00	3,599,225.00	0.00	3,599,225.00	508,850.00	337,643.84
6/30/2032	6,699,687.50	6,191,500.00	0.00	6,191,500.00	508,187.50	327,726.39
6/30/2033	6,826,631.25	6,318,775.00	0.00	6,318,775.00	507,856.25	318,251.62
6/30/2034	6,955,987.50	6,451,100.00	0.00	6,451,100.00	504,887.50	307,460.63
6/30/2035	7,086,706.25	6,578,187.50	0.00	6,578,187.50	508,518.75	301,017.44
6/30/2036	7,222,606.25	6,714,600.00	0.00	6,714,600.00	508,006.25	292,320.93
6/30/2037	7,359,400.00	6,854,725.00	0.00	6,854,725.00	504,675.00	282,310.43
6/30/2038	7,496,187.50	6,988,212.50	0.00	6,988,212.50	507,975.00	276,310.76
6/30/2039	7,639,918.75	7,134,537.50	0.00	7,134,537.50	505,381.25	267,329.42
6/30/2040	7,784,162.50	7,278,087.50	0.00	7,278,087.50	506,075.00	260,381.07
6/30/2041	7,927,618.75	7,423,425.00	0.00	7,423,425.00	504,193.75	252,366.74
6/30/2042	8,073,868.75	7,565,112.50	0.00	7,565,112.50	508,756.25	247,787.09
	<u>\$134,033,712.50</u>	<u>\$118,172,022.92</u>	<u>(\$10,823,372.92)</u>	<u>\$107,348,650.00</u>	<u>\$10,633,262.50</u>	<u>\$6,978,102.81</u>
PV savings from cash flows:						\$6,978,102.81
Plus refunding funds on hand:						706.27
Net present value savings:						<u>\$6,978,809.08</u>
PV savings, percent of bonds refunded:						10.52%
Negative arbitrage in escrow:						(\$5,447,669.35)

Refunding Summary & Breakeven Assessment

Advance Refunding at Current Market Rates in 2017

- Based on current rates, an advance refunding of both the Election of 2005, Series C-2 (BABs) and 2009 Refunding Bonds generate sufficient savings pursuant to the Board Refunding & Restructuring Policy 7214.3.
- A refunding of both the Election of 2005, Series C-2 (BABs) in combination with a portion of the Election of 2005 Series C-1 (CABs) generates sufficient savings, along with County tax rate stabilization, to maintain a \$60 tax rate for 2005 Measure J through 2018/19.

Waiting for a Current Refunding in 2019

- If rates increase by more than 30 bps, total taxpayer savings will be negatively impacted for the Election of 2005, Series C-2 (BABs).
- If rates increase by more than 100 bps, total taxpayer savings will be negatively impacted for the 2009 Refunding Bonds.

Refunding for Tax Rate Management in 2018

- If rates increase by more than 75 bps, management of the 2018/19 tax rate for 2005 Measure J will be negatively impacted.

Secured Tax Rate Estimates for 2005 Measure J (Through 2029/30)

