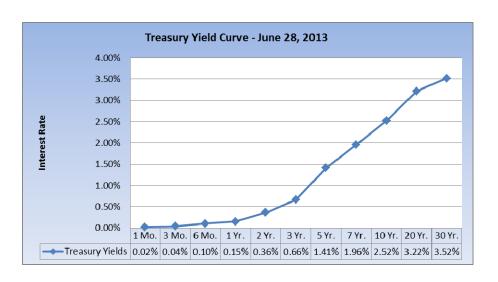
Miami-Dade County Public Schools Office of Management and Compliance Audits



AUDIT OF INTERNAL CONTROLS OVER DERIVATIVE INSTRUMENTS MANAGEMENT



The system of internal control in place over derivative instruments is mostly adequate; however, there are opportunities for improvement therein.

December 2013

THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA

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Mr. José F. Montes de Oca, CPA Chief Auditor Office of Management and Compliance Audits

Contributors to This Report:

Audit Performed by:
Ms. Teresita M. Rodriguez, CPA
Mr. Trevor L. Williams, CPA

Audit Reviewed by: Mr. Jon Goodman, CPA, CFE

<u>Audit Reviewed and Supervised by:</u> Mr. Trevor L. Williams, CPA





Miami-Dade County Public Schools

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Dr. Marta Pérez

Raquel A. Regalado

November 20, 2013

The Honorable Chair and Members of The School Board of Miami-Dade County, Florida Members of the School Board Audit and Budget Advisory Committee Mr. Alberto M. Carvalho, Superintendent of Schools

Ladies and Gentlemen:

In accordance with the Audit Plan for the 2012-13 Fiscal Year, we have performed an audit of the internal controls over derivative instruments (swaps) held by Miami-Dade County Public Schools. The objectives of the audit were to determine if the policies and procedures in place for managing derivatives conformed to recommended best practices and to assess the level of internal controls over the derivatives management process.

Although the scope of our audit was not designed specifically to assess the performance or effectiveness of individual swaps held by the District or to evaluate, endorse or critique management's strategic decisions or philosophy relating to the District's use of derivatives; and we do not offer any endorsement or critique to management's strategic decisions; we have made certain general observations regarding the cash flows related to these swaps.

The District's Forward Interest Rate Swap Program was initiated on March 15, 2006, shortly before the onset of the most recent financial crisis, which has been considered to be the worst recession since the Great Depression of 1933. Also, it is important to note that derivative instruments may be used for investment or hedging purposes. Through the advice of the independent citizen participation group (the Treasury Advisory Committee), consisting of seasoned professional members from the financial community, who advises the School Board on matters of finance; the current interest rate swaps were structured as hedging instruments.

Our audit found that the system of internal control in place over derivative instruments is mostly adequate; however, there are opportunities for improvement therein. Areas identified include, but are not limited to, the need for an annual review of the swap policy and for critical terms therein to be defined; the mode of communicating specific information regarding a swap's potential effect on the credit rating of the district's obligation when considering entering into a swap; and the presentation of information on the existing swaps' performance, including a cash flow analysis.

Because of the complex nature of derivatives, this report contains various important details and must be carefully read, in its entirety, to obtain an accurate understanding of our observations and conclusions.

Our findings and recommendations were discussed with management and their response is included. We would like to thank management for their cooperation and for the courtesies extended to our staff during the audit.

Sincerely

José F. Montes de Oca, CPA, Chief Auditor
Office of Management and Compliance Audits

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Why We Did This Audit

The most recent financial crisis has adversely affected some state and local governments that have engaged in derivative transactions and has exposed those agencies to added risks. Given these conditions and applying our annual risks assessment, we determined it was warranted that we review the internal controls over derivative instruments to ensure they conformed to recommended best practices. The audit was endorsed by the Audit and Budget Advisory Committee and subsequently approved by the Board.

What We Recommend

We are making four (4) recommendations to management to strengthen internal controls and the level of governance relative to swaps, as follows:

- Incorporate recommendations into the current revisions of the Swap Policy Guidelines and submit the revised policy to the Board for approval.
- Considering the importance of the Treasury
 Advisory Committee (TAC) in it is advisory role to
 the School Board, a summary of salient matters,
 including derivative activities, discussed at each
 TAC meeting should be communicated to the
 School Board. This will enhance the reporting to
 the School Board and transparency.
- Comply with School Board Policy 6145 by providing the Board with information regarding the potential effects of a swap on the credit ratings of outstanding obligations prior to the execution of a swap. Such information should also be documented, in writing, and maintained for auditing purposes.
- Information on the performance of the swaps, including the overall effectiveness of the swap activities, and whether they are meeting their intended objectives should be periodically (e.g., quarterly or semi-annually) reported to the School Board.

What We Found

The audit was included in the approved 2012-13 Audit Plan to review the policies and procedures used for managing derivatives and to assess the level of internal controls in place. The Miami-Dade County Public School's (M-DCPS') Forward Interest Rate Swap Program was initiated in March 2006, and consisted of three swaps with a total notional amount of \$197,320,000, with termination dates of August 2027. These are the only swaps M-DCPS has executed.

M-DCPS has a comprehensive policy for managing derivatives. The Swap Policy Guidelines (hereinafter referred to as "Swap Policy" or "Policy") contained in the District's debt management policy provide a good framework of internal control. Notwithstanding the comprehensive nature of the Swap Policy, there are opportunities to strengthen it, as it does not require the annual review of the same; some important control functions or activities are not spelled out in affirmative or specific terms, but in discretionary terms; it does not define some key terms, such as speculation; it does not establish a maximum amount for derivative contracts or a means of determining such amount; it does not, in some instances, provide procedures to carry out the intent of the policy; and it does not provide guidance or a formal mechanism for proceeding with and documenting circumstances that may necessitate departure from the Swap Policy when it is in the Board's best interest to do so, based on extenuating circumstances.

The District's staff tasked with managing the swaps, appear to have a thorough understanding of swaps. In addition, the District has an independent citizen participation group of the School Board, the Treasury Advisory Committee (TAC), and other contracted subject area professionals who review and advise the Treasurer on financing matters, including derivatives. This structure comports with recommended best practices, reduces operational risk, and strengthens internal controls. The members of the TAC, by policy, are appointed for a four year term, meet at a minimum of once a quarter and the committee reports to the Board at least annually.

Further, we found proper segregation of duties among the staff which prevented an individual from performing incompatible duties.

Authorization for swap transactions also occurred at the appropriate level in the District. The oversight by the TAC also contributes to these important control activities.

Our audit also concluded that through the execution of the swap instruments, management achieved its primary objective by synthethically fixing interest rates and subsequently issuing \$90.8 million variable-rate Certificate of Participation (COP) on May 24, 2007. An additional \$417.8 million in fixed-rate debt were issued in 2007.

A review of the swap agreements and other related documents disclosed that the swap transactions were properly executed using the standard contracting documents for municipal-issued swaps. The Swap Policy requires that prior to the execution of a swap agreement, the Board be provided for its consideration an analysis of the potential impact the swap transaction would have on the credit rating of other M-DCPS' obligations. However, we did not find evidence that specific information on the potential effect (not a guarantee) the swap transaction could have on the credit rating of the District's other obligations (i.e., favorable, unfavorable or neutral) was presented to the Board. Also, the Swap Policy stated that the effectiveness of each hedge [swap] will be measured by preparing a cash flow analysis comparing the payments received against the payments made. Our audit found that while this analysis was

reported to the Board for fiscal years ended June 30, 2007, through 2009, it was not reported to the Board for the succeeding fiscal years ended June 30, 2012. Our analysis of the swap-related cash flows from the inception of the swaps through June 28, 2013, shows that cumulative net swap payments were \$31.4 million (synthetically fixed-rate payments totaling \$40 million, less floating-rate receipts totaling \$8.6 million). Total interest payments on the hedged COPs were approximately \$15.3 million, compared to the \$8.6 million total floating-rate receipts on the swaps.

The total fair value of the swaps as of June 28, 2013, was \$(30,098,205), which represents the termination value and a deferred liability of M-DCPS to the counterparty. It is also important to note that although a swap's Mark-to-Market (MTM) value fluctuates over the life of the swap, if the swap is held for its full contract term, the MTM value at the end of the term will be zero. Therefore, neither party will have an asset or liability position in the swap at that point. Based on representation from the Treasurer and documentation of discussions at the TAC, it is evident that the swaps' values were periodically monitored.

Based on our observations, we made four (4) recommendations. Our detailed findings and recommendations start on page 20. There were other matters, which came to our attention during our audit, which were deemed non-reportable because they were immaterial or inconsequential. These were nevertheless discussed with management for their information and follow-up. We would like to thank the administration for their cooperation and the courtesies extended to our staff during the audit.

INTERNAL CONTROL ASSESSMENT

Our overall evaluation of internal controls over derivative instruments management for the period under audit is summarized in the table below.

INTERNAL CONTROLS RATING					
		NEEDS			
CRITERIA	SATISFACTORY	IMPROVEMENT	INADEQUATE		
Process Controls		X			
Policy & Procedures		X			
Compliance					
Effect	X				
Information Risk	Х				
External Risk	Х				

INTERNAL CONTROLS LEGEND					
		NEEDS			
CRITERIA	SATISFACTORY	IMPROVEMENT	INADEQUATE		
Process Controls	Effective	Opportunities	Do not exist or are not reliable.		
		exist to improve			
		effectiveness.			
Policy & Procedures	In compliance	Non-Compliance	Non-compliance issues are		
Compliance		Issues exist.	pervasive, significant, or have		
			severe consequences.		
Effect	Not likely to impact	Impact on	Negative impact on outcomes.		
	operations or	outcomes			
	program outcomes.	contained.			
Information Risk	Information	Data systems are	Systems produce incomplete or		
	systems are	mostly accurate	inaccurate data which may		
	reliable.	but can be	cause inappropriate financial		
		improved.	and operational decisions.		
External Risk	None or low.	Potential for	Severe risk of damage.		
		damage.			

derivative product is a financial instrument (contract) that derives its value from an underlying asset, liability or index. The underlying asset or liability may or may not be owned by the parties to the derivative contract. Commonly known derivative products include: (a) forward contracts; (b) futures contracts; (c) options; and (d) swaps, which are contracts where two parties agree to exchange the cash flows from the underlying assets or indices for a fixed period of time. There are many variations to the derivative products described above, including other exotic instruments. The District's current use of derivatives is limited to hedging instruments, specifically interest rate swaps. Given the District's derivatives exposure is limited to interest rate swaps, the following discussion focuses on that type of derivative instrument.

Interest Rate Swaps

Interest rate swaps (hereinafter referred to as swaps) make up a large portion of the financial market. According to data published by the Securities Industry and Financial Markets Association (SIFMA),² there were more than \$548 trillion of swaps outstanding near the end of June 2013.³ Swaps could be entered into either for speculative or hedging purposes. Miami-Dade County Public Schools Debt Management Policy prohibits using derivatives for speculative purposes. A number of entities, including some municipalities include swaps in their debt management strategy to hedge outstanding debts against interest rate risk. In its Rating Methodology white paper

¹ Although the District currently limits its use of derivatives to interest rate swaps, School Board Policy 6145, *Debt Management*, allows for the use of caps, floors, collars, options and other derivative financial products.

² SIFMA is an association of hundreds of security firms, banks, and asset managers founded in 1912 and is the U.S. Regional member of the Global Financial Market Association, which consists of the Association for Financial Markets in Europe (AFME) in London and Brussels, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong, and the Securities Industry and Financial Markets Association (SIFMA) in New York and Washington, representing each of their respective regions (i.e., Europe, Asia and North America).

³ Report on Global Interest Rate Swaps between March 31, 2010 and July 26, 2013, published by SIFMA, July 26, 2013.

report, Moody's Investors Service lists four examples of the potential benefits for using swaps. ⁴ These benefits include:

- 1. Reducing borrowing costs
- 2. Improving cash flows
- 3. Locking in current rates
- 4. Matching assets and liabilities

As part of its debt management strategy, M-DCPS' Swap Policy includes all of the above-listed benefits, among others, as its objective for using swaps in general.

Associated with the potential benefits for using swaps and other derivative products are the attendant risks. For example, an advisory from the Government Finance Officers Association (GFOA) advises state and local government finance officers to exercise great caution in the use of derivative instruments and use them only when the issuers have developed: 1) a sufficient understanding of the products; 2) the internal staffing and expertise to manage, monitor and evaluate these products properly, either on their own or in combination with a swap or financial advisor, tax counsel and/or monitor; and 3) a comprehensive derivatives policy. 5 The aforementioned GFOA's Advisory and Moody's Rating Methodology report, as well as a published document from the Committee of Sponsoring Organizations of the Treadway Commission (COSO) on the use of derivatives each lists a number of risks that users of swaps must consider. 6 Refer to Table 1 (page 7) for the list of risks by each organization and to Appendix C (page 44) for the definition of each risk.

⁴ Bill Fitzpatrick, Naomi Richman, Yung Louie and Cassina Brooks, Evaluating the Use of Interest Rate Swaps by U.S. Public Finance Issuers, Strengths and Risks of Interest Rate Hedges, Management Capacity, and Legal Terms are Evaluated in the Context of Issuer's Overall Credit Position, (Rating Methodology, Moody's Investors Service, Inc., October 2007)

⁵ Government Finance Officers Association, GFOA Advisory: *Use of Debt-Related Derivatives Products and the Development of a Derivatives Policy (2003, 2005, and 2010) (DEBT)*, GFOA's Executive Board.

⁶ Committee of Sponsoring Organizations of the Treadway Commission, *Internal Control Issues In Derivative Usage, An Information Tool for Considering the COSO Internal Control – Integrated Framework in Derivatives Applications*, A COSO Information Tool (COSO, 1996).

