Bond Accountability
Commission 2, Inc.

Issue 4 Update
$200 million in bonds issued

Dec. 1, 2015

Overview

The Cleveland Metropolitan School District issued $150.8 million in general-obligation tax-exempt municipal bonds (Series 2015A) and $49.2 million in general-obligation taxable Qualified School Construction Bonds (QSCBs, Series 2015B) in June, the total equaling the $200 million in bonds authorized by voters as Issue 4 on the November 2014 ballot.

The District completed price negotiation with a team of underwriters led by RBC Capital Markets on June 10, 2015, and the closing date of the deal was June 30.

The Board of Education had authorized the bond issue at its meeting on February 24, 2015.

RBC reported that the average stated interest rate of the tax-exempt bonds is 4.58 percent and that the average stated interest rate of the taxable QSCBs is 5.023 percent.

The bonds were issued for terms of maturity ranging to Dec. 1, 2049. Total debt service is calculated by RBC to be about $381.6 million.

Interest rate

The All-In True Interest Cost (the effective actual rate paid as a percentage of the face amount of the bonds, taking into account the net present value of all payments of principal, interest, and future expenses, discounts, premiums, costs of issuance, etc.,) will be about 4.099 percent for the tax-exempt bonds and 0.227 percent for the taxable bonds (The latter is so low because most of the interest cost for the taxable bonds is rebated to the District by the Internal Revenue Service. However, Issue 4 taxpayers may have to bear the full interest expense, because the District could, as it has in the past, deposit the rebates into its operating accounts rather than the Bond Retirement Fund.).

Cost of issuance

The cost of issuance was reported as $620,300, including $149,500 for the bond counsel, Squire Patton Boggs; a total of $125,000 for financial adviser Fifth Third Securities; and $292,000 for bond-rating agencies.

In addition, the total underwriter's discount (basically the difference between the price paid to the issuer and the prices at which the securities are initially offered to the investing

public) was reported as $157,155 for the tax-exempt bonds and $49,200 for the QSCBs, for a total of $206,355.

Bond ratings

The bonds were rated (AA) by Fitch Ratings, thanks to the District's participation in the Ohio School District Credit Enhancement Program, which requires the Ohio Department of Education to use the District's state operating subsidy to service the bond debt should the District fail to make the payment. Without the state credit enhancement, Fitch rated the bonds (A-).

Fitch's AA rating indicates very low default risk, with a very strong capacity for payment of financial commitments and not significantly vulnerable to foreseeable events. The A rating indicates low default risk, with capacity for payment of financial commitments considered strong but possibly more vulnerable to adverse business or economic conditions.

Moody's Investors Service rated the bonds Aa2 with the Ohio enhancement, and A2 without it.

According to Moody's, "obligations rated Aa are judged to be of high quality and are subject to very low credit risk" and "obligations rated A are judged to be upper-medium grade and are subject to low credit risk." Moody's adds numerical modifiers 1, 2, and 3 to each generic rating classification. "The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category."

Standard & Poor's rated the bonds with the Ohio enhancement AA (very strong capacity to meet financial commitments) and gave the District an underlying rating of A-minus (the lower end of its range denoting strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances).

Method of sale

The District chose to follow a negotiated underwriting process, in which a group of underwriters are solicited and selected according to the District's criteria before the securities are structured. The selected underwriters participate in the structuring efforts and they are able to engage in pre-marketing efforts because they have confidence that they will be able to purchase and resell the securities.

An analysis prepared for the BAC in 2010 by American Governmental Financial Services Co. of Sacramento, Calif., in conjunction with Government Financial Strategies Inc., Delphis-Hanover Corp., and the Law Office of Perry Israel generally recommended competitively bid deals as being most likely to result in the lowest possible interest rates to be borne by Cleveland's taxpayers. (See Pages 12-22 of "Issue 14 Bond Issues":

http://www.clevelandmetroschools.org/cms/lib05/OH01915844/Centricity/Domain/278/Issue%2014%20Bond%20Issues%20REPORT51410%201.pdf).

