

Warren County School District

New Money Discussion

April 24, 2017

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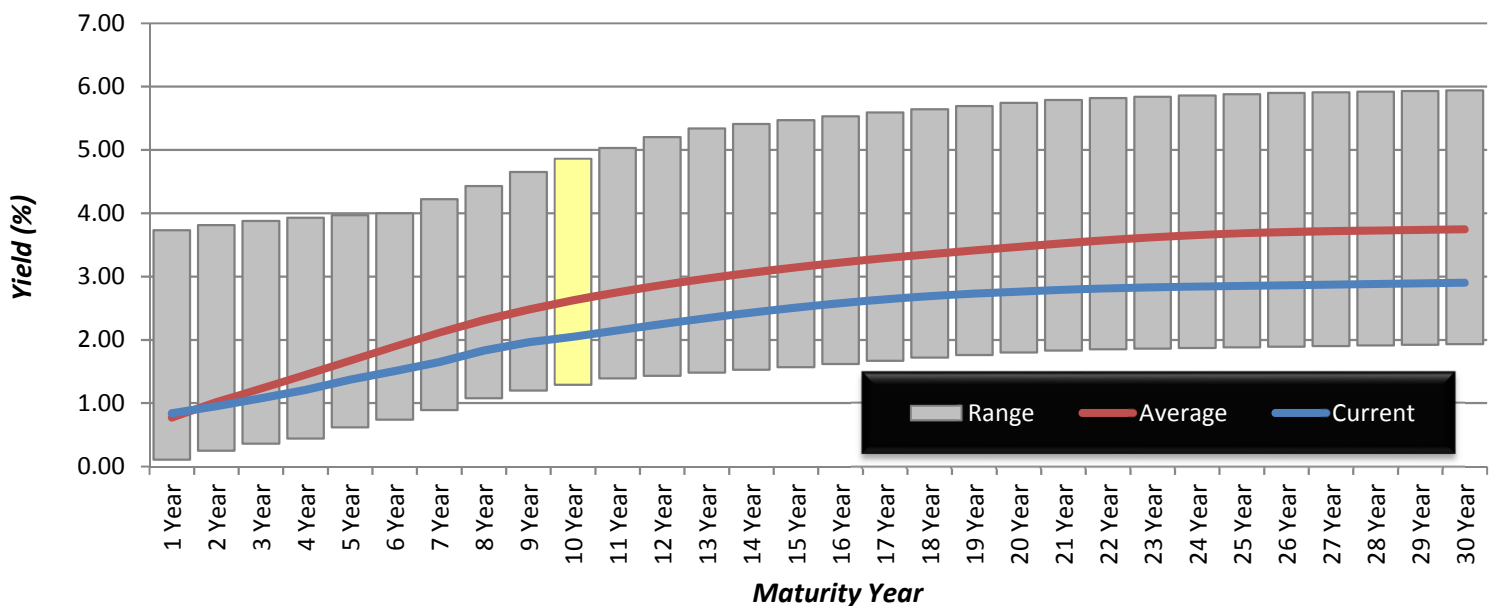
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MMD YIELD CURVE