Potential Risks For Financial Derivatives						
	Risks					
GFOA	Moody's	COSO				
Tax	Tax	Market				
Interest Rate	Yield curve	Market Liquidity				
Termination	Termination	Credit				
Collateralization	Collateral posting	Settlement				
Market access	Market access	Operational				
Basis	Basis	Basis or correlation				
Counterparty	Counterparty	Legal				
Credit	Loss of flexibility	Systemic				
Rollover or Amortization	Amortization mismatch	Funding liquidity				
	Management complexity					

Table 1

As a recommended best practice, users of swaps and other derivative products are advised to complete a risk assessment, whereby finance managers consider known and potential risks, their effects on the entity's holdings and overall financial posture, and mitigation strategies. A comprehensive swap policy, regular communication with the governing board and active oversight by the entity's board of governance are cornerstones of the risk assessment. Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), signed into law by President Obama on July 21, 2010, delineates various compliance requirements that affect issuers and participants in the swap market. Effective swap management would, therefore, necessitate a comprehensive analysis of the Act and its associated rules, as issued by the various rulemaking bodies, in conjunction with a review of the debt management policy, including the Swap Policy Guidelines to ensure that the Policy addresses provisions of the Act. We noted that in a printed document containing matters discussed in presentations to the TAC at it's November 19, 2012, and June 13, 2013, meetings, reference was made to Dodd-Frank and it's effects on the Swap Policy.

Anatomy of an Interest Rate Swap

The following provides a general description of the characteristics of swaps. In simple terms, swaps are agreements between two parties to exchange cash flows that are tied to a specified asset, liability or

Anatomy of an Interest Rate Swap

Swap contract: the standard ISDA Master Agreement, schedule and other documents laying out the terms of the swap.

Swap rates: the fixed interest rates of a "plain vanilla" swap.

Notional amount: the amount against which the interest rates are applied to calculate the swap payments.

Counterparty: each of the two parties of the swap agreement.

Netting: offsetting the counterparties' payment obligation, resulting in one party paying the difference.

Termination value: the amount required to be paid or received due to an unscheduled termination of the swap.

Mark-to-Market: the fair market value of the swap which typically represents the termination value.

index. They vary in their structure and make up a fairly large menu of options. Fundamentally, there are two broad types of swaps, exchange-traded contracts and over-the-counter contracts. Exchange-traded swaps are those standardized contracts that are traded on specialized exchanges, wherein the exchanges are the intermediary between the two parties to the contract. Over-the-counter swaps are those contracts that are traded or negotiated directly between the two contracting parties without going through an intermediary, such as an exchange. The swaps being held by the District are over-the-counter "plain vanilla" swaps.

A "plain vanilla" swap typically involves the exchange of interest rates (effectively, the interest payments) between the contracting parties (counterparties). Common rate exchange transactions involve swapping a fixed rate that is typically benchmarked to the yield of U.S. Treasury securities for a variable rate that is based on a specific index or benchmark, such as the London Interbank Offered Rate (LIBOR)⁷ or SIFMA swap index.⁸ The amount to be paid in exchange is based on the agreed-upon rates times a stated notional (essentially principal) amount times the agreed-upon "days-multiple conventions" (e.g., 30/360)

days or actual days/365 days). For example, an issuer of fixed-rate bonds, wanting to hedge his interest cost, may agree to pay to the

⁷ London Interbank Offered Rate established by the British Bankers' Association (BBA). LIBOR are taxable interest rates, which are set daily by the BBA and represent the rates at which banks in the London wholesale market are willing to lend unsecured funds to each other.

⁸ Formerly known as The Bond Market Association (BMA) swap index and is an index of seven-day high-grade taxexempt variable-rate demand obligations.

swap counterparty interest at the three-month LIBOR rate (a variable rate) and in exchange, receive from the counterparty interest at a fixed rate. (See Appendix A for examples of swap transactions.) On the settlement date, the actual payment made would be the net difference between the two rates. Netting terms of the swap agreement dictate the mode of payment. The bondholders who are not parties to the swap agreement will continue to receive interest income based on the bond coupon rate. It should be noted that in the case of a "plain vanilla" swaps, neither the notional amount nor the underlying asset is exchanged at the end of the swap's term. Typically, the swap is structured in such a way that no interest payments are made at the inception of the swap and the market value of the swap is zero (i.e., there is no gain or loss to either party; theoretically, both parties are at equilibrium). However, over the life of the swap, the fair market or MTM value of the swap changes; thereby, positively or negatively changing the financial position in the swap to the counterparties. In simple terms, a swap's MTM value represents the amount to be received or paid between counterparties in the event the swap is prematurely terminated (termination value). 9

From an accounting standpoint, derivative instruments are classified into different categories. Two of the major categories more often encountered are *hedging derivative instruments*, which are derivative instruments that are associated with a hedgeable item and significantly reduces an identified financial risk by substantially offsetting changes in cash flows or fair values of the hedgeable item and *investment derivative instruments*, which are derivative instruments that are entered primarily for the purpose of obtaining

⁹

⁹ As reported at June 30, 2012, in its most recent audited financial statements, M-DCPS held swaps with notional amounts of \$118,450,000 (paying 3.821% fixed-rate and receiving 70% one-month LIBOR) and \$57,440,000 (paying 3.909% fixed-rate and receiving 70% one-month LIBOR) and valued at negative \$41,181,937 in total. The one-month LIBOR as of the valuation date was 0.24%. As of June 28, 2013, the swaps aggregate unaudited MTM value amounted to negative \$30,098,205, including accrued interest of \$1,235,371. The MTM value represents a deferred liability of the District and fluctuates based on market and other factors, including the outstanding notional amount, but will be zero at the end of the swap's contract term.

income or profit, or derivative instruments that do not meet the criteria of a hedging derivative instrument. ¹⁰ Governmental Accounting Standards Board Statement No. 53, *Accounting and Reporting for Derivative Instruments* (GASB 53) and Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions (an amendment of GASB Statement No. 53)* (GASB 64) provide guidance to state and local governments on the proper accounting and reporting of swaps, including the changes in their MTM value. ¹¹ A swap with a positive MTM value to its holder is said to be "in-the-money," whereas a swap with a negative MTM value to its holder is said to be "out-of-the-money" and represents an outstanding liability for its holder.

Swaps are generally consummated through the execution of the standard International Swap and Derivatives Association, Inc., (ISDA) Master Agreement and its attendant schedule and other documents. These documents set forth the terms of the swap, including but not limited to, the notional amount, fixed and floating interest rates, prevailing currency, swap's effective and termination dates, netting agreement, insurance requirements, collateral levels, default actions, and legal jurisdiction for adjudicating matters.

¹⁰ Paragraph 110 of Appendix A to GASB Statement No. 53 discusses the characteristics of hedges and provides examples of this type of transaction in the following terms: "Hedging is a method that a government may employ to significantly reduce an identified financial risk. One form of financial risk arises from potential adverse changes in cash flows. A government may have an asset, a liability, or an expected transaction that exposes the government to either receiving smaller payments or making higher payments. For example, a government may be obligated to purchase fuel at a variable price at some time in the future. If fuel prices increase, the government would be obligated to pay a higher price. The same outcome is true for a government that has issued variable-rate debt. If interest rates increase, that government would be paying a higher interest rate. In order to protect against higher payments, the government may establish a cash flow hedge. This can be accomplished by entering into a derivative instrument that provides offsetting changes in cash flows against price or rate changes of hedgeable items. In a cash flow hedge, the intent is to offset changes in the cash flows of a hedgeable item with changes in the cash flows of the hedging derivative instrument. For example, a government may establish a cash flow hedge by entering into a pay-fixed, received-variable interest rate swap to hedge interest rate risk associated with its variable-rate debt. If interest rates increase, the swap would provide increasing payments to the government, keeping net interest costs substantially unchanged."

¹¹ GASB 53, paragraphs 19-20, require that swaps be reported either as an asset or liability (depending on the swap's financial status) in the government's statement of net asset at fair value. The accounting treatment of the changes in the swap's fair value will differ depending on the nature and effectiveness of the swap. Changes in the fair value of swaps entered into primarily for the purpose of obtaining income or profit (i.e., investment derivatives) or those that are ineffective should be reported within investment revenue on the flow of revenue statement. Changes in the fair value of swaps entered into for hedging purposes should be accounting for using hedge accounting, which requires the changes to be reported as either deferred inflows or deferred outflows in the statement of net assets. See also footnote 14 regarding GASB Statement No. 63.

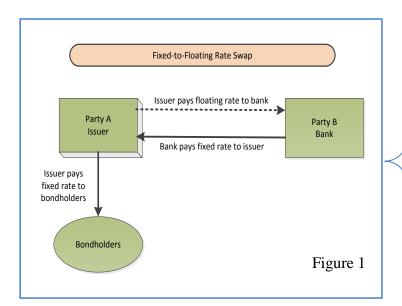
The Objective of an Interest Rate Swap

There are a number of reasons for entering into a swap. From a hedging perspective, a government entity may use swaps to:

- lower its cost of borrowing
- lock in low long-term rate by synthetically converting variablerate debt to fixed-rate debt via a floating-to-fixed rate swap without having to incur the cost associated with issuing new fixed-rate debt
- smooth out variation in its debt service budgeting by using floating-to-fixed rate swap, which makes debt service cost known
- align or adjust the outstanding mode of interest rates (i.e., fixed vs. variable) to the limits established in its debt management policy or to enhance its interest mode capacity
- take advantage of the relationship of the yield curve to the rate of its outstanding debt. (The application of this strategy would need to be pursued with caution as it could be perceived by some as speculative.)

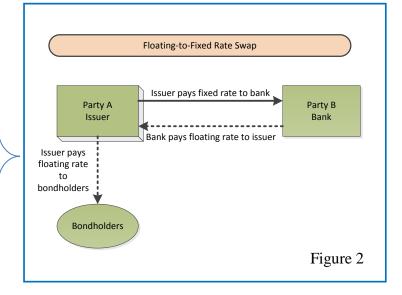
To achieve these objectives, two basic types of swaps are often used: fixed-to-floating rate and floating-to-fixed rate. In the case of a fixed-to-floating rate swap, the issuer pays a variable or floating rate to the counterparty and receives a fixed rate from the counterparty. For a floating-to-fixed rate swap, the opposite relationship exists – the issuer pays a fixed rate to the counterparty and receives a variable or floating rate from the counterparty.

The diagrams below illustrate these relationships.



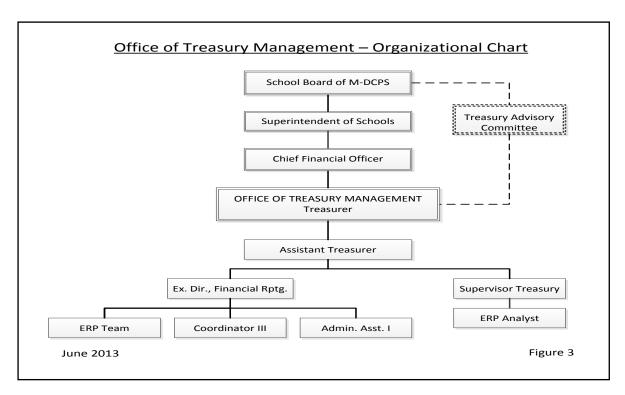
In this scenario, Party A, the issuer of fixed-rate bonds is attempting to hedge its fixed-rate exposure by synthetically creating a floating-rate obligation via the swap. The expectation is that the fixed-rate received from the bank will approximate or offset the fixed coupon rate paid to its bondholders. (See Appendix A on page 39 for examples of swap transactions.)

In this scenario, Party A, the issuer of floating-rate bonds is attempting to hedge its variable-rate exposure by synthetically creating a fixed-rate obligation via the swap. The expectation is that the floating rate received from the bank will approximate or offset the variable rate paid to its bondholders. (See Appendix A on page 39 for examples of swap transactions.)



The School District of Miami-Dade County, Florida, maintains a debt portfolio of approximately \$3 billion. The greatest portion (\$2.8 billion) of the outstanding debt is certificates of participation (COPs). The District's debt management responsibilities are under the control of the Chief Financial Officer and the Treasurer. (See Figure 3 – Organizational Chart.) They are supported by a Treasury Advisory Committee (TAC), one of the School Board's citizen participation group, consisting of 11 members – six (6) independent third parties with high level background in finance who, in practice, are nominated by the existing members of the TAC and approved by the School Board, one (1) School Board member (non-voting) appointed by the chair of the School Board, and four (4) M-DCPS staff members (non-voting). The debt management function, including the role of the TAC as it relates to debt management, is governed by School Board Policy 6145, Debt Management Policy.

Organizational Structure of the Office of Treasury Management

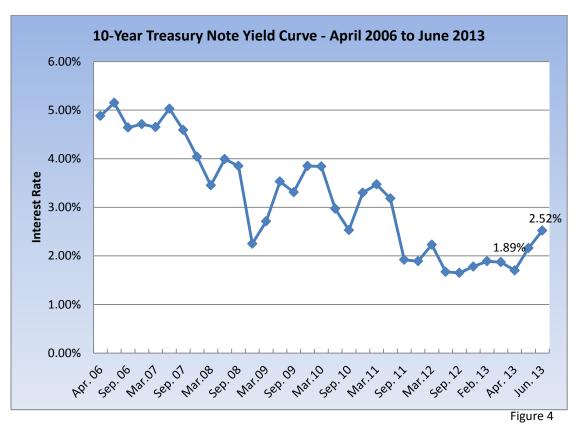


Through the approval of School Board agenda item E-25, on March 15, 2006, and April 18, 2006, the Board authorized the execution of a Forward Interest Rate Swap Program, pursuant to Resolution 06-22. The resolution stated that it was in the School Board's best interest to exchange its current variable-rate obligations for fixed-rate obligations in order to provide flexibility in future financings to issue additional variable-rate debt and to manage the interest rate risk associated with specific COPs. The action, according to the agenda items, would result in the issuance of three interest rate swaps with a total notional amount of \$197,830,000, in connection with existing floating-rate and multimodal COPs Series 2002A, 2002B and 2003A. According to the agenda item of March 15, 2006, the transaction was not structured as a bet on future interest rates, but a reduction of interest rate risks and was being executed to lock in historically low interest rates and reduce the future interest rate risks to the Board's debt portfolio by having certainty over the interest amount the Board will pay in the future, because the Board's derivative financial advisor believed that interest rates could rise significantly in the next year. Through the execution of the swaps, the Board synthethically fixed interest rates on the related variable rate debts and subsequently issued \$90.8 million variable-rate COPs on May 24, 2007. An additional \$417.8 million in fixed-rate debt were issued in 2007.