Interest rates are the major determinant of the ultimate taxpayer cost of a bond issue.

In a competitive process, the offered securities are structured by the issuer, its financial advisers, and its bond counsel and then the District advertises the sale and solicits bids by underwriting firms. The firm proposing the lowest overall interest cost wins the bid.

The District's deputy chief financial officer, Dennis Kubick, and the financial advisers from Fifth Thirdtold the BAC in a public meeting on August 25, as they have in the past, that

negotiated deals allow flexibility to change the sale date and amount of targeted bonds in response to changing market conditions, which they said will result in the lowest borrowing rates; give the District the ability to ensure minority-firm participation on the underwriting team; and can provide District residents with first access to investment in the bonds. They said the financial advisers in a negotiated sale help to make certain that interest rates are "on the market," and they reported that 10 of 13 Ohio issues over $150 million as of the August meeting were negotiated.

Mr. Kubick previously also told the BAC the flexibility afforded by a negotiated sale was important in the market climate at the time, which he characterized as decreased demand for municipal bonds among retail investors amid a higher volume of municipal bond issues. In this situation of issuers competing for the attention of the same buyers, he said, a competitive sale could result in the issuer paying higher rates due to lack of demand for the transaction.

In 2010, the BAC's consultants essentially rejected such arguments as being irrelevant to achieving the ultimate goal: the lowest possible interest rate to be borne by Cleveland's taxpayers. Their report asserted that under the circumstances of CMSD's bond issues, a competitive deal would be most likely to yield the best results for local taxpayers:

> *"One of the ironies of the municipal securities market is that large numbers of issuers that otherwise are frugal and that carefully evaluate costs and money-saving alternatives in making even relatively small purchases nevertheless choose to ignore strong evidence that competitive bidding produces better pricing in certain securities financings of significant size. ....*
> *"With CMSD's own credit level, the enhanced ratings provided through CMSD's participation in the Department of Education's enhancement program, and standardized terms of unlimited tax general obligation Bonds, a competitive bid is preferable in terms of producing optimized yields for CMSD and the taxpayers."*

Selection of underwriter

When a negotiated method of sale is chosen, selection of underwriters is typically done through a Request for Proposals (RFP) process in which an issuer, such as the District, evaluates underwriter proposals according to set criteria and then selects a syndicate of underwriters with one or two designated as the lead managers.

The Government Finance Officers Association (GFOA), widely regarded as the good-government advisory body for the industry in the United States and Canada, notes in its official "Best Practices" recommendations:

> *"The issuer's goal in a negotiated bond sale is to obtain the lowest possible borrowing cost for the bonds. To maximize the potential of this occurring, the issuer's goal in the underwriter selection process is to select the underwriter(s) that has the best potential for obtaining the lowest borrowing cost. Those underwriters are typically the ones that have demonstrated both experience underwriting the type of bonds being proposed and the strongest marketing/distribution capabilities. ... No firm should be given an unfair advantage in the RFP process."*

To read the full GFOA Best Practice statement "Selecting Underwriters for Negotiated Bond Sales," go to: http://www.gfoa.org/selecting-and-managing-underwriters-negotiated-bond-sales.

According to the GFOA, the Request for Proposals should include "a description of the objective evaluation and selection criteria and explanation of how proposals will be evaluated."

The District's RFP defined the selection criteria as:

A. Underwriting Spread:

B. Organization, Personnel and Experience:

1. Experience of Firm with the District
2. Experience of assigned or relevant Personnel in Similar Programs
3. Experience of assigned or relevant Personnel in Similar Programs within Ohio
4. Experience of Firm Underwriting Bond Issues for Ohio Issuers
5. Experience of Firm Underwriting larger voted bond issues
6. Underwriting Capacity of Firm
7. Distribution Capability
8. Business presence in Ohio

C. General Quality, Approach and Adequacy of Response:

1. Completeness and Thoroughness
2. Responsiveness to Terms and Conditions

The District's RFP did not address the weighting or relative importance of the listed criteria.