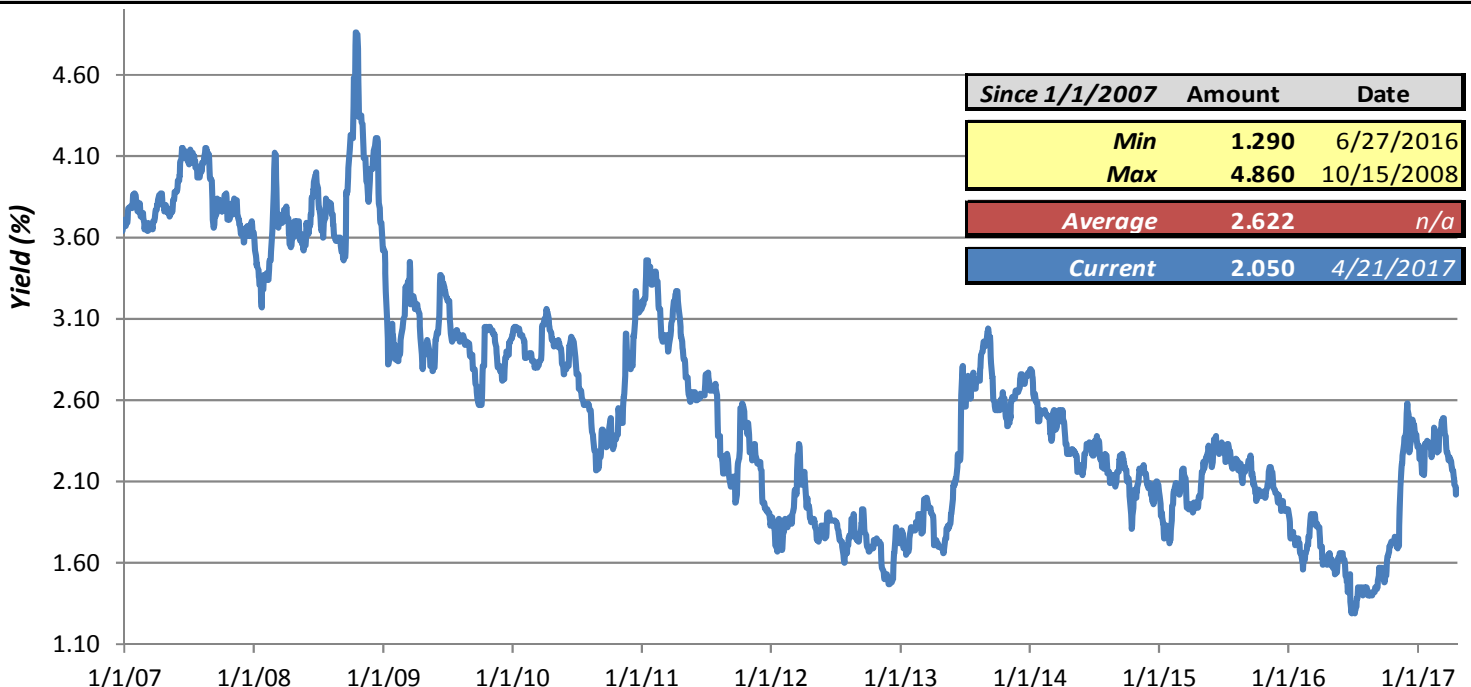
The MMD Yield Curve is a high grade municipal yield curve published daily by Municipal Market Data. It is one of the most commonly used benchmarks in municipal finance. The yields within the curve reflect the current yields for each maturity year at which bondholders would be likely to sell high quality (AAA rated) general obligation backed bonds. The yield curve is typically influenced by new issuances in the primary market as well as post-issuance trading in the secondary market.

Municipal bonds typically trade at a "spread to MMD", meaning the difference between the yield in a specific year of a bond issue and the respective yield in the MMD Yield Curve. While these spreads vary over time, they can be a meaningful and powerful tool in trying to compare relative yield levels in a volatile interest rate environment.

HISTORICAL MMD CURVE ILLUSTRATION - SINCE JANUARY 1, 2007



SPOT ANALYSIS - 10 YEAR MMD - SINCE JANUARY 1, 2007



Warren County School District

2017 Financing Plan Discussion

Project Summaries

- Warren County High School project
 - As of April 2017, project had \$11 million of remaining expenditures, approximately \$4.6 million of which still needs financed

Potential Use of Proceeds	
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High School Project	
Available 2014 Bond Proceeds (4/5/2016)	1,758,326
Available 2016 Bond Proceeds (4/5/2016)	2,207,636
Future 2017 QZAB	2,428,440
Future 2017 Tax Exempt Issue	4,629,088
Estimated Remaining High School Costs	11,023,490

Career Center	
Future 2017 QZAB	4,900,000
Future 2017 Tax Exempt Issue	5,137,746
Total Available for Project	10,037,746

- Warren County Career Center submitted PlanCon A & B in 2015 (bids must be awarded by July 1, 2019 per Act 25 of 2016)
 - Waiting for results of survey in June to proceed with design

Reimbursement Resolution

- A reimbursement resolution allows the issuer to pay itself back from the bond proceeds for costs related to the project
- A project may incur significant expenses prior to the financing

Tax Exempt-Federal Tax Laws

- The Internal Revenue Code (the "Code") permits the Issuer to borrow funds at a tax-exempt interest rate and invest the proceeds at an unlimited yield during the period of project construction, but not more than 3 years, if the reasonable expectations of the Issuer are to meet the following 3 tests:
- Expenditure Test – spend 85% of the proceeds within 3 years;
- Time Test – incur within 6 months a substantial binding obligation to expend at least 5% of the proceeds;
- Due Diligence Test – proceed with due diligence to complete the capital project and expend the proceeds for the capital project.