The agenda stated that, "[a]though the fundamental objective of the transaction is not savings driven, but replacing uncertainty with certainty for a portion of the District's future financings for the Capital Plan ...," that the Board could save approximately 75 basis points (bps) in annual costs in comparison to conventional taxexempt bond financing. In the April 18, 2006, agenda document, the approximate present value savings from executing the forward swaps vis-à-vis new fixed-rate COPs of similar maturity were listed at \$12.2 million.

The March 15, 2006, agenda item cautioned that future savings related to the swaps could not be determined because of the District's inability to predict future interest rates, but also noted that short term taxable Fed Funds rates have increased from 1% to 4.50% since June 2004. Due to concerns in the credit and subprime markets, rather than experiencing an uptick in interest rates, from their

"historically" low levels as anticipated, interest rates declined as depicted in the following charts of the benchmark 10-year Treasury note yield curve and 10-year LIBOR swap rates, and is supported by the accompanying quotation. ¹²

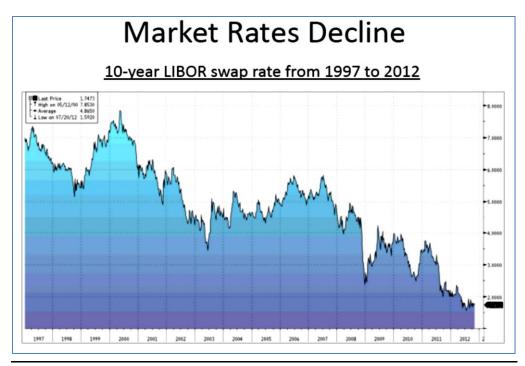


<u>Note</u>: Yields shown are the yields as of the end of each month as published by the U.S. Department of the Treasury at http://www.treasury.gov.

"...When interest rates drop, the cost of terminating swaps (when the government is a fixed-rate payer) increases. Pre-crisis, governments had evaluated this risk, looking at interest rate scenarios in which 10-year Treasury rates dropped to the lows of the prior generation, less than 4 percent. But in the aftermath of the crisis, rates fell below 2 percent, and remain there today..." – Peter Shapiro

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¹² Peter Shapiro, "Swaps in the Aftermath of the Banking Debacle, The Importance of Reviewing the GFOA's Advisory and Checklist on Derivatives," Government Finance Review (February 2013), p. 14.



Source: Office of Treasury Management

Figure 5

The swaps were effected through a competitive bid process, whereby 12 swap providers offered competitive fixed rates to the District and the provider offering the lowest rates selected as the swap counterparty. According to documents prepared by the District's former derivative financial advisor, at the time of conducting the auctioning on April 3, 2006, during the competitive bid process, the 10-year Treasury note yield was 4.86%. The following table details information about the swaps:

COPs		Notional	Effective	Termination	Fixed Rate		
Series	COPs Rate	Amount	Date	Date	(Bid)	Floating Rate	Swap Provider
2002A	Dexia – SIFMA + 75bps	\$69,765,000	4/1/2007	8/1/2027	3.821%	70% one-month LIBOR	Royal Bank of Canada
2002B	Dexia – SIFMA + 75bps	\$70,115,000	4/1/2007	8/1/2027	3.821%	70% one-month LIBOR	Royal Bank of Canada
	PNC – 70% LIBOR +						Merrill Lynch Capital
2003A	90bps	\$57,440,000	8/1/2008	7/15/2027	3.884%	70% one-month LIBOR	Markets

Table 2

 $Source: Treasury\ Advisory\ Committee\ meeting\ handout.$

Note: Series 2002A and 2002B were combined to create Swap I and Series 2003A was designated as Swap II to comprise the three insured swap agreements executed by the District for a 20-year period. Also, as explained in the following section, in 2008, Series 2003A was remarketed, renamed 2008C and subsequently reassigned to the Royal Bank of Canada (RBC) in 2012. The bid rate for Series 2003A was slightly higher because of the longer forward period. In addition, the fixed-rates shown above include 0.012% increment to the actual rates bid by the swap providers to reflect professional services paid by the swap counterparty on behalf of M-DCPS at the execution of the swaps. Those costs consisted of \$118,440 legal fees paid to M-DCPS' bond counsel, \$62,000 paid to M-DCPS' former derivative financial advisor, and \$10,000 paid to M-DCPS' financial advisor.

As of June 28, 2013, the preliminary unaudited combined MTM value is (\$30,098,205), including accrued interest of \$1,235,371 (essentially the termination value). ¹³ The MTM value represents a deferred liability of the District and fluctuates based on market and other factors, including the outstanding notional amount, but will be zero at the end of the swap's contract term. (Refer to Appendix B on page 43 for an amortization schedule of the swaps'notional amounts.)

In August 2008, the District remarketed (refunded) COPs Series 2003A and renamed the associated swap with Merrill Lynch Series 2008C. The swap's fixed rate also increased 2.5 basis points from 3.884% to 3.909% to compensate for removing swap insurance coverage. The remaining terms of the swap remained unchanged. A downgrading of Merrill Lynch, by Moody's and S&P in September 2011, triggered an "Additional Termination Event," which resulted in Merrill Lynch being terminated as Series 2008C swap provider and replaced with RBC. ¹⁴ At the time of the termination, the swap had a fair value of approximately negative \$10.6 million.

It is important to note that in May 2012, in providing a rating for a separate unhedged District's COPs issue, Standard and Poor's indicated that, "the district's interest rate swap portfolio represents a low credit risk, because of highly rated swap counterparties, a low degree of involuntary termination risk because of a moderate trigger spread, and strong management oversight with a formal debt policy that addresses swaps and derivatives."

¹⁴ The Swap Policy requires the posting of collateral if the counterparty is downgraded below double A rating category by one of the major credit rating agencies. An "Additional Termination Event" occurs if the counterparty's credit rating is downgraded to "Baa1" (Moody's) or "BBB" (S&P).

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the District's CAFR for the fiscal year ending June 30, 2013.

¹³ In June 2011, the Governmental Accounting Standards Board (GASB) issued Statement No. 63, *Finanacial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. In essence, the statement provides guidance to state and local governments for reporting certain transactions that were previously reported as assets or liabilities, as deferred outflows of resources or deferred inflows of resources in the renamed statement of net position (formerly statement of net assets). Interest rate swaps are among the affected transactions. The statement affects financial statements for periods beginning after December 15, 2011, and therefore, will affect

OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with the Audit Plan for the 2012-13 fiscal year, we performed an audit of the internal controls over derivatives instruments management (swaps). The objectives of the audit were to:

- determine if the policies and procedures in place for managing derivatives conformed with recommended best practices
- assess the level of internal controls in place over the derivatives management process

The scope of our audit covered the current operations as they relate to outstanding derivative contracts. Our auditing procedures included a review of the process used to initiate and execute derivative products used in M-DCPS. As such, certain activities occurring prior to the current fiscal year were also subject to our auditing procedures.

The scope of our audit was not designed specifically to assess the performance or effectiveness of individual swaps held by M-DCPS or to evaluate, endorse or critique management's strategic decisions or philosophy relating to the District's use of derivatives. As such, we do not offer any endorsement or critique to management's strategic decisions. We have made certain general observations regarding the reported fair value and net swap payments related to these swaps.

We performed the following procedures to satisfy the audit objectives:

- Interviewed district staff.
- Reviewed the M-DCPS' Investment and Debt Management Policies.
- Reviewed the Treasurer's office Policy and Procedures Manual.
- Obtained an understanding of the derivatives management process.

- Reviewed the documents and conclusions related to the bidding process.
- Verified counterparties credit rating.
- Reviewed the Master Swap Agreements and attendant schedules and forms.
- Examined and recalculated, on a sample basis, monthly swap and bond interest payments.
- Analyzed the swap payments and receipts.
- Compared pertinent information relative to the swaps to ensure the financial reporting of their activity and risks are in accordance with generally accepted accounting principles.
- Reviewed third-party financial advisors' credentials.
- Reviewed the meeting minutes of the District's Treasury Advisory Committee.
- Performed various other audit procedures as deemed necessary.

We conducted this performance audit in accordance with generally accepted Government Auditing Standards issued by the Comptroller General of the United States of America. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objectives. A performance audit is an objective analysis, based on sufficient and appropriate evidence, to assist management and those charged with governance and oversight to improve program performance and operations, reduce costs, facilitate decision-making and contribute to public accountability. Performance audits encompass a wide variety objectives, including assessments of program effectiveness, economy and efficiency; internal control; compliance; and prospective analyses. 15 Planning is a continuous process throughout the audit. Therefore, auditors may need to adjust the audit objectives, scope and methodology as work is being conducted.16

We believe that the evidence obtained provides a reasonable basis for our findings and conclusions, based on our audit objectives.

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¹⁵ Comptroller General of the United States, *Government Auditing Standards*, 2011 Revision, (Washington D.C.: United States Government Accountability Office, 2011), pp. 17-18.

¹⁶ *Ibid.*, p. 126.

FINDINGS AND RECOMMENDATIONS

1. THE POLICY FOR MANAGING DERIVATIVES IS COMPREHENSIVE, BUT COULD BE FURTHER ENHANCED

Derivative products present certain unique risk factors that must be understood and managed effectively. Given these risks, both best practices and effective internal control models recommend that state and local governments engaging in derivative transactions obtain sufficient understanding of the products and develop a comprehensive derivatives policy that is aligned with their entity-wide objectives. The M-DCPS staff who are responsible for managing derivatives appear to have a thorough understanding of swaps. This understanding helps to reduce operational risk.

According to the Government Finance Officers Association (GFOA), a derivative policy should include the following elements:¹⁷

- evidence of clear legal authorization to enter into such arrangements and guidelines for how derivative products fit into the overall debt management program
- b. a list of the types of derivative products that may be used or are prohibited
- c. the condition under which these types of products can be utilized (e.g., bidding procedures, minimum benefit thresholds, terms of master agreements)
- d. the maximum amount of derivative contracts, or a means of determining such amount, (e.g., by reference to floating rate assets)
- e. guidelines for selecting counterparties of high credit quality and addressing the risks [outlined by the GFOA in Table 1, on page 7 of this report]

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¹⁷ Government Finance Officers Association, GFOA Advisory: *Use of Debt-Related Derivatives Products and the Development of a Derivatives Policy (2003, 2005, and 2010) (DEBT)*, GFOA's Executive Board.

In developing a framework for adequate internal controls for derivatives use, The Committee of Sponsoring Organizations to the Treadway Commission (COSO) provides the following policy consideration for organizations to contemplate when developing a derivatives use policy:¹⁸

- a. specifying activity-level risk management objectives (e.g., the purpose of using derivatives should be clearly articulated in the derivatives policy)
- b. defining terms (e.g., key risk management terms should be defined)
- c. classifying derivative product characteristics
- d. classifying activities and strategies (e.g., identify activities and strategies that might be considered controversial and provide a clear and formal interpretation of what they mean to the organization)
- e. addressing user considerations (e.g., ensuring that the level of knowledge and expertise required to manage derivatives activity is available)
- f. monitoring activities and other policy considerations (e.g., periodic analysis should be required to document that the use of derivatives is effective and consistent with activity-level and entity-wide objectives)

To be effective, policies must be clear and concise to avoid confusion and to guide the organization towards the objectives of the policy. As stated by COSO, "[T]he policy governing the use of derivatives should identify objectives and expected results, clearly define significant terms used, and identify and classify activities and strategies that are permitted, prohibited, or require specific approval." ¹⁹

¹⁸ Committee of Sponsoring Organizations of the Treadway Commission, *Internal Control Issues In Derivative Usage*, *An Information Tool for Considering the COSO Internal Control – Integrated Framework in Derivatives Applications*, A COSO Information Tool (COSO, 1996).

¹⁹ *Ibid*, p. 9.

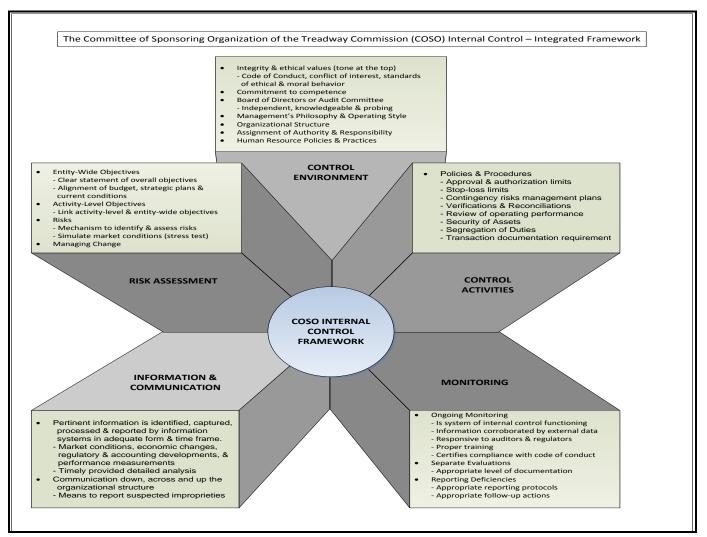


Figure 6

School Board Policy 6145 – *Debt Management* (formerly School Board Rule 6Gx13-3a-1.012) includes the Swap Policy Guidelines and refers to the use of derivative products, including interest rate swaps. Overall the District's Swap Policy is comprehensive and conforms with recommended best practices and a framework for adequate internal control, in that it contains many of the GFOA's, COSO's and other recognized organization's recommended policy considerations. It provides guidance, beginning with the Board's initial consideration of entering a swap and ending with the annual reporting on the executed swap. For example, the Policy includes the following elements:

- a. The approval to enter into a swap is subject to authorization from the Board and parameters are established for the terms of the swap.
- b. The forms to execute a swap are specified as those of the International Swap and Derivative Association, Inc., (ISDA).
- c. Specific terms and standards to be included in all swap agreements are identified.
- d. Consideration to enter into a swap by the Board takes into account the appropriateness of the transaction, based on the balance of risks and rewards presented by the proposed swap, the potential effects the transaction may have on the credit rating of other obligations of the District, as assigned by the rating agencies, the potential impact on areas where the District's capacity is limited, and the District's ability to handle the swap transaction.
- e. Credit standards related to potential counterparties, collateralization upon counterparty credit downgrade, and swap termination upon counterparty credit downgrade are established.
- f. A method of procurement is established (i.e., competitive or negotiated).
- g. A list of the types of swap risks to be monitored and evaluated by the Board is articulated.