According to information from the District, the submitted proposals were evaluated separately by John Adams and David Tiggett, both of Fifth Third Securities, according to the following weighted criteria:

- Fees and expenses, 40%
- Distribution capabilities, 35% (institutional, 10%; retail, 10%; capital position, 15%)
- Experience, 10% (Ohio school issuers, 5%; Ohio issuers, 5%)
- Commitment to and/or ownership role of minority groups, 5%
- Corporate presence within the District, 5%
- Performance on previous District bond and note issues, 5%

The BAC's consultants in their 2010 report took issue with the District's practice in 2002 and 2004 of giving even 25 percent weighting for fees and expenses, a category that they noted "does not relate to interest costs, but rather to the underwriters' compensation and expenses for selling the securities." Compared with interest costs, the consultants said, "such fees and expenses normally are a significantly less important element."

For refinancing bond issues in 2012, 2013 and 2014, the District revamped its evaluation weightings, subtracting from those for "corporate presence" and "performance on previous District" sales as our consultants had recommended, and adding weight -- to a total of 35 percent each -- to "ability to distribute" and "fees and expenses," even though the consultants had recommended against the latter.

This time, the District added 14 percent more weight -- 5 percentage points -- to the "fees and expenses" criterion and subtracted 33 percent -- 5 percentage points -- from the Ohio "experience" criterion.

Asked to explain this change, Mr. Kubick responded: "The rationale for shifting 5% to the "Fee" criteria from the "Experience" criteria was that most of the firms, if not all the responding firms, have the K-12 underwriting experience to effectively underwrite the bonds and that [the] more important factor for consideration would be the cost, due to the total size of the issuance."

The District has touted the fact that the basic underwriter's discount of $1 per $1,000 in bonds agreed to by members of the selected underwriting team was extraordinarily low compared with the typical range in Ohio, which the District said was $4 to $6 per $1,000, which would equate to $800,000 to $1,200,000 on a $200 million issuance, instead of the $200,000 charged in this case.

In their comments on the relative importance of underwriter-selection criteria, the BAC's consultants said in their report:

> *"... Bond yields represent, by far, the largest cost for the District and the taxpayers. ... A firm that may charge a little more compensation for its work in order to motivate its sales staff to a greater extent, but which overall produces the lowest yields, is almost invariably the firm that will benefit the District and the taxpayers the most."*

For this issue, the District solicited proposals from PNC Capital Markets; RBC Capital Markets; Ross, Sinclaire & Assoc.; Stifel, Nicolaus & Company, Inc.; KeyBanc Capital Markets; CastleOak Securities; Loop Capital Markets; Blaylock Beal Van, LLC; Huntington Investment Co.; Piper Jaffray & Co.; Siebert, Brandford, Shank & Co.; First Southwest Company; Bank of America Merrill Lynch; JP Morgan Securities; Morgan Stanley; Wells Fargo Capital Markets; Cabrera Capital Markets; and Fidelity Investments. According to information supplied by the District, no proposal was received from Bank of America, Wells Fargo, Huntington, or CastleOak.

The District's financial advisors ranked the RFP responses. According to information supplied by the District, Fifth Third's John Adams did not score PNC. Three proposers were disqualified: JP Morgan, Blaylock Beal Van, and Ross, Sinclaire. According to the District, they were disqualified for failure to "notarize forms and/or supply original forms" as instructed.

The District selected the firms with the top five reported aggregate scores for its underwriting team. They are (with respective allocation of bonds): RBC, Senior Manager (40%); KeyBanc, Co-Manager (15%); Loop, Co-Manager (15%); PNC, Co-Manager (15%); Stifel, Nicolaus, Co-Manager (15%).