Actual Tax Rates Through 2016/17; Rates in Italics Are Estimated						
(Dollars of Tax Per \$100,000 of Secured Assessed Value)						
Rates Based On Assumed Annual Assessed Value Growth of 4.00%						
Tax Year	No Refunding		2017 Tax Management Refunding		2017 Maximum Savings Crossover Refunding	
	Not Stabilized	\$60.00 Stabilization	Not Stabilized	\$60.00 Stabilization	Not Stabilized	\$60.00 Stabilization
2016/17	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	60.00
2017/18	<i>51.49</i>	<i>60.00</i>	<i>37.52</i>	<i>60.00</i>	<i>55.38</i>	<i>60.00</i>
2018/19	<i>71.68</i>	<i>63.05</i>	<i>54.63</i>	<i>60.00</i>	<i>72.04</i>	<i>67.36</i>
2019/20	<i>73.69</i>	<i>74.15</i>	<i>74.40</i>	<i>63.15</i>	<i>70.31</i>	<i>70.56</i>
2020/21	<i>76.78</i>	<i>76.76</i>	<i>76.59</i>	<i>77.88</i>	<i>73.72</i>	<i>73.71</i>
2021/22	<i>79.74</i>	<i>79.74</i>	<i>79.61</i>	<i>80.23</i>	<i>76.79</i>	<i>76.79</i>
2022/23	<i>78.55</i>	<i>78.55</i>	<i>78.41</i>	<i>78.38</i>	<i>75.71</i>	<i>75.71</i>
2023/24	<i>78.13</i>	<i>78.13</i>	<i>78.00</i>	<i>78.01</i>	<i>75.40</i>	<i>75.40</i>
2024/25	<i>80.34</i>	<i>80.34</i>	<i>80.22</i>	<i>80.22</i>	<i>77.73</i>	<i>77.73</i>
2025/26	<i>81.45</i>	<i>81.45</i>	<i>81.34</i>	<i>81.34</i>	<i>78.93</i>	<i>78.93</i>
2026/27	<i>81.87</i>	<i>81.87</i>	<i>81.76</i>	<i>81.76</i>	<i>79.45</i>	<i>79.45</i>
2027/28	<i>82.33</i>	<i>82.33</i>	<i>82.23</i>	<i>82.23</i>	<i>80.00</i>	<i>80.00</i>
2028/29	<i>82.80</i>	<i>82.80</i>	<i>82.70</i>	<i>82.70</i>	<i>80.56</i>	<i>80.56</i>
2029/30	<i>83.24</i>	<i>83.24</i>	<i>83.14</i>	<i>83.14</i>	<i>81.08</i>	<i>81.08</i>

Recommendations

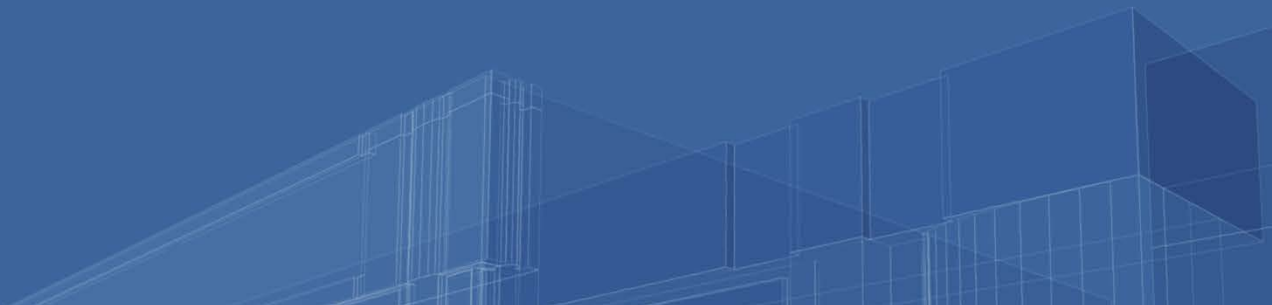
- District would need to decide on its refunding purpose: achieve annual debt service savings, leveling out overall debt service or managing tax rate commitments to voters.

- Consider refunding the Election of 2005 Series C-2 Bonds (Build America Bonds) since it meets the policy goals:
 - Analysis shows present value savings over **20% if structured for maximum savings.**
 - Analysis shows present value savings over **\$12,700,000** and over **\$1,000,000** annually if structured for savings.
 - The term of the debt **does not extend beyond 8/1/2034 final maturity of prior bonds.**
 - To maximize savings, would be a crossover refunding; crossover/first optional call date is 8/1/2019.
 - At interest rate shifts of 30 basis points or higher, the refunding savings is greater now than in 2019. This breakeven is so close that if refunding for maximum savings is the choice, we believe refunding in early 2017 rather than waiting until 2019 is warranted to avoid interest rate risk.