Notwithstanding the comprehensive nature of the District's Swap Policy, we noted that the policy does not contain some important elements. Therefore, it can be enhanced as follows:

 a. The Swap Policy does not require the periodic or annual review of the same to ensure it reflects the objectives of the Board. Our review of the documentation (including the minutes of the Treasury Advisory Committee (TAC) meetings) of events occurring prior to the commencement of our audit fieldwork, found that although the debt management policy was revised in October 2010, there were no revisions made to the Swap Policy at that time.

Over the course of time the financial markets continue to evolve. They are affected by new regulatory requirements (e.g., the Dodd-Frank Act, the Security and Exchange Commission, the Municipal Securities Rulemaking Board, the Financial Stability Oversight Board, and the Governmental Accounting Standards Board) and re-engineered best practices. Such changes necessitate an annual review of the policy, as recommended by the GFOA, to ensure that the policy has adopted to the relevant changes, whether statutorially enabled or created by the financial markets.

During the course of our audit, we became aware that the Treasurer's office had revised the Debt Management Policy and presented the revised policy to the TAC for its consideration and subsequent recommendation to the School Board for approval. According to management, it is anticipated that the revised policy will be submitted to the School Board for approval at its September 2013 meeting. (The revised policy was submitted to the October 16, 2013 School Board meeting for approval.) We were provided a draft copy of the revised policy. The Treasurer and Swap Advisor should review the Swap Policy annually and request its amendment, by the Board, as conditions warrant.

b. Certain control functions or activities contained in the Swap Policy are spelled out in discretionary or general terms, whereas, those matters should be affirmative and/or specific. For example, the Policy states that as a matter of general principle, the Board may require counterparties to provide regular mark-to-market valuations of swaps and may also seek independent valuations from third party professionals. (Emphasis added) We should note that the recent revisions to the policy address a number of these recommended qualitative enhancements.

- c. The swap policy prohibits entering swaps for speculative purposes. However, it does not define speculation or provide a clear interpretation of its meaning to M-DCPS in the context of swap activities. Because the term speculation and its concept may mean different things to different individuals, it is important that the Policy provides a clear meaning of the term to avoid misunderstandings. Definitions of significant terms should be included in the Policy.
- d. The Policy does not establish the maximum amount of derivative contracts, or a means of determining such amount. In addition, risk exposure should be measured to determine their potential magnitude and tolerable levels. The Policy should specify actions to be taken if risk exposures exceed the tolerable levels.
- e. In some instances, the Policy does not include reference to detailed procedures to carry out its intent. Specifically, the Policy should include procedures, mechanisms, and intervals for monitoring and communicating results to the Board to ensure that risk management objectives are being met. The absence of detailed procedures and means may result in the inconsistent handling of swaps.
- f. The Policy does not provide guidance or a formal mechanism for proceeding with and documenting circumstances that may necessitate departure from the Swap Policy when it is in the Board's best interest to do so, based on extenuating circumstances. Providing for such flexibility is appropriate, provided the proper process, including obtaining authorization from the Board, is followed.

The foregoing observations and recommendations will serve to enhance an already comprehensive swap policy.

RECOMMENDATIONS

1.1 Incorporate the above recommendations into the current revisions of the Swap Policy Guidelines contained in School Board's Debt Management Policy 6145 and implement

a process for the annual review of the Policy to ensure that it reflects changes in the District's risk management philosophy and regulatory environment.

Responsible Department: Treasurer's Office

Management Response: The District's Debt Management Policy, Board Rule 6145, includes policy on derivatives that were implemented in 2006 and coincides with the initiation of the District's swap program. The current policy has been cited by S&P rating reports as part of their assessment that the swap represents low credit risk. Staff with support from the derivative financial advisor has periodically reviewed policy.

PFM Asset Management LLC (PFM), the District's current derivative advisor was tasked with reviewing the policy with staff early in FY 2012/13 at the onset of their engagement. The subsequent proposed revisions were provided to the TAC on November 19, 2012, which has recommended that the Board approve the revisions. Revisions proposed under Finding 1.1, not already incorporated, were reviewed by staff along with PFM and were deemed to further strengthen internal controls over derivatives. On June 13, 2013 the TAC reviewed the additional proposed revisions to policy and recommended that the Board approve all the proposed revisions. The Board approved the Initial Reading of proposed revisions to Board Rule 6145 on September 3, 2013 and on October 16, 2013 the Board approved the Final Reading of Board Rule 6145.

The revised policy includes a process that formalizes the annual review as recommended.

1.2 Considering the significance of the information deliberated at the TAC meetings and the importance of that committee in it is advisory role to the School Board, we believe that as a matter of course, Financial Affairs should provide the School Board with a summary of salient matters, including derivative activities, discussed at each TAC meeting. This will enhance the reporting to the School Board, internal controls and transparency.

Responsible Department: Treasurer's Office

Management Response: The TAC Agenda package includes unofficial minutes that provide the summary of salient matters and is provided to the School Board Member Representative appointed by the School Board Chair. Other School Board Members are included in the distribution of TAC Agenda package upon request. The District Chief Auditor also is included in the distribution of the TAC package and attends meetings

regularly. As part of the external auditor's due diligence the official (TAC approved) minutes are also reviewed.

Beginning with 2013 all TAC agenda and official minutes are posted on the TAC section of the Treasury Web Site. In addition, a request to provide TAC Agenda package that includes the unofficial minutes to individual Board Members will be completed prior to the December 2013 School Board Audit Committee. Committee meeting minutes include all salient matters discussed.

2. THE SUBMISSION OF SPECIFIC INFORMATION TO THE BOARD REGARDING THE SWAP TRANSACTIONS' POTENTIAL IMPACT ON THE CREDIT RATING OF M-DCPS' OUTSTANDING OBLIGATIONS WAS NOT EVIDENT AND COUNTERPARTY EXPOSURE EXISTS

School Board Policy 6145 states that the Board shall consider entering a swap based on several analyses. The purpose of the analyses is to provide the Board with an understanding of the potenital risks, rewards, and characteristics of a swap to enable it to evaluate the swap and make an informed decision on whether or not to enter into the transaction. One of the analyses includes a consideration of the "potential effects that the transaction may have on the credit ratings of any Board obligations, assigned by the rating agencies." This requirement conforms with best practices published by the GFOA and Moody's. ²⁰

Our review of the TAC meeting minutes and documents prepared by the District's swap advisor indicate that substantial discussions occurred regarding the rationale for the use of the swap, the structure of the swap transaction, the potential swap counterparties and the risk-reward tradeoff for using a LIBOR-based floating rate. As part of these discussions, several alternatives for structuring the transaction were considered by the TAC, which recommended to the Board, the alternative it concluded to be "the most straightforward alternative, with the fewest legal complications and least downside risk." Also, at these meetings, the TAC considered and unanimously approved the proposed term sheet (as a risk reduction exercise) and swap policy.

The School Board Agenda Item E-25 and Resolution 06-22, considered by the Board at its March 15, 2006, meeting, through which authorization to execute the District's swap transactions was obtained, contained various pieces of information that were indicative of the dicussions at the TAC meetings. These included the purpose for entering the swaps, the tax and legal ramifications of the

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²⁰ The GFOA's Advisory recommends that issuers of derivatives read and understand the most current material regarding the effect of derivatives on ratings prior to executing a derivative contract. Moody's indicated that an organization's use of interest rate swaps is one of the factors considered in assigning a rating and that it evaluates the potential impact of derivatives contracts on an issuer's overall financial strength.

swap transaction, the risks and rewards of the proposed swap transaction. They also included interest rate, basis, and counterparty credit risks. However, we found no evidence that the Board was provided with specific information on the potential effects that the transaction may have on the credit ratings of any outstanding Board obligations (e.g., potentially viewed favorably, unfavorably, or neutral), as required by School Board Policy 6145.

According to the Treasurer, "credit considerations are always a part of any analysis prior to entering a transaction" and "issues... addressed in the swap advisor's January 30, 2006, memorandum and later in their April 4, 2006, memorandum have credit implications, which is what the rating agencies focus on." The Treaurer further stated that consideration of the swap transaction would not have moved forward to the Board for approval if the TAC had not considered the credit implication to the debt portfolio. Also, as indicated by the Treasurer, the swap term sheet required potential counterparties to have a minimum rating of at least double-A category, one way collateralization and other terms favorable to M-DCPS. The swap advisor's memorandum dated January 30, 2006, was provided to the TAC at its meeting of February 3, 2006, and the memorandum dated April 4, 2006, was presented to the Board on April 18, 2006, after the execution of the transaction.

We are in agreement with the Treasurer that credit and other considerations may have been contemplated on this transaction, as is evident from the TAC's discussions. However, the evidence reviewed did not show that the School Board was specifically advised on the potential effect the transaction could have on the credit rating of the District's other obligations, as stated above. This is a determination that requires consideration at the School Board level, pursuant to Policy 6145, and from a practical standpoint could have been facilitated through inclusion in the Board agenda item as the other policy-required considerations were presented. It is also understood that the representation on the *potential effect* of the transaction is not an assertion from management that the transaction *will* absolutely affect the rating of the District's outstanding debts or a guarantee. Changes made to an entity's credit rating is done at the

discretion of the rating agencies. Nevertheless, the presence or absence of certain factors are typically known to have a potential impact on those agencies' rating consideration.

School Board Policy 6145 further states that in order to limit the Board's counterparty risk, the Board will seek to avoid excessive concentration of exposure to a single counterparty by diversifying its counterparty. During the bidding process for the swaps, care was exercised to ensure compliance with this policy requirement, in that the winning swap provider (the Royal Bank of Canada (RBC)) for Swap I (contains two swaps) was precluded from being considered for Swap II. However, due to extenuating circumstances, on March 8, 2012, M-DCPS terminated its swap agreement with Merrill Lynch, the winning bidder of Swap II and replaced Merrill Lynch with RBC, making RBC the counterparty for all three swaps. According to the former Swap Advisor, attempts to replace Merrill Lynch and maintain diversification were unsuccessful; and only RBC would pick up the swap contract with the same terms.

On February 15, 2012, the Board was presented with Agenda Item E-25, which specified that in replacing Merrill Lynch with RBC, "the principal risk to the District in negotiating with RBC is that it will increase the District's swap exposure with RBC." Again, we note that the circumstances surrounding this event were extraordinary and the Board was informed about its counterparty exposure and approved the replacement of the swap counterparty. Nevertheless, as a statement of fact, the Board is currently subject to counterparty exposure contrary to its objectives, pursuant to Policy 6145. Refer to Finding 1 on the need to establish formal guidelines or a mechanism to allow flexibility in carrying out Policy 6145, when warranted.

RECOMMENDATION

2.1 Management should ensure compliance with School Board Policy 6145 by providing the Board with specific information regarding the potential effects of a swap on the credit ratings of outstanding obligations prior to the execution of a swap. Such information should also be documented, in writing, and maintained for auditing purposes.

Responsible Department:

Treasurer's Office

Management Response: The implementation of School Board Policy 6145 coincided with the implementation of the District's derivative program. The TAC reviewed all relevant credit concerns related to the proposed derivatives at the February 2006 meeting. Earlier at the same meeting the TAC approved recommending the Board adopt the Debt Management Policy 6145. The policy required that the Board consider an analysis that includes "The potential effects that the transaction may have on the credit ratings of any Board obligations assigned by the rating agencies".

The Board Item E-25 approved by the Board on March 15, 2006 approving Resolution 06-22 Authorizing a Forward Interest Rate Swap Program, along with the draft of the term sheet that included relevant credit terms, provided the analysis to the Board in summary form that the TAC reviewed, see Attachment A. Board Policy 6145, Section E.5.c. requiring that the Board consider an analysis of "The potential effects that the transaction may have on the credit ratings of any Board obligations assigned by the rating agencies" was complied with.

As a result of having comprehensively dealt with all credit concerns the resulting transaction included highly favorable terms to the District that were reported to the Board under Agenda Item E-25 dated April 18, 2006, see Attachment B. These terms were referred to in the S&P rating report assessing that the swaps represents low credit risk.

The request to provide an explicit written assertion as to credit implications, e.g., potentially viewed favorably, unfavorably, or neutral, in the Board Item that is documented and available for audit is not required by the policy. As per PFM, the District's Derivative Advisor, the inclusion of an explicit assertion as to potential credit outcomes in a Board Item is not a common practice, nor is it considered a best practice. Neither do they recommend that the District begin to employ this practice going forward.

This recommendation's underlying observation refers to the oversight and reporting structure governing derivative management. The current structure employed by the district that utilizes an independent committee (TAC) whose committee members have specific financial expertise to advice staff and the Board is considered best practice and has served the district well in the past.

The only challenge due to the "Great Recession" that directly impacted the swaps' was related to counterparty risk and was successfully managed because credit concerns were adequately dealt with when the transactions were originally structured and approved by the Board. As a result S&P provided the distinction of "strong management oversight" in their report as it relates to derivative management.

In order to further clarify the Board's role in considering the potential credit rating impacts future proposed derivative transactions Board Agenda Items would include the following statement "The following credit concerns were reviewed by the TAC when recommending (or not recommending) Board approval and are to be considered by the Board as required by Section E.5.c. of Board Rule 6145:" The Board Rule 6145, Debt Management was revised in order to enhance, clarify and formalize staff and the TAC role in supporting the debt management policies and objectives of the Board.