QSCB rebates

Qualified School Construction Bonds were a debt-issuance tool provided by the American Recovery and Reinvestment Act of 2009 for the rehabilitation, repair and equipping of schools. The idea was to help stimulate construction during the so-called Great Recession by having the federal government pay most of the interest costs on the bonds. Authority to issue the total amount of bonds available under the program for 2009 and 2010 -- $22 billion -- was distributed among the states (60 percent) and large local educational agencies such as CMSD (40 percent). Unused allocations could be carried forward to future years.

The Cleveland District issued $55 million in QSCBs in 2010, and now it has issued $49.2 million more.

For the District, the chief advantage of issuing Qualified School Construction Bonds is that the Internal Revenue Service rebates almost all of the interest cost to the District. On the 2010 issue, the District will receive approximately $40 million in rebates over 16 years. The rebate on the 2015 issue will total approximately $60 million over 26 years.

Under the law, the District may spend the rebate money as it wishes. So far, the District has not indicated how it will allocate the rebate for the 2015 issue. It has allocated rebates on the 2010 issue for general operating expenses, including building repairs and improvements.

The District and its advisors asserted in their August briefing of the BAC that even without rebates they had saved taxpayers about $4.1 million in interest liability by issuing the QSCBs along with the tax-exempt bonds versus issuing the entire $200 million as traditional tax-exempt bonds. Asked to clarify, in view of the lower interest rate on the tax-exempt bonds, they attributed their savings figure to $2.2 million in interest earnings on the QSCB debt-retirement sinking fund and to "$1.9 million in interest cost savings from a slightly accelerated amortization of the $150mm principal over the 35-year period."

However, examination of supporting documentation that they provided showed that, compared with the present debt-retirement schedule (see Page 7), the hypothetical tax-exempt-only model (Page 8) generally reduced debt payments over the first 26 years and greatly increased them in the last nine years (Page 9), which could have the effect of increasing interest costs. Therefore the BAC cannot vouch for the validity of the claim of $4.1 million in savings.

Evaluating results

BAC reports on the District's bond sales consistently have said that the District would not know whether it had gotten a good deal in a given bond sale unless it commissioned a comparative analysis of the actual sale results.

The GFOA's Best Practice statement "Selecting and Managing the Method of Sale of State and Local Government Bonds" says an issuer that chooses to pursue a negotiated sale should "*prepare a post-sale summary and analysis that documents the pricing of the bonds relative to other similar transactions priced at or near the time of the issuer's bond sale. ...*"

The BAC's reports have advocated a post-sale comparative analysis after every bond issuance, especially in light of the District's underwriter-selection criterion "performance on past District bond issues." If bottom-line performance has not been properly evaluated, then how is that criterion judged?

The District provided comparisons of the rates received for its bond refundings in 2012, 2013 and 2014 with the average rates for Aaa-rated general-obligation municipal bonds at the time. Because the comparisons pitted bonds rated Aaa against rates for the District's bonds rated at the lower Aa2, they were useful for evaluating the District's performance on one sale vs. its performance on another District sale but not for evaluating whether the District obtained rates competitive with those of other similarly rated municipal issues at the time.

For this sale, the District and its advisors provided a compilation of sales results for CMSD's issues *and* various other similar bond issues, comparing the rates for each bond maturity with those reported for national indexes in terms of the number of basis points by which the issuer's rate exceeded the relevant index value (a basis point is one-hundredth of one percent). Reportedly, the indexes used were for Aaa municipal bonds for the tax exempts, and for U.S. Treasury bonds for the taxable bonds. (See Pages 10-11)

It is encouraging that the District now has a comparison by which it can assess whether its bond issues received market-competitive interest rates. Both the District and its advisors say they did. However, the BAC lacks the expertise to independently vouch for the completeness or the relevance of the provided comparative analysis.