Recommendations (continued)

- Consider refunding the Election of 2005 Series C-2 Bonds (Build America Bonds) in combination with Election of 2005 Series C-1 Capital Appreciation Bonds to keep Measure M tax rate stabilized at \$60 per \$100,000 at least through 2018/19.
 - Analysis shows present value savings of **15% if structured for Measure J \$60 tax management at least through 2018/19.**
 - Analysis shows present value savings over **\$9,000,000 but only minimal savings annually after 2018/19 if structured for \$60 tax management through 2018/19.**
 - The term of the debt **does not extend beyond 8/1/2034 final maturity of prior bonds**
 - To minimize debt service through 2018/19, would be a conventional advance refunding, not a crossover.
 - At interest rate shifts of 75 basis points or higher, the refunding savings is greater now than in 2018 (necessary to manage 2018/19 tax rate).
 - Consider refunding the eligible portion of the 2009 General Obligation Refunding Bonds as an add-on to the above refunding. Particularly useful to increase annual savings after 2018/19 in tax rate management scenario.

Appendix



Appendix- Terminology

- **Aggregate Present Value Savings:** The present value savings in each year of the refunding transaction added together.
- **Net Debt Service Savings Approach:** A method to calculate refunding savings that accounts for the difference in interest earnings of the debt service reserve funds of the refunded and refunding bonds.
- **Net Present Value Savings:** A method of calculating the aggregate amount of savings on a refunding transaction taking into consideration the time value of money and net of all issuance fees.
- **Present Value Savings:** In each semi-annual period, the present value of the debt service on the refunding bonds is subtracted from the present value of the debt service on the refunded bonds using the arbitrage yield on the refunding bonds as the discount rate.

Participants in a Refunding Transaction

- **Board of Education** – set policy, and approves refunding plan and financing documents.
- **District Staff** – liaison with financing team, assist with gathering District information and executing the financing.
- **Financial Advisor** – develop the plan of finance, manage the financing team, and oversee all aspects of financing, with a focus on protecting District’s interests and achieving lowest borrowing costs.
- **Bond Counsel** – prepare legal documents and issue legal and tax opinions.
- **Disclosure Counsel** – outline disclosure obligations, prepare preliminary/final official statements and issue disclosure opinion.
- **Underwriter(s)** – assist with structuring the financing, investor outreach, and facilitate sale of bonds to investors (negotiated sale).
- **Verification Agent** – verify the refunding calculations.

External Participants

- **Rating Agencies** – evaluate credit quality of issuers and assign ratings which investors use to base investment decisions. Higher ratings typically result in lower interest rates.
- **County Assessor** – responsible for determining annual assessed valuation.
- **County Auditor-Controller** – responsible for calculating and levying school district taxes for bonds.
- **Bond Investors** – includes retail and institutional investors; their buying decisions ultimately dictate the interest rates associated with each bond sale.

The District's Debt Summary

- District voters have approved bonds on 6 occasions since June 1998.
- Measures approved after 2000 used Proposition 39 requirements.

	Yes Vote*	Required Vote	Authorized Amount	Authorization Utilized	Remaining Authorization
1998 Measure E	75.70%	66.60%	\$40,000,000	\$40,000,000	\$0
2000 Measure M	77.50%	66.60%	\$150,000,000	\$150,000,000	\$0
2002 Measure D	71.80%	55.00%	\$300,000,000	\$299,997,483	\$2,517
2005 Measure J	56.90%	55.00%	\$400,000,000	\$322,409,708	\$77,590,292
2010 Measure D	62.60%	55.00%	\$380,000,000	\$250,000,000	\$130,000,000
2012 Measure E	64.40%	55.00%	\$360,000,000	\$235,000,000	\$125,000,000
TOTAL			\$1,630,000,000	\$1,297,407,192	\$332,592,809

* Data from smartvoter.org