Auditor's Comment: As we have already stated in the body of our finding and in other areas in this report, we acknowledge that, through their analyses, management and the TAC contemplated various credit and other considerations in structuring the swaps in question. School Board Policy 6145, however, requires that the Board considers, via an analysis, "the potential effects that the transaction may have on the *credit ratings of any Board obligations assigned by the credit agencies*. [emphasis added] While a significant amount of details is contained in the documents, including management's Attachment A (Pages 51-70), we reviewed during the conduct of our audit, we found no mention of the District's then outstanding debts other than COPs 2002A, 2002B and 2003A (later changed to 2008C) or how the execution of these transactions would affect the credit rating of these debts. Absent of documentary evidence, we cannot conclude that School Board Policy 6145, Section D.4.c., (Section E.5.c., revised October 2013) was complied with.

The current oversight and governance structure over derivatives management comports with best practice in many respects, with the exception of the level of communication to the Board, the policy-making body of the school district. Given this fact, we maintain and reiterate that our recommendation should strengthen the existing practice.

3. AN ANALYSIS OF SWAP-RELATED CASH FLOWS WAS NOT ALWAYS PRESENTED TO THE BOARD

Best practices in derivatives management and proper internal controls require that senior management and the governing board regularly receive information, in sufficient detail, on the performance of the derivative instruments to enable them to determine whether the instruments are meeting their intended objectives. The information may include performance measurements regarding the effectiveness of hedging strategies and include comparison of: (1) actual to forecasted results and (2) actual results to a suitable market indicator. The reporting of information should also include the required disclosures in the organization's financial statements.

School Board Policy 6145 requires the regular tracking and reporting of the financial implications of the swaps. According to the Treasurer, swap activities are reported to the Board through the Comprehensive Annual Financial Report (CAFR), which is the standard process for providing such information, pursuant to Board policy. The Policy specifically states that: "In so much as the Board is hedging its risk exposure by having entered into the swap transaction(s), the effectiveness of each hedge will be measured by preparing a cash flow analysis comparing the payments received against the payments made."

To determine the extent of swap-related information provided to the Board, we reviewed the CAFR for fiscal years ended June 30, 2006, through June 30, 2012. We found the reports contained information on the swaps, including the general terms of the swap agreements, the fair value of each swap, risks disclosure, and the projected net swap payments for the remaining life of the swaps. However, our review disclosed that while the cash flow analysis comparing actual payments received against payments made was reported in the District's CAFR for the fiscal years ended June 30, 2007, through June 30, 2009, this cash flow analysis was not presented for fiscal years ended June 30, 2010, through June 30, 2012, as required by Policy 6145. Management indicated that the absence of the disclosure was

due to an oversight which occurred at a time when changes in the GASB reporting standards were being implemented.

Monthly swap interest receipts/payments and other swap related matters are maintained by the Treasurer's office and can be reported to the Board. The following table shows the actual swap interest payments and receipts from the date of execution through the fiscal year ended June 30, 2013:

	Swap Fixed		Net Swap		Total Cumulative	
	Interest	Swap Floating	Interest		Swap	
	Payments by	Rate Receipts	(Payments)/	Bond Interest	(Payments)/	Total Interest
Fiscal Year	M-DCPS	From RBC/ML	Receipts	Payments	Receipts	Payments
2006-07	\$ (1,076,702)	\$ 1,063,839	\$ (12,863)	\$ (1,056,633)	\$ (12,863)	\$ (1,069,496)
2007-08	(5,258,199)	4,255,073	(1,003,126)	(5,009,860)	(1,015,989)	(6,012,986)
2008-09	(6,145,388)	2,036,485	(4,108,903)	(3,504,895)	(5,124,892)	(7,613,798)
2009-10	(7,208,938)	346,036	(6,862,902)	(1,610,481)	(11,987,794)	(8,473,383)
2010-11	(6,803,611)	336,097	(6,467,514)	(1,428,467)	(18,455,308)	(7,895,981)
2011-12	(7,168,495)	299,270	(6,869,225)	(1,183,206)	(25,324,533)	(8,052,431)
2012-13	(6,331,910)	266,746	(6,065,164)	(1,470,382)	(31,389,697)	(7,535,546)
Total	\$ (39,993,243)	\$ 8,603,546	\$ (31,389,697)	\$(15,263,924)	\$ (31,389,697)	\$ (46,653,621)

Table 3

Source: Records maintained by the Treasurer's office

The analysis of cash flows that is required by Policy 6145 to measure the effectiveness of each hedge shows that the synthetically fixed-rate payments on the swaps totaled approximate \$40 million and the interest paid on the hedged bonds totaled \$15.3 million compared to \$8.6 million floating-rate receipts from the swaps.²¹ The difference between the latter two amounts is largely due to the differences in the combined variable interest payment factors (i.e., the index rates

instrument significantly reduces an identified financial risk by substantially offsetting the changes in cash flows or

fair values associated with a hedgeable item.

²¹ In general, the determination of whether a swap is an "effective hedge" for financial statement reporting purposes in accordance with GASB is specifically prescribed by those standards and may differ from determining a swap's effectiveness in achieving its operational or organizational objective. GASB determines a swap's "effectiveness" based on two principal methodologies: (1) the Consistent Critical Terms Method, and (2) the Quantitative Methods (i.e., Synthetic Instrument Method, Dollar-offset Method, Regression Analysis Method, and Other Quantitative Methods). For example, according to GASB 53, in the case of applying the synthetic instrument method, if the actual synthetic rate is within 90% to 111% of the fixed rate of the swap, the swap is essentially deemed an "effective hedge." In the case of the dollar-offset method, if the change in the swap's fair value divided by the change in the fair value of the underlying asset is within 80% to 125%, the swap is essentially deemed an "effective hedge." In its commentary on evaluating the effectiveness of a hedge by use of a quantitative method, the GASB indicated that the underlying principle is that the method should demonstrate that a potential hedging derivative

and set basis point spreads) on the swaps and COPs.²² A perfect hedge would have a ratio of 1:1. Evaluating the performance of the swap using the cash flow information presented would require comparing the total interest payments (\$46,653,621) to the total interest cost that would have been incurred if conventional fixed-rate debt of the same amount was issued at the time the swaps were executed or alternatively by comparing the effective interest rate, based on the total interest payments, to the fixed interest rate that similar term conventional debt could have been issued for at the time the swaps were executed (to the swap's fixed rate, within the range specified in GASB 53, if applying that standard depending on the swaps' objective²³).

The future debt service requirements for the variable rate debts and net swap payment, assuming current interest rates remain the same, are reprized in the unaudited Annual Financial Report as follows (in thousands):

Fiscal Year Principal Interest Instruments, Net Interest 2014 \$ 5,125 \$ 1,530 \$ 6,244 \$ 7,774 2015 \$ 7,560 \$ 1,443 \$ 5,997 \$ 7,440 2016 \$ 7,935 \$ 1,375 \$ 5,691 \$ 7,066	
2015 \$ 7,560 \$ 1,443 \$ 5,997 \$ 7,440 2016 \$ 7,935 \$ 1,375 \$ 5,691 \$ 7,066	Fiscal Year
2016 \$ 7,935 \$ 1,375 \$ 5,691 \$ 7,066	2014
	2015
	2016
2017 \$ 8,330 \$ 1,306 \$ 5,397 \$ 6,703	2017
2018 \$ 7,990 \$ 1,233 \$ 5,070 \$ 6,303	2018
2019-2023 \$ 46,825 \$ 5,030 \$ 20,204 \$ 25,234	2019-2023
2024-2028 \$ 87,560 \$ 2,456 \$ 9,149 \$ 11,605	2024-2028
Total \$ 171,325 \$ 14,373 \$ 57,752 \$ 72,125	Total

Exhibit A

Although School Board Policy 6145 requires the completion and reporting of a cash flow analysis of payments received compared to payments made, it must be noted that the primary stated objective of the swaps was to have certainty over the interest amount the Board

2

²² The Distract pays interest to the holders of COPs Series 2002A and 2002B at the rate of SIFMA + 75 basis points and to holders of COPs Series 2008C at the rate of 70% one-month LIBOR + 90 basis points. For all three swaps, the District receives variable-rate payments of 70% one-month LIBOR from its counterparty. At the end of June 2013, the SIFMA 7-day auction rate (hedged COPs indexed-rate for Series 2002A and 2002B) was 0.06% and one-month LIBOR (indexed-rate received from swap counterparty and the indexed-rate at which COPs Series 2008C is hedged at a factor of 70%) was 0.19465%. Therefore, at the end of June 2013, the effective rates of interest paid to holders of COPs Series 2002A and 2002B, and Series 2008C were 0.81% and 1.036%, respectively; and the effective rate of interest received on the swaps was 0.1363%.

²³ See Footnote 21 for the range GASB 53 establishes.

will pay in the future and to free up capacity for future floating rate issues. With the execution of the swap instruments, management achieved this objective by synthethically fixing interest rates and subsequently issuing \$90.8 million variable-rate COPs on May 24, 2007. An additional \$417.8 million in fixed-rate debt were issued in 2007.

Because of the nature of and risks associated with swaps, and how their financial position may change over time, there is a need for the Board to be provided with sufficient and timely information to review swap activities on a periodic basis and be able to respond effectively. Although the swap information reported in the CAFR was in accordance with GASB requirements, information that compares the results of the swaps to their strategic objectives should be periodically communicated to the Board, as Policy 6145 requires. This information is at times considered by the TAC, but is not typically communicated to the School Board, the District's policy making body. The information provided is as important as its frequency; therefore, the establishment of a reporting period of less than a year for certain swap-related information should be considered.

RECOMMENDATION

3.1 To ensure that the Board has the information necessary to make informed decisions and assess whether the swaps are meeting their intended objectives, information on the performance of the swaps, including the overall effectiveness of the swap activities, should be periodically (e.g., semi-annually) reported to the Board.

Responsible Department: Treasurer's Office

The derivatives objectives as approved under Resolution Management Response: 06-22 was to synthetically fix the variable rate debt on the COP Series 2002AB, & 2008C as a risk mitigation exercise that includes reducing interest rate risk and would provide future financial flexibility. The objectives were met even though the "Great Recession" impacted the credit cost of the associated variable rate debt.

The all-in fixed rate cost of funds of 4.571% and 4.809%, respectively for the 2002AB and 2008C swaps and associated COPs and are in-line with conventional fixed rates (4.473%

-36-

thru 5.277%) at the time the swaps were executed and incurred by the district during the period of 2007 thru 2011. Long-term borrowing rates increased for the district during this period. The total borrowing cost through FY 2013 of \$46.7 million is also in-line with other fixed rate financings and is inclusive of the credit costs on the associated variable rate debt.

The increase in credit costs on the associated variable rate debt were incurred by the district regardless of whether or not the district entered into the derivatives in 2006. This increase was disclosed in the Swap Note under the Risk Disclosure section labeled Basis Risk included in the 2008 CAFR, Attachment C.

Board Policy 6145 provides for a comprehensive set of reporting factors to be provided to the Board annually. A peer review of the top 5 school districts in the State of Florida and Miami-Dade County indicates that all entities provide only annual updates to the Board for derivative transactions. Most provide the updates via the required disclosures in the Comprehensive Annual Financial Report (CAFR), which initially included all required reporting factors. Since Governmental Accounting Standards Board Statement 53 was implemented in FY 2010, only the projected cash flows, not the actual payments made and received were required by GASB to be reported.

PFM worked with Staff to enhance the regular reporting to the Board to address the audit recommendation and to ensure compliance with Board Rule 6145. The Annual Swap Report for June 30, 2013 encompasses recommended information will be provided to the Board prior to the December 2013 Audit Committee meeting. The TAC at the June 13, 2013 meeting reviewed a draft of the report and recommended that the format and information included in the report be provided on an annual basis to the Board. Interim reports or request for Board action will be considered as needed.

Auditor's Comment: As already stated in the body of this finding, the disclosures contained in the District's CAFR pertaining to its forward interest rate swaps comply with the disclosures required by GASB Statement No. 53. ²⁴ As such, we do not question the District's compliance with GASB Statement No. 53. Rather, the focus of the audit finding deals with the District's non-compliance with the reporting requirements of School Board Policy 6145, Section D.15.g., and Board Agenda Item E-25 of the School Board meeting of March 15, 2006. Section D.15.g., states that "... the effectiveness of each hedge will be measured by preparing a cash flow analysis comparing the payments

²⁴ Governmental Accounting Standards Board, *The User's Perspective*, December 2009.

received against the payments made." We believe that prospectively, the proposed Annual Swap Report by PFM, the District's derivatives advisor, will comply with the District's reporting requirements delineated in School Board Policy 6145, Section D.15.g.

Appendix A – Illustrative Examples of Interest Rate Swaps:

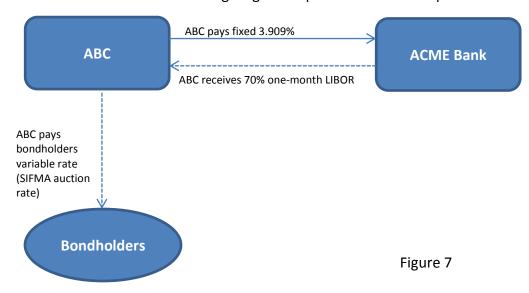
The following examples illustrate the structure and effects on cash flows of a common "plain vanilla" interest rate swap. They are intended to demonstrate the effects movement in interest rates could have on the cash flows associated with the swaps.

Floating-to-fixed rate:

For illustration purposes, the following assumptions are made:

ABC has \$50,000,000 variable-rate bonds outstanding. The bonds were issued January 1, 2008, and mature December 31, 2012. The interest paid on the bonds is based on the SIFMA auction rate, reset annually. ²⁵ Interest payments are made annually. To lock in low interest rates, while believing that rates will increase, ABC entered a pay-fixed, receive-variable rate swap with a notional amount of \$50,000,000 and maturity and interest payment dates that align with the underlying variable-rate bonds. The swap rate (fixed-rate paid by ABC) was 3.909% and the floating rate payments from the counterparty (ACME Bank) were based on 70% one-month LIBOR, determined at the end of the interest calculation period.