Bank Qualification Considerations

- Current IRS tax law states that a tax exempt issuer can issue \$10 million of Bank Qualified ("BQ") bonds per calendar year
 - Holders of BQ bonds enjoy certain tax benefits, resulting in higher demand

BQ	Non-BQ
-Lower interest rates (5-25 bps)	-Lock in rates earlier
-Shorter call feature (5 yrs vs 7-10 years)	
-Less negative arbitrage in construction fund	

QZAB Discussion (Taxable Financing)

- Warren County School District received a total allocation of \$5,000,000 of QZAB from the Pennsylvania Department of Education for use on the Warren County High School project
 - \$2,522,000 of 2014 federal allocation which settled on December 31, 2016
 - \$2,478,000 of 2015 federal allocation
 - Bonds must settle on or before December 31, 2017
 - Maximum final maturity on bonds will not be known until the month of pricing
 - Actual interest rate and QZAB tax credit rate will be determined on the day of pricing
- Warren County Career Center received allocation of \$5,000,000 of QZAB from the Pennsylvania Department of Education
 - 2015 federal allocation
 - Bonds must settle on or before December 31, 2017
 - Maximum final maturity on bonds will not be known until the month of pricing
 - Actual interest rate and QZAB tax credit rate will be determined on the day of pricing
- 100% of QZAB proceeds must be spent within 3 years

STEP 1: SAMPLE MOTION (Tax Exempt Financing)

Resolved: The Board of School Directors of the Warren County School District does hereby authorize the Administration to work with PFM Financial Advisors LLC as Independent Financial Advisor, Knox, McLaughlin Gornall & Sennett, P.C. as Bond Counsel and the local Solicitor to issue G.O. Bonds, Series of 2017 for the purpose of financing the Warren Area High School and Warren County Career Center Projects in the amount of \$9,995,000

ESTIMATED TIMELINE

Step 1: Tax Exempt Financing

- | | |
|--|--------------------------|
| ➤ Finance Committee Meeting | April 24, 2017 |
| ➤ Authorize Finance Team to Proceed | May 8, 2017 or later |
| ➤ Bond Sale (Lock in Rates) | July 17, 2017 or later |
| ➤ Settlement (District Receives Funds) | August 21, 2017 or later |

Step 2: Taxable QZAB Financing

- | | |
|--|-----------------------------|
| ➤ Authorize Finance Team to Proceed | September 11, 2017 or later |
| ➤ Sale (Lock in Rates) | November 6, 2017 or later |
| ➤ Settlement (District Receives Funds) | December 11, 2017 or later |