CMSD bond-retirement schedule with estimated millage requirements

Cleveland MSD
Projected Debt Service and Millage

Collection Year / Collection Rate	Assumed Total Property Valuation [a]	Series 2012	January Issue [c] Series 2013	QSCB [d] Series 2010 $55,000,000	State of Ohio "Hold Harmless" Payment	Series 2013	QSCB [d] Series 2015B $49,200,000	Series 2015A $151,800,000	Total Debt Service	Debt Service Mills	Collection Fees [b]	Total Mills
85%												
2015	5,007,005,510	2,343,275	1,328,650	5,933,529	1,013,180	4,368,000	1,036,580	13,751,488	27,748,343	6.52	610,000	6.66
2016	5,007,005,510	2,342,675	1,328,650	5,901,176	1,013,180	-	2,471,316	10,029,840	21,060,477	4.95	610,000	5.09
2017	5,007,005,510	2,342,425	1,328,650	5,868,823	1,013,180	-	2,471,316	10,061,040	21,059,074	4.95	610,000	5.09
2018	5,007,005,510	2,345,825	2,308,650	5,836,470	1,013,180		2,471,316	9,225,140	21,174,221	4.98	610,000	5.12
2019	5,007,005,510	2,346,225	2,304,250	5,804,118	1,013,180		2,471,316	9,259,090	21,171,819	4.97	610,000	5.12
2020	5,007,005,510	2,343,625	2,304,050	5,771,765	1,013,180		2,471,316	9,287,690	21,165,266	4.97	610,000	5.12
2021	5,007,005,510	2,342,875	2,301,800	5,739,412	1,013,180		2,471,316	9,321,940	21,164,163	4.97	610,000	5.12
2022	5,007,005,510	2,344,425	2,303,000	5,707,059	1,013,180		2,471,316	9,346,190	21,158,810	4.97	610,000	5.11
2023	5,007,005,510	2,338,575	2,306,000	5,674,706	1,013,180		2,471,316	9,375,440	21,152,857	4.97	610,000	5.11
2024	5,007,005,510	0	4,801,000	5,642,353	1,013,180		2,471,316	9,268,940	21,170,429	4.97	610,000	5.12
2025	5,007,005,510	0	6,303,250	5,610,000	1,013,180		2,471,316	7,982,940	21,354,326	5.02	610,000	5.16
2026	5,007,005,510	0	6,306,000	5,577,649	1,013,180		2,471,316	8,006,190	21,347,975	5.02	610,000	5.16
2027	5,007,005,510	0	6,300,000	-	1,013,180		2,471,316	12,895,940	20,654,076	4.85	610,000	5.00
2028	5,007,005,510						2,471,316	10,133,440	12,604,756	2.96	610,000	3.11
2029	5,007,005,510						2,471,316	10,133,690	12,605,006	2.96	610,000	3.11
2030	5,007,005,510						2,471,316	10,134,440	12,605,756	2.96	610,000	3.11
2031	5,007,005,510						2,471,316	10,134,940	12,606,256	2.96	610,000	3.11
2032	5,007,005,510						2,471,316	10,134,440	12,605,756	2.96	610,000	3.11
2033	5,007,005,510						2,471,316	10,132,190	12,603,506	2.96	610,000	3.10
2034	5,007,005,510						9,496,316	3,107,440	12,603,756	2.96	610,000	3.10
2035	5,007,005,510						9,496,316	3,110,250	12,606,566	2.96	610,000	3.11
2036	5,007,005,510						9,501,316	3,101,538	12,602,854	2.96	610,000	3.10
2037	5,007,005,510						9,501,316	3,101,738	12,603,054	2.96	610,000	3.10
2038	5,007,005,510						9,501,316	3,105,415	12,606,731	2.96	610,000	3.11
2039	5,007,005,510						9,501,316	3,102,353	12,603,669	2.96	610,000	3.10
2040	5,007,005,510						9,501,316	3,102,768	12,604,084	2.96	610,000	3.10
2041	5,007,005,510							6,586,443	6,586,443	1.55	610,000	1.69
2042	5,007,005,510							6,586,780	6,586,780	1.55	610,000	1.69
2043	5,007,005,510							6,583,635	6,583,635	1.55	610,000	1.69
2044	5,007,005,510							6,586,790	6,586,790	1.55	610,000	1.69
2045	5,007,005,510							6,585,593	6,585,593	1.55	610,000	1.69
2046	5,007,005,510							6,584,825	6,584,825	1.55	610,000	1.69
2047	5,007,005,510							6,588,075	6,588,075	1.55	610,000	1.69
2048	5,007,005,510							6,585,938	6,585,938	1.55	610,000	1.69
2049	5,007,005,510							6,583,388	6,583,388	1.55	610,000	1.69
2050	5,007,005,510								-		610,000	0.14
2051	5,007,005,510								-		610,000	0.14
2052	5,007,005,510								-		610,000	0.14
Total		21,089,925	41,523,950	69,067,060	13,171,340	4,368,000	112,019,480	269,617,973	504,515,048		23,180,000	