The following diagram depicts this relationship:



²⁵ An annual reset period is used in this illustration for purposes of simplicity regarding the calculation of the payments. In actuality, the rate would reset either daily or weekly. Refer to the www.sifma.org for information on SIMFA's auction rate securities indices.

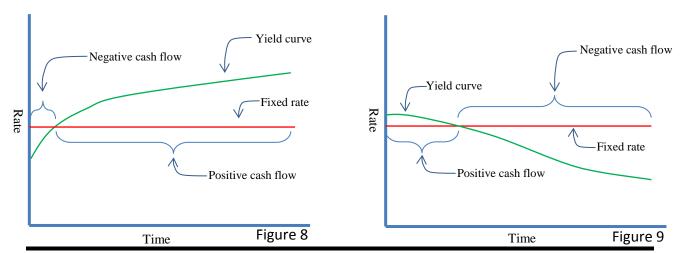
-39-

The cash flows from the related interest payments are as follows given the interest rates assumed for illustration purposes:

Interest	SIFMA	One- Month	Coun	iterparty Swap P	ayments	Interest Payment to Bondholders	
Calculation	Auction	LIBOR	То	From		(SIFMA Auction	Total
Date	Rate (%)	(%)	ABC	ABC	Net	Rate)	Payments
Dec. 31, 2008	2.27	0.43625	\$ 152,688	\$ (1,954,500)	\$ (1,801,812)	\$ (1,135,000)	\$ (2,936,812)
Dec. 31, 2009	0.52	0.23094	80,829	(1,954,500)	(1,873,671)	(260,000)	(2,133,671)
Dec. 31, 2010	0.50	0.26063	91,221	(1,954,500)	(1,863,279)	(250,000)	(2,113,279)
Dec. 31, 2011	0.43	0.29530	103,355	(1,954,500)	(1,851,145)	(215,000)	(2,066,145)
Dec. 31, 2012	0.27	0.20870	73,045	(1,954,500)	(1,881,455)	(135,000)	(2,016,455)
Total			\$ 501,138	\$(9,772,500)	\$(9,271,362)	\$ (1,995,000)	\$(11,266,362)

Table 4

Cash flows from the swap are affected by movements in the index rates relative to the swap rate (fixed-rate). On the one hand, the fall in interest rates (downward slope), benefited ABC by reducing the debt service to its bondholders. However, on the other hand, because the fixed rate (3.909%) paid by ABC on the swap was greater that the indexed rate (70% one-month LIBOR) received from ACME Bank; net payments under the swap created a negative cash flow for ABC. The following graphs illustrate the effects on cash flows based on the movement of interest rates beginning from the inception of the floating-to-fixed rate swap. The first graph follows the normal yield curve, wherein short-term rates are lower than long-term rates, with the assumption that rates will rise over time. The second graph depicts an inverted yield curve, wherein short-term rates are higher than long-term rates, with the assumption that rates will fall over time.



Miami-Dade County Public Schools
Office of Management & Compliance Audits

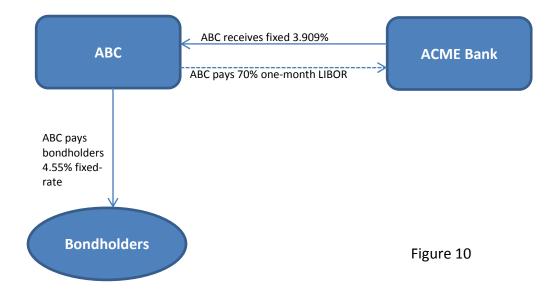
-40-

Fixed-to-floating rate:

For illustration purposes, the following assumptions are made:

ABC has \$50,000,000, 4.55% fixed-rate bonds outstanding. The bonds were issued January 1, 2008, and mature December 31, 2012. The interest payments are made annually. Wanting to reduce its borrowing cost, while believing that interest rates will fall, ABC entered a pay-variable, receive-fixed rate swap with a notional amount of \$50,000,000 and maturity and interest payment dates that align with the underlying fixed-rate bonds. ABC has agreed to pay ACME Bank interest payments based on 70% one-month LIBOR and receive fixed-rate payments of 3.909% from ACME Bank. Each payment is to be determined at the end of the interest calculation period.

The following diagram depicts this relationship:

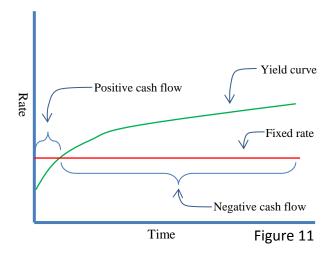


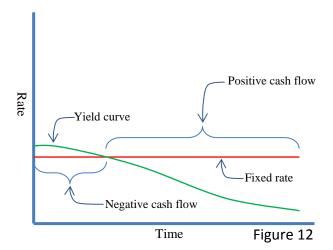
The cash flows from the related interest payments are as follows, given the interest rates assumed for illustration purposes:

		One-	Counterparty Swap Payments			Interest	
Interest	Fixed-	Month				Payment to	
Calculation	Rate	LIBOR	То	From		Bondholders	Total
Date	(%)	(%)	ABC	ABC	Net		Payments
Dec. 31, 2008	3.909	0.43625	\$1,954,500	\$ (152,688)	\$ 1,801,812	\$ (2,275,000)	\$ (473,188)
Dec. 31, 2009	3.909	0.23094	1,954,500	(80,829)	1,873,671	(2,275,000)	(401,329)
Dec. 31, 2010	3.909	0.26063	1,954,500	(91,221)	1,863,279	(2,275,000)	(411,721)
Dec. 31, 2011	3.909	0.29530	1,954,500	(103,355)	1,851,145	(2,275,000)	(423,855)
Dec. 31, 2012	3.909	0.20870	1,954,500	(73,045)	1,881,455	(2,275,000)	(393,545)
Total			\$9,772,500	\$ (501,138)	\$ 9,271,362	\$(11,375,000)	\$(2,103,638)

Table 5

Similarly, cash flows from the swap are affected by movements in the index rate (70% one-month LIBOR) relative to the swap's fixed rate. In this case, LIBOR remained below the agreed-upon fixed rate – falling dramatically, resulting in positive cash flows for ABC. The following graphs illustrate the effects on cash flows based on the movement of interest rates beginning from the inception of the fixed-to-floating rate swap. The first graph follows the normal yield curve, wherein short-term rates are lower than long-term rates, with the assumption that rates will rise over time. The second graph depicts an inverted yield curve, wherein short-term rates are higher than long-term rates, with the assumption that rates will fall over time.





Appendix B – Amortization Schedules of Swaps' Notional Amounts

Notional Amount Pay-Down Schedules (Amortization)							
Interest Rate	Swap 2002A		Interest Rate	Swap 2002B		Interest Rate	Swap 2008C
<u>Date</u>	<u>Amount</u>		<u>Date</u>	<u>Amount</u>		<u>Date</u>	<u>Amount</u>
Aug. 14, 2007	\$69,765,000		Aug. 31, 2007	\$70,115,000		Jul. 15, 2014	\$57,440,000
Sept. 2, 2008	\$68,070,000		Aug. 15, 2008	\$68,070,000		Jul. 15, 2015	\$55,280,000
Aug. 18, 2009	\$65,935,000		Sept. 4, 2009	\$66,260,000		Jul. 15, 2016	\$53,035,000
Aug. 3, 2010	\$64,020,000		Aug. 20, 2010	\$64,020,000		Jul. 15, 2017	\$50,700,000
Aug. 23, 2011	\$61,680,000		Aug. 5, 2011	\$61,985,000		Jul. 15, 2018	\$49,030,000
Aug. 7, 2012	\$59,225,000		Aug. 24, 2012	\$59,525,000		Jul. 15, 2019	\$47,280,000
Aug. 27, 2013	\$56,940,000		Aug. 9, 2013	\$56,945,000		Jul. 15, 2020	\$45,440,000
Aug. 12, 2014	\$54,245,000		Aug. 29, 1014	\$54,515,000		Jul. 15, 2021	\$43,535,000
Sept. 1, 2015	\$51,680,000		Aug. 14, 2015	\$51,680,000		Jul. 15, 2022	\$41,540,000
Aug. 16, 2016	\$48,715,000		Sept. 2, 2016	\$48,955,000		Jul. 15, 2023	\$39,450,000
Aug. 1, 2017	\$45,840,000		Aug. 18, 2017	\$45,835,000		Jul. 15, 2024	\$37,280,000
Aug. 21, 2018	\$42,575,000		Aug. 3, 2018	\$42,780,000		Jul. 15, 2025	\$35,005,000
Aug. 6, 2019	\$39,150,000		Aug. 23, 2019	\$39,345,000		Jul. 15, 2026	\$25,185,000
Aug. 25, 2020	\$35,740,000		Aug. 7, 2020	\$35,740,000		Jul. 15, 2027	\$22,215,000
Aug. 10, 2021	\$31,970,000		Aug. 27, 2021	\$32,125,000			
Aug. 30, 2022	\$28,155,000		Aug. 12, 2022	\$28,155,000			
Aug. 15, 2023	\$23,995,000		Sept. 1, 2023	\$24,115,000			
Sept. 3, 2024	\$19,735,000		Aug. 16, 2024	\$19,735,000			
Aug. 19, 2025	\$15,145,000		Aug. 1, 2025	\$15,220,000			
Aug. 4, 2026	\$10,385,000		Aug. 21, 2026	\$10,385,000			
Aug. 1, 2027	\$5,315,000		Aug. 1, 2027	\$5,315,000			

Source: Schedule to the ISDA Master Agreement executed for each swap.

Appendix C – Definition of Potential Risks for Derivatives

Risk	Definition
Market	The risk that the value of the derivative contract will change, either favorably or
	unfavorably, in response to changing market conditions.
Market liquidity	The risk that closing out a derivative contract might be difficult. For example, the
	only practical way to close out individually negotiated derivative contracts between
	two parties might be through negotiated early termination, which may be very
	costly.
Loss of Flexibility	The risk that your future debt management options might be limited due to your
	inability to modify or terminate a derivative contract without cost.
Credit	The risk of loss from the nonperformance by the counterparty to a derivative
	contract.
Counterparty / Settlement	The risk that the counterparty will no longer perform its obligations under the
	derivative contract (i.e., you have performed your obligations under the contract,
	but the counterparty has not) or that the counterparty's credit has declined to a
	point, which places doubt about its ability to perform.
Basis / Correlation	The risk that the variable rates payment streams of a derivative contract may not
	correlate because different variable-rate indices are used (e.g., six-month Treasury
	Bills vs. six-month LIBOR).
Amortization Mismatch	The risk that the swap's notional amount and the face value of the underlying debt
(Rollover)	may not be equal.
Tax	The risk that an issuer's cost will rise due to a decrease in federal income tax rates or
	the elimination or modification in tax exemption that reduces the value of the
	derivative.
Interest Rate / Yield Curve	The risk that your cash flow will be adversely affected because the slope of the yield
	curve is different than anticipated at the swap's inception.
Collateralization / Collateral	The risk that you will be required to post collateral, upon a downgrade of your credit
Posting	rating or other trigger event at a time when the market value of the derivative is
	negative.
Funding Liquidity	The risk that the derivative position, whether due to changes in market value or
	downgrade in credit rating, may require you to make significant unexpected
	payments during the derivative's life.
Termination	The risk that upon an unscheduled termination of the derivative, you may be
	required to make a payment, equal to the derivative's market value, to the
	counterparty, at a time when the market value is negative.
Market Access (Rollover)	The risk that you may be unable to replace a terminated derivative contract or
	obtain a new contract in the future on reasonably favorable terms.
Operational / Management	The risk that derivatives may add a level of complexity to your debt management
Complexity	practice that will require ongoing commitment of additional resources (in-house and
. ,	external).
Legal	The risk that a court might not enforce the derivative contract as intended by the
_	parties.
Systemic / Interconnection	The risk that an isolated disruption in the market for a particular instrument could
, ,	cause widespread difficulties for participant in that market (systemic) or could
	disrupt other markets or the financial system as a whole (interconnection).
	, , , , , , , , , , , , , , , , , , , ,

Appendix D – Credit Ratings and Their Definition

Moody's	Standard & Poor's	Fitch	Description of Credit Quality
Aaa	AAA	AAA	Highest credit quality. Entity has exceptionally strong capacity for
			payment of financial commitments, with minimal risk.
Aa	AA	AA	Very high credit quality. Entity has very strong capacity for payment of
			financial commitments, with very low risk.
Α	Α	Α	Upper-medium to High credit quality. Entity has strong capacity for
			payment of financial commitments, with low risk.
Baa	BBB	BBB	Good to moderate credit quality. The capacity for payment of financial
			commitments is considered adequate but adverse business or
			economic conditions are more likely to impair this capacity. May
			possess certain speculative characteristics.
Ва	BB	BB	Speculative. Elevated vulnerability to default risk. Substantial credit
			risk.
В	В	В	Speculative to highly speculative. More vulnerability to default risk. High credit risk.
Caa	CCC	CCC	Poor standing. Substantial credit risk. Default is a real possibility.
Ca	СС	СС	Highly speculative. Default of some kind appears probable.
С	С	С	Exceptionally high levels of credit risk. Default is imminent, inevitable
			or in-progress, with little prospect of recovery of principal or interest.
	D	D	In default of payment or the filing of bankruptcy.

Source: Credit rating agencies' report on their credit rating methodology.

Note: Each credit rating agency may append a modifier ("1," "2" or "3" for Moody's and "+" or "-" for Standard & Poor's and Fitch) to denote the relative standing within each rating category. For example, Aa3 (Moody's) or A+ (Standard & Poor's and Fitch). Also, some sources indicate that any issues below an "A" rating is not considered "investment grade."

Appendix E – Management's Respons	Appendix E –	Management's	Response
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RHH:022 October 29, 2013 305-995-1225

TO:

Mr. Jose F. Montes de Oca, Chief Auditor

Office of Management and Compliance Audits

FROM:

Richard H. Hinds, Associate Superintendent and Chief Financial Officer

Financial Services

SUBJECT: RESPONSE TO INTERNAL CONTROL OVER DERIVATIVE INSTRUMENTS AUDIT FINDINGS

Following are management's responses to the recommendation of the audit report received by my Office on October 21, 2013.