WARREN COUNTY SCHOOL DISTRICT
SUMMARY OF OUTSTANDING INDEBTEDNESS

Debt Service Requirements									
1	2	3	4	5	6	7	8	9	10
Fiscal Year Ended	QZAB Series of 2011 (1)	QZAB Series of 2012(2)	G.O. Bonds Series of 2013	G.O. Bonds Series A of 2013	G.O. Bonds Series of 2014	QZAB Series of 2015	G.O. Notes Series of 2015	QZAB Series of 2016	Total Debt Service
6/30/2017	1,040,700	105,966	295,830	862,875	406,850	125,821	1,185,975		4,024,016
6/30/2018	1,045,300	105,966	295,755	862,750	406,760	125,721	1,215,890	149,000	4,207,141
6/30/2019	1,777,800	180,000	295,680		406,670	125,621	1,216,100	164,000	4,165,871
6/30/2020	1,315,700	1,215,000	295,583		406,580	125,521	710,807	159,000	4,228,190
6/30/2021	762,100	1,825,000	295,463		406,460	125,421	704,166	159,000	4,277,609
6/30/2022	789,000	1,764,254	295,343		406,310	125,321	706,321	168,000	4,254,548
6/30/2023	720,000	1,802,781	295,223		406,160	125,221	711,159	172,000	4,232,543
6/30/2024	702,000	1,797,494	295,103		425,710	125,121	705,745	172,000	4,223,172
6/30/2025	684,000	2,559,846	294,983		449,535	125,021		172,000	4,285,384
6/30/2026	666,000	2,016,867	792,273		487,273	124,921		172,000	4,259,333
6/30/2027	648,000	639,871	1,397,523		1,062,210	124,821		172,000	4,044,424
6/30/2028	630,000	599,733	1,363,323		1,133,010	124,721		172,000	4,022,786
6/30/2029	612,000	559,595	1,329,123		1,194,910	124,621		172,000	3,992,248
6/30/2030	594,000	514,639	1,294,923		1,267,710	124,521		173,000	3,968,792
6/30/2031		479,501	1,260,723		1,777,110	124,421		173,000	3,814,754
6/30/2032		439,363	1,231,448		1,827,595	124,321		173,000	3,795,726
6/30/2033		399,225	1,197,098		1,887,285	124,221			3,607,828
6/30/2034		359,087	1,162,461		1,490,295	284,121			3,295,964
6/30/2035						2,775,821			2,775,821
6/30/2036						2,777,621			2,777,621
6/30/2037						2,771,910			2,771,910
6/30/2038									
6/30/2039									
6/30/2040									
6/30/2041									
6/30/2042									
6/30/2043									
TOTAL	11,986,600	17,364,185	13,687,851	1,725,625	15,848,433	10,734,824	7,156,163	2,522,000	81,025,681

Local Effort Requirements									
11	12	13	14	15	16	17	18	19	20
Fiscal Year Ended	QZAB Series of 2011 (1)	QZAB Series of 2012(2)	G.O. Bonds Series of 2013	G.O. Bonds Series A of 2013	G.O. Bonds Series of 2014	QZAB Series of 2015	G.O. Notes Series of 2015	QZAB Series of 2016	Total Local Effort
6/30/2017	772,709	84,928	243,593	649,405	358,013	105,680	888,743		3,103,070
6/30/2018	776,124	84,928	243,532	649,311	357,933	105,596	911,160	128,142	3,256,726
6/30/2019	1,319,997	144,264	243,470		357,854	105,512	911,318	141,043	3,223,458
6/30/2020	976,893	973,783	243,390		357,775	105,428	532,663	136,743	3,326,674
6/30/2021	565,851	1,462,679	243,291		357,669	105,344	527,686	136,743	3,399,262
6/30/2022	585,824	1,413,992	243,192		357,537	105,260	529,301	144,483	3,379,590
6/30/2023	534,592	1,444,871	243,093		357,405	105,176	532,926	147,923	3,365,986
6/30/2024	521,227	1,440,633	242,994		374,609	105,092	528,870	147,923	3,361,348
6/30/2025	507,863	2,051,634	242,895		395,574	105,008		147,923	3,450,897
6/30/2026	494,498	1,616,454	652,376		428,781	104,924		147,923	3,444,956
6/30/2027	481,133	512,836	1,150,753		934,705	104,840		147,923	3,332,189
6/30/2028	467,768	480,667	1,122,591		997,006	104,756		147,923	3,320,711
6/30/2029	454,403	448,497	1,094,430		1,051,476	104,672		147,923	3,301,402
6/30/2030	441,039	412,466	1,066,269		1,115,537	104,588		148,783	3,288,682
6/30/2031		384,304	1,038,108		1,563,790	104,504		148,783	3,239,489
6/30/2032		352,135	1,014,003		1,608,215	104,420		148,783	3,227,555
6/30/2033		319,966	985,718		1,660,740	104,336			3,070,759
6/30/2034		287,796	957,198		1,311,403	238,640			2,795,038
6/30/2035						2,331,483			2,331,483
6/30/2036						2,332,995			2,332,995
6/30/2037						2,328,199			2,328,199
6/30/2038									
6/30/2039									
6/30/2040									
6/30/2041									
6/30/2042									
6/30/2043									
TOTAL	8,899,922	13,916,834	11,270,895	1,298,716	13,946,022	9,016,455	5,362,666	2,168,960	65,880,470