(a) Assumes CY 2015 AV and no growth in future years.

(b) 6.1 mills for CY 2014 and $610,000 per year in fees.

(c) Refunds part of 2004 issue

(d) Assumes average earnings rate of 1.50% in sinking fund, but IRS subsidy is not applied to debt service.

Hypothetical debt schedule for $200 million tax-exempt issue

Cleveland MSD

2015 Bond Issue

2015 Series - 6.10.15 - Final Pricing BAC

Debt Service Schedule

Part 1 of 2

Date	Principal	Coupon	Interest	Total P+I
12/01/2015	11,000,000.00	2.000%	3,623,475.69	14,623,475.69
12/01/2016	2,575,000.00	2.000%	8,418,750.00	10,993,750.00
12/01/2017	2,625,000.00	2.000%	8,367,250.00	10,992,250.00
12/01/2018	2,680,000.00	3.000%	8,314,750.00	10,994,750.00
12/01/2019	2,760,000.00	4.000%	8,234,350.00	10,994,350.00
12/01/2020	2,870,000.00	5.000%	8,123,950.00	10,993,950.00
12/01/2021	3,015,000.00	5.000%	7,980,450.00	10,995,450.00
12/01/2022	3,165,000.00	5.000%	7,829,700.00	10,994,700.00
12/01/2023	3,320,000.00	5.000%	7,671,450.00	10,991,450.00
12/01/2024	3,490,000.00	5.000%	7,505,450.00	10,995,450.00
12/01/2025	3,665,000.00	5.000%	7,330,950.00	10,995,950.00
12/01/2026	3,845,000.00	5.000%	7,147,700.00	10,992,700.00
12/01/2027	4,040,000.00	5.000%	6,955,450.00	10,995,450.00
12/01/2028	4,240,000.00	5.000%	6,753,450.00	10,993,450.00
12/01/2029	4,450,000.00	5.000%	6,541,450.00	10,991,450.00
12/01/2030	4,675,000.00	5.000%	6,318,950.00	10,993,950.00
12/01/2031	4,910,000.00	5.000%	6,085,200.00	10,995,200.00
12/01/2032	5,155,000.00	5.000%	5,839,700.00	10,994,700.00
12/01/2033	5,410,000.00	5.000%	5,581,950.00	10,991,950.00
12/01/2034	5,685,000.00	4.350%	5,311,450.00	10,996,450.00
12/01/2035	5,930,000.00	4.350%	5,064,152.50	10,994,152.50
12/01/2036	6,190,000.00	4.350%	4,806,197.50	10,996,197.50
12/01/2037	6,455,000.00	4.350%	4,536,932.50	10,991,932.50
12/01/2038	6,740,000.00	4.350%	4,256,140.00	10,996,140.00
12/01/2039	7,030,000.00	4.350%	3,962,950.00	10,992,950.00
12/01/2040	7,335,000.00	4.350%	3,657,145.00	10,992,145.00
12/01/2041	7,655,000.00	4.350%	3,338,072.50	10,993,072.50
12/01/2042	7,990,000.00	4.350%	3,005,080.00	10,995,080.00
12/01/2043	8,335,000.00	4.350%	2,657,515.00	10,992,515.00
12/01/2044	8,700,000.00	4.350%	2,294,942.50	10,994,942.50
12/01/2045	9,080,000.00	4.350%	1,916,492.50	10,996,492.50
12/01/2046	4,620,000.00	5.000%	1,521,512.50	6,141,512.50
12/01/2047	9,705,000.00	4.250%	1,290,512.50	10,995,512.50
12/01/2048	10,115,000.00	4.250%	878,050.00	10,993,050.00
12/01/2049	10,545,000.00	4.250%	448,162.50	10,993,162.50
Total	**$200,000,000.00**	-	**$183,569,683.19**	**$383,569,683.19**