1.1 Incorporate the above recommendations into the current revisions of the Swap Policy Guidelines contained in School Board's Debt Management Policy 6145 and implement a process for the annual review of the Policy to ensure that it reflects changes in the District's risk management philosophy and regulatory environment.

Response: The District's Debt Management Policy, Board Rule 6145, includes policy on derivatives that were implemented in 2006 and coincides with the initiation of the District's swap program. The current policy has been cited by S&P rating reports as part of their assessment that the swap represents low credit risk. Staff with support from the derivative financial advisor has periodically reviewed policy.

PFM Asset Management LLC (PFM), the District's current derivative advisor was tasked with reviewing the policy with staff early in FY 2012/13 at the onset of their engagement. The subsequent proposed revisions were provided to the TAC on November 19, 2012, which has recommended that the Board approve the revisions. Revisions proposed under Finding 1.1, not already incorporated, were reviewed by staff along with PFM and were deemed to further strengthen internal controls over derivatives. On June 13, 2013 the TAC reviewed the additional proposed revisions to policy and recommended that the Board approve all the proposed revisions. The Board approved the Initial Reading of proposed revisions to Board Rule 6145 on September 3, 2013 and on October 16, 2013 the Board approved the Final Reading of Board Rule 6145.

The revised policy includes a process that formalizes the annual review as recommended.

1.2 Considering the significance of the information deliberated at the TAC meetings and the importance of that committee in its advisory role to the School Board, we believe that as a matter of course, Financial Affairs should provide the School Board with a

Page 1 of 4

summary of salient matters, including derivative activities, discussed at each TAC meeting. This will enhance the reporting to the School Board, internal controls and transparency.

Response: The TAC Agenda package includes unofficial minutes that provide the summary of salient matters and is provided to the School Board Member Representative appointed by the School Board Chair. Other School Board Members are included in the distribution of TAC Agenda package upon request. The District Chief Auditor also is included in the distribution of the TAC package and attends meetings regularly. As part of the external auditor's due diligence the official (TAC approved) minutes are also reviewed.

Beginning with 2013 all TAC agenda and official minutes are posted on the TAC section of the Treasury Web Site. In addition, a request to provide TAC Agenda package that includes the unofficial minutes to individual Board Members will be completed prior to the December 2013 School Board Audit Committee. Committee meeting minutes include all salient matters discussed.

2.1 Management should ensure compliance with School Board Policy 6145 by providing the Board with specific information regarding the potential effects of a swap on the credit ratings of outstanding obligations prior to the execution of a swap. Such information should also be documented, in writing, and maintained for auditing purposes.

Response: The implementation of School Board Policy 6145 coincided with the implementation of the District's derivative program. The TAC reviewed all relevant credit concerns related to the proposed derivatives at the February 2006 meeting. Earlier at the same meeting the TAC approved recommending the Board adopt the Debt Management Policy 6145. The policy required that the Board consider an analysis that includes "The potential effects that the transaction may have on the credit ratings of any Board obligations assigned by the rating agencies".

The Board Item E-25 approved by the Board on March 15, 2006 approving Resolution 06-22 Authorizing a Forward Interest Rate Swap Program, along with the draft of the term sheet that included relevant credit terms, provided the analysis to the Board in summary form that the TAC reviewed, see Attachment A. Board Policy 6145, Section E.5.c. requiring that the Board consider an analysis of "The potential effects that the transaction may have on the credit ratings of any Board obligations assigned by the rating agencies" was complied with.

As a result of having comprehensively dealt with all credit concerns the resulting transaction included highly favorable terms to the District that were reported to the Board under Agenda Item E-25 dated April 18, 2006, see Attachment B. These terms were referred to in the S&P rating report assessing that the swaps represents low credit risk.

Page **2** of **4**

The request to provide an explicit written assertion as to credit implications, e.g., potentially viewed favorably, unfavorably, or neutral, in the Board Item that is documented and available for audit is not required by the policy. As per PFM, the District's Derivative Advisor, the inclusion of an explicit assertion as to potential credit outcomes in a Board Item is not a common practice, nor is it considered a best practice. Neither do they recommend that the District begin to employ this practice going forward.

This recommendation's underlying observation refers to the oversight and reporting structure governing derivative management. The current structure employed by the district that utilizes an independent committee (TAC) whose committee members have specific financial expertise to advice staff and the Board is considered best practice and has served the district well in the past.

The only challenge due to the "Great Recession" that directly impacted the swaps' was related to counterparty risk and was successfully managed because credit concerns were adequately dealt with when the transactions were originally structured and approved by the Board. As a result S&P provided the distinction of "strong management oversight" in their report as it relates to derivative management.

In order to further clarify the Board's role in considering the potential credit rating impacts future proposed derivative transactions Board Agenda Items would include the following statement "The following credit concerns were reviewed by the TAC when recommending (or not recommending) Board approval and are to be considered by the Board as required by Section E.5.c. of Board Rule 6145:" The Board Rule 6145, Debt Management was revised in order to enhance, clarify and formalize staff and the TAC role in supporting the debt management policies and objectives of the Board.

3.1 To ensure that the Board has the information necessary to make informed decisions and assess whether the swaps are meeting their intended objectives, information on the performance of the swaps, including the overall effectiveness of the swap activities, should be periodically (e.g., semi-annually) reported to the Board.

Response: The derivatives objectives as approved under Resolution 06-22 was to synthetically fix the variable rate debt on the COP Series 2002AB, & 2008C as a risk mitigation exercise that includes reducing interest rate risk and would provide future financial flexibility. The objectives were met even though the "Great Recession" impacted the credit cost of the associated variable rate debt.

The all-in fixed rate cost of funds of 4.571% and 4.809%, respectively for the 2002AB and 2008C swaps and associated COPs and are in-line with conventional fixed rates (4.473% thru 5.277%) at the time the swaps were executed and incurred by the district during the period of 2007 thru 2011. Long-term borrowing rates increased for the district during this period. The total borrowing cost through FY 2013 of \$46.7 million is

also in-line with other fixed rate financings and is inclusive of the credit costs on the associated variable rate debt.

The increase in credit costs on the associated variable rate debt were incurred by the district regardless of whether or not the district entered into the derivatives in **2006.** This increase was disclosed in the Swap Note under the Risk Disclosure section labeled *Basis Risk* included in the 2008 CAFR, Attachment C.

Board Policy 6145 provides for a comprehensive set of reporting factors to be provided to the Board annually. A peer review of the top 5 school districts in the State of Florida and Miami-Dade County indicates that all entities provide only annual updates to the Board for derivative transactions. Most provide the updates via the required disclosures in the Comprehensive Annual Financial Report (CAFR), which initially included all required reporting factors. Since Governmental Accounting Standards Board Statement 53 was implemented in FY 2010, only the projected cash flows, not the actual payments made and received were required by GASB to be reported.

PFM worked with Staff to enhance the regular reporting to the Board to address the audit recommendation and to ensure compliance with Board Rule 6145. The Annual Swap Report for June 30, 2013 encompasses recommended information will be provided to the Board prior to the December 2013 Audit Committee meeting. The TAC at the June 13, 2013 meeting reviewed a draft of the report and recommended that the format and information included in the report be provided on an annual basis to the Board. Interim reports or request for Board action will be considered as needed.

If you have any questions, please do not hesitate to contact me at 305-995-1225, or Ms. Silvia R. Rojas, Treasurer, Office of Treasury Management, at 305-995-1699.

RHH :rf M022 Attachments

Cc: Ms. Judith Marte Ms. Silvia R. Rojas

ATTACHMENT A

Office of Superintendent of Schools Board Meeting of March 15, 2006

March 14, 2006

Revised

Revised

Business Operations Ofelia San Pedro, Deputy Superintendent

SUBJECT:

ISSUANCE OF A REQUEST FOR BID AND EXECUTION OF AN UP TO

\$197,830,000 FORWARD INTEREST RATE SWAP PROGRAM

PURSUANT TO RESOLUTION 06-22

COMMITTEE:

INNOVATION, EFFICIENCY & GOVERNMENTAL RELATIONS

Authorization to issue a Request For Bid and to execute a Forward Interest Rate Swap Program pursuant to Resolution 06-22 is being requested for the issuance of up to three interest rate swap transactions with a total notional amount of up to \$197,830,000 in connection with existing floating-rate and multimodal Certificates of Participation (COP), Series 2002A, 2002B, and 2003A respectively. In anticipation of the 2006/2007 fiscal year COP issuances of over \$400 million the Forward Interest Rate Swap Program will allow the School Board to hedge approximately 50% of next year's issuance by locking in historically low current interest rates. As a result the Board is reducing future interest rate risks of its debt portfolio by having certainty over what interest amounts it will pay in the future. The forward swap will synthetically fix the existing floating rate debt by April 1, 2007 and provide the added flexibility to issue additional floating rate debt in the future. By including a forward option the Board will continue to enjoy the lower floating rates until it will be ready to issue next fiscal year's COP series. The Board could also save approximately 75 basis points in annual costs in comparison to conventional taxexempt bond issuance by using this type of financing.

While the District has experienced relatively low long-term interest rates over the past several years and continues to see relatively lower interest rates in the current market, there is a greater risk that rates will trend higher; especially in light of the current inverted yield curve (short term rates are higher than longer term rates). In the opinion of our Derivative Financial Advisor, Swap Financial Group, the forward swap will be a risk reducing transaction for the Board because interest rates could rise significantly in the next year from today's historically low levels.

District staff, the District's Financial Advisor, DeLara and Associates, and Swap Financial Group considered current market conditions, low forward premiums, transaction rationale that considered three principal alternatives and the risk-reward trade-off for LIBOR (London Interbank Offered Rate)-based swaps in developing this program. In addition, the Board's Special Tax Counsel, Greenberg Traurig, P.A., reviewed the three principal alternatives to determine the tax and legal ramifications of each of the proposed alternative transactions. The most straightforward and elegant alternative, with the fewest legal complications and least downside risk was determined to be a forward interest rate swap that would be tied to existing floating rate COP's, but would commence payments by April 2007.

The School Board's Treasury Advisory Committee at its meeting of February 3, 2006 reviewed a draft of the attached Term Sheet, a Memorandum from Swap Financial Group delineating the transaction and the proposed Debt Management Policies, which include policies related to Swaps. Swap Financial Group conducted a presentation of the risks-reward relationship of the

Page 1 of 3

REVISED 2

E-25

proposed swap. As part of the Committee's review a discussion of the risks inherent in the proposed Forward Interest Rate Swap was conducted as follows:

- Interest rate risks were considered as to current market conditions under an inverted yield curve environment.
- Basis risks were considered as it relates to a LIBOR based Swap, whereby there could be a mismatch between the floating taxable rate the Board would receive and the floating tax-exempt rate the Board would pay.
- Counter party risks were considered as to credit quality standards required for potential bidders.
- Uncertainty over sizing and timing of future issuance were considered in determining notional amounts to be hedged and whether to tie the Swap to existing debt or future debt issuances.

The rewards as highlighted in the initial paragraph are highly favorable as determined by Swap Financial Group.

In addition the risk-reward relationship was quantified utilizing "What if" scenarios for both a Moderate Case and a Worst Case scenario analysis. Although the analysis is indicative only, it provides a reasonable basis for decision making regarding the trade-offs for using a LIBOR-based swap. Swap Financial Group determined that a LIBOR-based Swap, properly structured, would be suitable for the Board. The risks are outweighed by the potential rewards, which is why a large majority of municipal swap users employ LIBOR based swaps.

After the presentation from Swap Financial Group, the Treasury Advisory Committee approved recommending that the School Board issue the Request For Bid, Forward Interest Rate Swap Program.

We are requesting authority to issue a request for bids and to execute up to \$197,830,000 aggregate notional amount of Forward Interest Rate Swaps. Having the ability to lock in rates immediately upon award will allow for more favorable pricing from the Swap Providers (counter parties) because it decreases uncertainty on their side of the transaction. A report will be provided at the April Board Meeting of the results of awarding the swap. Resolution 06-22 includes parameters that the swap will not exceed the term of the underlying certificates (8/1/2027), and that the synthetic fixed rates will not exceed 4.00%.

Although the fundamental objective of the transaction is not savings driven, but replacing uncertainty with certainty for a portion of the District's future financings for the Capital Plan, the following analysis was provided by Swap Financial Group:

- Issuance of a synthetic fixed forward swap as opposed to conventional tax-exempt COP's with a forward contract as of March 8, 2006 on a notional amount of \$197,830,000 could generate estimated present value savings of \$13,082,076.
- The current cost of the forward premium under current market conditions is substantially less than what the forward premium would have cost as recently as 2-3 years ago, when the cost of the premium could have been estimated to be over \$5.5 million. Currently the estimates for a forward premium are approximately \$350,000.
- Future savings related to exchanging the District's variable rate debt for fixed rate debt cannot be determined because we cannot predict future interest rates. However, since June 2004 short term taxable rates (Fed Funds) have increased from 1% to 4.50%. As

(Fed Funds) have increased from 1% to

Added

part of the District's due diligence and best practices included in the Debt Management Policies in the proposed revision to Board Rule 6Gx13- 3A-1.012 an annual report to the Board on all Outstanding Swaps will include a cash flow analysis which will compare payments received against payments made.

The transaction is not structured as a bet on future interest rates, but a reduction of interest rate risks. If rates are lower during the 2nd quarter of 2007 when the future COP issuances are being planned, then the District may issue fixed rate COP's, taking advantage of the lower rate environment and saving our variable rate capacity for future issuances when rates are higher. If rates are higher during the same time period, then the District will have the capacity to issue variable rate debt providing additional savings to the District. The Forward Interest Rate Swap Program being proposed is structured to provide financial flexibility for the management of the District's debt portfolio in addition to adding certainty to future financings.

Added

RECOMMENDED:

That The School Board of Miami-Dade County, Florida approve Resolution 06-22 authorizing the issuance of bids and execution of up to \$197,830,000 aggregate notional amount of interest rate swaps pursuant Revised

to the District's Forward Interest Rate Swap Program.