Principal *:	16,200,000	23,180,000	9,685,000	850,000	9,970,000	8,449,000	5,631,000	2,522,000	76,487,000
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PE%:	35.89%	27.67%	24.61%	34.48%	16.73%	22.31%	34.93%	19.51%	
PE% Status:	Temporary	Permanent	Temporary	Temporary	Temporary	Temporary	Permanent	Permanent	
AR%	71.75%	71.75%	71.75%	71.75%	71.75%	71.75%	71.75%	71.75%	
Call Date:	Non-Callable	Non-Callable	5/15/2018	Non-Callable	5/15/2019	9/1/2025	Anytime	Anytime	
Purpose:	New Money	New Money	New Money	Cur Ref 08	New Money	New Money	Cur Ref 2010	New Money	

* Outstanding as of April 21, 2017

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

(1A) Assumes Fed. Reimbursement Subsidy for 9/1/13 payments reduced by 8.70% (\$36,207.49 per payment)

(1B) Assumes Fed. Reimbursement Subsidy for 3/1/14 & 9/1/14 payments reduced by 7.20% (\$29,964.82 per payment)

(1C) Assumes Fed. Reimbursement Subsidy for 3/1/15 & 9/1/15 payments reduced by 7.30% (\$30,380.99 per payment)

(1D) Assumes Fed. Reimbursement Subsidy for 3/1/16 & 9/1/2016 payment reduced by 6.80% (\$28,300.10 per payment)

(1E) Assumes Fed. Reimbursement Subsidy for 3/1/17 & 9/1/2017 payment reduced by 6.80% (\$28,300.10 per payment) (ESTIMATE ONLY)

(1F) Assumes Fed. Reimbursement Subsidy for 3/1/18 payment reduced by 6.80% (\$28,300.10 per payment) (ESTIMATE ONLY)

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

(2A) Assumes Fed. Reimbursement Subsidy for 11/1/13 & 5/1/14 payments reduced by 7.20% (\$34,922.99 per payment)

(2B) Assumes Fed. Reimbursement Subsidy for 11/1/214 & 5/1/2015 payments reduced by 7.30% (\$35,408.03 per payment)

(2C) Assumes Fed. Reimbursement Subsidy for 11/1/2015 & 5/1/2016 payments reduced by 6.80% (\$32,982.82 per payment)

(2D) Assumes Fed. Reimbursement Subsidy for 11/1/2016 & 5/1/2017 payments reduced by 6.80% (\$32,982.82 per payment) (ESTIMATE ONLY)

(2E) Assumes Fed. Reimbursement Subsidy for 11/1/2017 & 5/1/2018 payments reduced by 6.80% (\$32,982.82 per payment) (ESTIMATE ONLY)

**WARREN COUNTY SCHOOL DISTRICT
SUMMARY OF NEW MONEY**

Tax Exempt For High School + Career Center, 15 Year Term QZAB

	1	2	3	4
	STEP 1	STEP 2	STEP 2	
	<i>High School/Career Center</i>	<i>High School Portion</i>	<i>Career Center Portion</i>	Total
Principal	\$9,995,000	\$2,478,000	\$5,000,000	\$17,473,000
Type	Tax Exempt	QZAB	QZAB	
Millage Equivalent [1]	0.87	0.35	0.82	2.04