2015 Series - 6.10.15 - | $151MM Tax-exempt | 10/20/2015 | 2:42 PM

Fifth Third Securities, Inc.

Public Finance

Debt service: taxable & tax-exempt vs. tax-exempt only

Year	$49.2 million QSCB taxable	$150.8 million tax-exempt	Total	$200 million tax-exempt	Annual debt service difference
	Present debt schedule			**Hypothetical debt schedule**	
2015	1,036,580	13,751,488	14,788,068	14,623,476	-164,592
2016	2,471,316	10,029,840	12,501,156	10,993,750	-1,507,406
2017	2,471,316	10,061,040	12,532,356	10,992,250	-1,540,106
2018	2,471,316	9,225,140	11,696,456	10,994,750	-701,706
2019	2,471,316	9,259,090	11,730,406	10,994,350	-736,056
2020	2,471,316	9,287,690	11,759,006	10,993,950	-765,056
2021	2,471,316	9,321,940	11,793,256	10,995,450	-797,806
2022	2,471,316	9,346,190	11,817,506	10,994,700	-822,806
2023	2,471,316	9,375,440	11,846,756	10,991,450	-855,306
2024	2,471,316	9,268,940	11,740,256	10,995,450	-744,806
2025	2,471,316	7,982,940	10,454,256	10,995,950	541,694
2026	2,471,316	8,006,190	10,477,506	10,992,700	515,194
2027	2,471,316	12,895,940	15,367,256	10,995,450	-4,371,806
2028	2,471,316	10,133,440	12,604,756	10,993,450	-1,611,306
2029	2,471,316	10,133,690	12,605,006	10,991,450	-1,613,556
2030	2,471,316	10,134,440	12,605,756	10,993,950	-1,611,806
2031	2,471,316	10,134,940	12,606,256	10,995,200	-1,611,056
2032	2,471,316	10,134,440	12,605,756	10,994,700	-1,611,056
2033	2,471,316	10,132,190	12,603,506	10,991,950	-1,611,556
2034	9,496,316	3,107,440	12,603,756	10,996,450	-1,607,306
2035	9,496,316	3,110,250	12,606,566	10,994,153	-1,612,414
2036	9,501,316	3,101,538	12,602,854	10,996,198	-1,606,657
2037	9,501,316	3,101,738	12,603,054	10,991,933	-1,611,122
2038	9,501,316	3,105,415	12,606,731	10,996,140	-1,610,591
2039	9,501,316	3,102,353	12,603,669	10,992,950	-1,610,719
2040	9,501,316	3,102,768	12,604,084	10,992,145	-1,611,939
2041		6,586,443	6,586,443	10,993,073	4,406,630
2042		6,586,780	6,586,780	10,995,080	4,408,300
2043		6,583,635	6,583,635	10,992,515	4,408,880
2044		6,586,790	6,586,790	10,994,943	4,408,153
2045		6,585,593	6,585,593	10,996,493	4,410,900
2046		6,584,825	6,584,825	6,141,513	-443,313
2047		6,588,075	6,588,075	10,995,513	4,407,438
2048		6,585,938	6,585,938	10,993,050	4,407,112
2049		6,583,388	6,583,388	10,993,163	4,409,775
Totals	112,019,480	269,617,977	**381,637,457**	**383,569,683**	
			Liability less $2.2 million earned interest		**Reported savings**
			$379,437,457	**$383,569,683**	**$4,132,226**

DRAFT

Comparative sales results, $150.8 million municipal tax-exempt bonds

-- source: CMSD/Fifth Third Securities

Spread Analysis

Issuer Pricing Date Ratings Amount	Cleveland MSD 6/10/2015 A-/A-/A2 (under) St. Credit Enh. $151MM	Marysville EVSD 6/2/2015 A1/A+ $36MM	Ohio Higher Education Facilities Commission (Denison University) 6/4/15 Aa3/AA $59MM	Hamilton County Economic Develp. Corp. (University of Cincinnati) 6/2/2015 A1/A+ (under) BAM insured $37MM	Franklin County Hospital Faciliites / OhioHealth Corporation 6/3/2015 Aa2/AA+/AA $282MM
Maturity	Final Sprd. Vs MMD	Final Sprd. Vs MMD	Final Sprd. Vs MMD	Final Sprd. Vs MMD	Final Sprd. Vs MMD
12/01/16	23	56	18		5
12/01/17	28	57	23		17
12/01/18	35	56	28		18
12/01/19	40	61	33		25
12/01/20	45	66	38		30
12/01/21	52	72	40		37
12/01/22	55	77	43	77	41
12/01/23	60	82	46	82	46
12/01/24	60	85	48	82	49
12/01/25	60	89	50	82	52
12/01/26	65	93	50	90	56
12/01/27	62	95	50	90	60
12/01/28	65	95	50	87	64
12/01/29	65	95	50	82	64
12/01/30	65		50	82	65
12/01/31	65		50	82	65
12/01/32	65		50	83	65
12/01/33	65		50	83	65
12/01/34			50	108	65
12/01/35				83	65
12/01/36				108	
12/01/37				83	
12/01/38				108	
12/01/39					
12/01/40					65
12/01/41					
12/01/42					
12/01/43					
12/01/44					
12/01/45	102				65
12/01/46	70				
12/01/47					
12/01/48	104				
12/01/49					
12/01/50					
12/01/51	80				

Comparative sales results, $49.2 million QSCBs
-- source: CMSD/Fifth Third Securities

Spread Analysis

Maturity	UST Bench	**06/10/15** **$49.2MM** Cleveland MSD QSCB A-/A-/A2 MW Call	**05/26/15** **$110MM** El Paso County, CO The Colorado College Project Aa3/AA- MW Call WFS	**05/21/15** **$250MM** Baptist Health (Florida) Hospital Revenue NR/AA- (Positive) WM Call JPM	**05/19/15** **$250MM** Port Authority of NY/NJ Colsolidated Port Revenue Aa3/AA-/AA- 10yr Call Barc/RBC/BAML/Citi	**05/12/15** **$81MM** City of Austin, TX Electric Utility System Revenue A1/AA-/AA- MW Call GS	**07/27/15** **$4.0MM** Lipan ISD - Taxable QSCB AAA (A)	**04/27/15** **$4.085M** Sunnyvale ISD - Taxabl QSCB AAA (AA-)
				INDEX ELIGIBLE	***INDEX ELIGIBLE***			
2015	1yr							
2016	1yr					50		
2017	2yr					72		
2018	3yr					50		
2019	5yr					90		
2020	5yr					80		
2021	7yr					100		
2022	7yr					100		
2023	10yr					105		
2024	10yr		115			110		
2025	10yr		125			145		
2026	10yr		140			155		
2027	10yr		160			170		
2028	10yr		170			-		
2029	10yr		180			175		
2030	10yr		190			190		
2031						200		
2032								
2033								
2034								
2035	30yr		155					
2036			(18.4yr WAL)					
2037						165	165	
2038								
2039								
2040	30Yr	180						150
2041								
2042								
2043								
2044								
2045	30yr		175	185	175			
2046			(26.2yr WAL)					
2047								
2048								
2049								
2050								