5	6	7	8	9	10	11	12	13	14	15	16
Fiscal Year Ending	Existing Local Effort	Proposed Local Effort	Total Local Effort	Millage Equivalent [1]	Proposed Local Effort [2]	Total Local Effort	Millage Equivalent [1]	Proposed Local Effort [2]	Total Local Effort	Millage Equivalent [1]	Total Millage Equivalent
6/30/2017	3,103,070		3,103,070			3,103,070			3,103,070		
6/30/2018	3,256,726	190,459	3,447,186	0.45	60,201	3,507,387	0.14	156,000	3,663,387	0.37	0.96
6/30/2019	3,223,458	365,484	3,588,942	0.42	147,923	3,736,865	0.21	346,000	4,082,865	0.45	1.08
6/30/2020	3,326,674	365,378	3,692,052		147,923	3,839,975		346,000	4,185,975		
6/30/2021	3,399,262	365,262	3,764,524		147,923	3,912,447		346,000	4,258,447		
6/30/2022	3,379,590	365,137	3,744,726		147,923	3,892,649		346,000	4,238,649		
6/30/2023	3,365,986	365,002	3,730,989		147,923	3,878,912		346,000	4,224,912		
6/30/2024	3,361,348	364,861	3,726,209		147,923	3,874,132		346,000	4,220,132		
6/30/2025	3,450,897	364,715	3,815,611		147,923	3,963,534		346,000	4,309,534		
6/30/2026	3,444,956	364,564	3,809,520		147,923	3,957,443		346,000	4,303,443		
6/30/2027	3,332,189	364,410	3,696,599		147,923	3,844,522		346,000	4,190,522		
6/30/2028	3,320,711	364,252	3,684,963		147,923	3,832,886		346,000	4,178,886		
6/30/2029	3,301,402	364,090	3,665,492		147,923	3,813,414		346,000	4,159,414		
6/30/2030	3,288,682	363,924	3,652,606		147,923	3,800,529		346,000	4,146,529		
6/30/2031	3,239,489	363,755	3,603,244		147,923	3,751,167		346,000	4,097,167		
6/30/2032	3,227,555	363,583	3,591,138		147,923	3,739,061		346,000	4,085,061		
6/30/2033	3,070,759	363,408	3,434,168			3,434,168			3,434,168		
6/30/2034	2,795,038	363,231	3,158,269			3,158,269			3,158,269		
6/30/2035	2,331,483	848,040	3,179,524			3,179,524			3,179,524		
6/30/2036	2,332,995	847,149	3,180,144			3,180,144			3,180,144		
6/30/2037	2,328,199	850,062	3,178,261			3,178,261			3,178,261		
6/30/2038		2,713,905	2,713,905			2,713,905			2,713,905		
6/30/2039		2,719,098	2,719,098			2,719,098			2,719,098		
6/30/2040		2,715,478	2,715,478			2,715,478			2,715,478		
6/30/2041											
6/30/2042											
6/30/2043											
6/30/2044											
6/30/2045											
6/30/2046											
6/30/2047											
6/30/2048											
6/30/2049											
6/30/2050											
TOTAL	65,880,470	16,715,247	82,595,717	0.87	2,131,119	84,726,836	0.35	5,000,000	89,726,836	0.82	2.04

[1] 1 Mill = 420,000

[2] Assumes District receives a bank loan proposal with a 0.0% supplemental coupon.

Assumes PE% of 19.51% on High School series, 0.00% on Career Center series

Actual rate to be determined at the time of pricing.

WARREN COUNTY SCHOOL DISTRICT
Series of 2017
Comparison of QZAB

	Base Case	Bond	Net Benefit
	Est. Tax Exempt Bond Issue	Est. Taxable QZAB- BOND	
Estimated Project Proceeds Available to District	7,210,530	7,245,717	
Borrowing Amount:	7,480,000	7,478,000	
PLUS: Estimated Interest:	5,694,246	4,167,427	
LESS: Estimated Sinking Fund Earnings:	0	(275,487)	
Total Local Effort (Principal + Interest):	13,174,246	11,369,940	1,804,306
Assumptions			
Est. Final Maturity:	9/1/2039	9/1/2039	
Est. Interest Rate:	3.72%	2.50%	
Est. Subsidy:	0.00%	0.00%	
Est. Sinking Fund Investment Rate:	0.00%	2.29%	
Est. Millage Equivalent	0.65	0.45	

	Bond	Bank Loan	Net Benefit
	Est. Taxable QZAB- BOND	Est. Taxable QZAB- BANK	
Estimated Project Proceeds Available to District	7,245,717	7,328,440	
Borrowing Amount:	7,478,000	7,478,000	
PLUS: Estimated Interest:	4,167,427	0	
LESS: Estimated Sinking Fund Earnings:	(275,487)	0	
Total Local Effort (Principal + Interest):	11,369,940	7,478,000	3,891,940
Assumptions			
Est. Final Maturity:	9/1/2039	3/1/2032	
Est. Interest Rate:	2.50%	0.00%	
Est. Subsidy:	0.00%	0.00%	
Est. Sinking Fund Investment Rate:	2.29%	0.00%	
Est. Millage Equivalent	0.45	1.17	
			Total
			5,696,246

Estimated rates. Actual rates to be determined at the time of pricing.