Page 3 of 3

Swap Financial Group

Swap Financial Group, LLC 76 South Orange Avenue, Suite 6 South Orange, NJ 07079 (973) 378-5500, fax (973) 378-5575

February 27, 2006

School Board of Miami-Dade County Forward Interest Rate Swap Program

Term Sheet

OVERVIEW OF FINANCING PLAN

The School Board of Miami-Dade County ("the Board") is seeking to enter into two forward starting swaps (Swap I and Swap II) in connection with the Board's existing floating-rate and multimodal certificates (the "Bonds"). Under this program, the Board will enter into the forward-starting, fixed-payer swaps, as detailed below. The associated Bonds for Swap I are insured auction rate bonds, known as Certificates of Participation Series 2002A and 2002B. The associated Bonds for Swap II are insured multimodal bonds known as Certificates of Participation Series 2003A (Put Date 8/1/2008). The insurers on the Bonds, Ambac and MBIA, respectively, have agreed to provide insurance on the swaps, which will cover scheduled swap payments (but not termination payments unless authorized by the insurer). Full details of the swap insurance are available separately.

Your firm is in the process of being approved as a potential counterparty for the transaction contemplated in this program. Swap Financial Group has been retained by the Board to work with it for the bidding of the swaps for this program.

^{*}subject to change

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 2 of 10

The table below shows the initial notional amounts, forward effective dates, and termination dates for Swap I and II.

	Bonds	Initial Notional	Effective Date	Termination Date
Swap I	2002A	\$69,765,000*	4/1/2007*	8/1/2027*
1	2002B	\$70,115,000*	4/1/2007*	8/1/2027*
Total		\$139,880,000*		

	Bonds	Initial Notional	Effective Date	Termination Date
Swap II	2003A	\$57,440,000*	8/1/2008*	8/1/2027*

SWAP TRANSACTION SPECIFICS

Fixed Rate Payer:	School Board of Miami-Dade County	
Floating Rate Payer:	Counterparty (winning bidder). Minimum rating of at least Aa3 (Moody's) or AAminus (S&P) is required.	
Notional Amounts:	Initially, a total amount of \$139,880,000* for Swap I and \$57,440,000* for Swap II. Amounts will amortize as shown in the schedules in Attachment A.	
Trade Date:	, 2006	
Effective Dates:	As shown in the table above*	
Termination Dates:	As shown in the table above*	
Fixed Rate Provisions:		
Fixed Rate:	Rate provided by winning bidder	
*subject to change		

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 3 of 10

Fixed Rate Day Count Fraction:

30/360

Fixed Rate Period End Dates:

Semiannually, each May 1 and November 1 during the term of the transaction, not

subject to adjustment

Fixed Rate Payment Dates:

Semiannually, each May 1 and November 1 during the term of the transaction, subject to adjustment in accordance with Following

Business Day Convention

Floating Rate Provisions:

Floating Rate:

70% of One-Month USD LIBOR, reset two London business days prior to commencement of each floating rate period.

Floating Rate Day Count Fraction:

Actual/360

Floating Rate Period End Dates:

Matching the reset period on the corresponding bonds during the term of the

transaction, not subject to adjustment

Floating Rate Payment Dates:

Same as payment dates on the corresponding Bonds, subject to adjustment in accordance with Following Business Day

Convention

DOCUMENTATION PROVISIONS

Schedule to the ISDA Master Agreement (1992 Local Currency, Single Jurisdiction)

^{*}subject to change

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 4 of 10

Specified Indebtedness: With respect to the Board, only includes

obligations secured on parity with the Bonds and payable from the same source of

revenues.

Cross Default Threshold: With respect to the Board, limited to

defaults under the general indenture under which the Bonds are issued. With respect to Counterparty, lowest amount specified under master agreements currently being

entered into.

Payments on Early Termination: Market Quotation, Second Method

Additional Termination Events: Counterparty's ratings (measured in

reference to its senior, unsecured debt or other similar obligation) fall below A3 (Moody's) and A-minus (S&P),

(Counterparty as Affected Party).

Board's ratings fall below Baa3 (Moody's) and BBB-minus (S&P), (Board as Affected

Party).

Governing Law: Swap agreement to be governed by New

York law; Board's powers and sovereign immunity to be governed by Florida law. Generally, Florida law provides that sovereign immunity cannot be waived only

with respect to tort law.

Jurisdiction: Appropriate federal court in New York or

Florida.

^{*}subject to change

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 5 of 10

Netting of Payments:

Section 2(c)(ii) will apply (no netting across transactions)

Compliance with Covered Indenture:

Will apply, but "Incorporated Provisions" will be limited solely to those bearing on the creditworthiness of the Board or the Bonds.

Appropriation Requests. The Board shall, in connection with all requests for appropriations for funds to meet its obligations under the Covered Indenture, include an appropriation of funds to meet its obligations, if any, to the Floating Rate Payer hereunder. Additionally, in the event any amount is payable by the Board under Section 6(e) of the Swap Agreement following the designation of an Early Termination Date under the Swap Agreement, the Board shall take any and all steps reasonably necessary to submit a request for appropriation of such amount in accordance with applicable Florida law as soon as possible (and in no event any later than the next meeting of The School Board of Miami-Dade County, Florida, unless such next meeting is within 10 days of the applicable Early Termination Date, in which case the request for appropriation shall be submitted no later than the date of the second meeting of The School Board of Miami-Dade County, Florida occurring after the applicable Early Termination Date) after such Early Termination Date.

^{*}subject to change

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 6 of 10

Security and Source of Payments:

Payments to be made by the Board in respect of any Transaction under the Swap Agreement are payable as Additional Lease Payments under Section 3.1 of the Master Lease Purchase Agreement, supplemented and amended with respect to a Series of Certificates by the applicable Lease Schedule. Such Additional Lease Payments are subject to and dependent upon appropriation of funds being duly made from time to time by the Board, as described in the Master Lease Purchase Agreement. Pursuant to the Master Lease Purchase Agreement, however, the Board is obligated to budget and appropriate funds for all Leases (including Additional Lease Payments) or none of them and may not budget and appropriate funds to make Lease Payments selectively on a Lease by Lease basis. In the event that funds so appropriated are not sufficient to pay all such Lease Payments when due, the Trustee shall apply any amounts available to it to the payment of the items set forth in Section 504(a) of the Master Trust Agreement in the manner and with the order of priority set forth in such Section 504(a) of the Master Trust Agreement, as so amended, and with the same force and effect as if amounts due under the Swap Agreement were specifically set forth in a Lease Schedule.

The Board will have the right to transfer or

Transfer Language:

assign its position in any swap, in whole or in part, to another swap dealer with whom

^{*}subject to change

School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 7 of 10

> the original Counterparty has trading lines, subject to an enumerated list of criteria for approval by the Counterparty

Optional Early Termination:

The Board will have the right to optionally terminate the Swap Agreement "at market" (second method, market quotation) at any time over the term of the agreement. The counterparty will have no similar right.

Deferral of Termination Payments:

Notwithstanding Section 6(d)(ii) of the Swap Agreement to the contrary, in the event an amount is payable by the Board under Section 6(e) of the Swap Agreement following the designation of an Early Termination Date then the following provision shall apply:

- (i.) if such Early Termination Date has been designated pursuant to (A) [Insurer fails to meet payment obligations under Swap Insurance Policy], (B) [Insurer Event occurs and a Payment Event occurs with respect to Party B], or (C) [a right of optional termination by the Board], then the amount payable by the Board shall become due and payable by the Board in accordance with the terms of the Swap Agreement;
- (ii) if such Early Termination Date has been designated pursuant to (A) [Insurer Event occurs and a Credit Event occurs with respect to the Board], or (B) [Insurer Event occurs and the Board has been give 30 days notice without providing a Credit Support

^{*}subject to change

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School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 8 of 10

Provider or confirmation of ratings], then the amount payable by the Board shall not become due and payable by the Board until the earlier of: (1) the 7th Business Day following the Board's appropriation of funds to pay such amount; (2) the date on which the Board determines that it shall not appropriate funds to pay such amount; and (3) that certain date which is thirty (30) days following the Early Termination Date;

(iii) if such Early Termination Date has been designated pursuant to [anything not covered by clauses (i) or (ii)], then the amount payable by the Board shall not become due and payable by the Board until the earlier of: (1) the 7th Business Day following the Board's appropriation of funds to pay such amount; (2) the date on which the Board determines that it shall not appropriate funds to pay such amount; and (3) that certain date which is sixty (60) days following the Early Termination Date.

Credit Support Annex

Mark-to-market frequency:

Daily, for value of both collateral and swap exposure.

Eligible collateral:

US Treasury and Agency securities, excluding specialized securities such as interest-only and principal-only securities.

^{*}subject to change

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School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 9 of 10

Collateral Thresholds:

As shown in the table below. Collateral posting is one-way; the Board cannot legally post collateral under Florida law.

Senior Unsecured Debt or Counterparty Ratings and Threshold Amounts

Moody's	S&P	Counterparty Threshold
Aa3 and above	AA- and above	Infinity
		(no collateral required)
A1	A+	\$10,000,000
A2	A.	\$5,000,000
A3	A-	0
Baa1	BBB+	0
Baa2	BBB	0
Baa3	BBB-	0
Below Baa3	Below BBB-	0

Insurance Provisions:	Separately available. Trigger for "Additional Termination Event" requirement for the Board. "Insurer Event" credit threshold will be below A3/A-minus.
Opinions:	Both parties will provide enforceability opinions and such other documents as are required in the master agreement and schedule, including an opinion of the Issuer that it is legally authorized to enter into the transaction, and that the transaction is valid and binding.
Basis of Award:	Lowest fixed rate payable by the Issuer. However, the Board reserves the right to reject any and all bids, to waive any irregularity or informality in any bid, to take

^{*}subject to change

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School Board of Miami-Dade County Forward Swap Term Sheet, February 27, 2006 Page 10 of 10

any action adjourning or postponing the award of the bids, or to take any other action it may deem to be in the Board's best interest.

Swap Financial Group has prepared this term sheet from information available to us which we believe to be correct, but this term sheet is not a substitute for your complete review of the appropriate documents relative to this financing. In the event of any conflict between the term sheet and such documentation, the documentation will control.

Your interest in the above transactions is appreciated. Further information regarding the structuring of these transactions will be communicated to you as it develops. Any questions concerning the above should be directed to Peter Shapiro, John Keenan, Lillian Chern or James Murphy of Swap Financial Group (973) 378-5500. We look forward to working with you and welcome any comments or suggestions regarding this placement process.

^{*}subject to change

RESOLUTION NO. 06-22

A RESOLUTION OF THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA, AUTHORIZING A FORWARD INTEREST RATE SWAP PROGRAM TO ASSIST THE SCHOOL BOARD IN THE MANAGEMENT OF INTEREST RISK IN ITS DEBT PORTFOLIO AND ASSOCIATED WITH THE SERIES 2002A CERTIFICATES, SERIES 2002B CERTIFICATES AND SERIES 2003A CERTIFICATES ISSUED UNDER THE MASTER LEASE PROGRAM; AUTHORIZING THE AWARD OF INTEREST RATE EXCHANGE AGREEMENTS TO THE SUCCESSFUL BIDDERS THEREFOR; AUTHORIZING EXECUTION OF INTEREST RATE EXCHANGE AGREEMENTS AND **AUTHORIZING** THE **INSTRUMENTS**; RELATED **OBLIGATIONS** THE AND **INCURRENCE** OF EXPENDITURE OF FUNDS IN CONNECTION WITH THE EXCHANGE AGREEMENT: INTEREST RATE **ACTION: PROVIDING** FOR INCIDENTAL AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, The School Board of Miami-Dade County, Florida (the "School Board") as the governing body of the School District of Miami-Dade County, Florida (the "District"), has determined to finance and refinance certain of its capital needs through a master lease-purchase agreement pursuant to Sections 1001.42 and 1013.15, Florida Statutes; and

WHEREAS, the School Board has the power under Section 1001.42(2), Florida Statutes, to receive, purchase, acquire, lease, sell, hold, transmit and convey title to real and personal property for educational purposes, and under Section 1001.42(9) and 1013.15(2), Florida Statutes, to enter into leases or lease-purchase arrangements of sites and educational facilities for school purposes; and

WHEREAS, Miami-Dade County School Board Foundation, Inc. (the "Foundation"), a not-for-profit corporation organized and existing under the laws of the State of Florida, has been formed to lease purchase certain real property, educational facilities and equipment to the School Board; and

WHEREAS, the Foundation and the School Board have provided for the lease-purchase financing and refinancing of certain real property, educational facilities and equipment ("Facilities") from time to time by entering into a Master Lease Purchase Agreement dated as of August 1, 1994 (the "Master Lease"), and related leases; and

WHEREAS, the Facilities to be leased from time to time are identified on separate Schedules (each a "Schedule") attached to the Master I ease; and

WHEREAS, the School Board and the Foundation have heretofore entered into Schedule 2002-1 dated as of December 1, 2002, to the Master Lease for the lease-purchase financing of the Series 2002-1 Facilities specified therein (the Master Lease together with Schedule 2002-1, the "Series 2002-1 Lease") and Schedule 2002-2 dated as of December 1, 2002, to the Master Lease for the lease-purchase financing of the Series 2002-2 Facilities specified therein (the Master Lease together with Schedule 2002-2, the "Series 2002-2 Lease" and the Series 2002-2 Lease together with the Series 2002-1 Lease, the "Series 2002 Leases"); and

WHEREAS, the School Board and the Foundation have heretofore entered into Schedule 1998B-1 dated as of June 1, 1998, as amended and restated as of March 1, 2003, to the Master Lease for the lease-purchase financing of the Series 1998B-1 Facilities specified therein (the Master Lease together with Schedule 1998B-1, the "Series 1998B-1 Lease") and Schedule 1998B-2 dated as of June 1, 1998, as amended and restated as of March 1, 2003, to the Master Lease for the lease-purchase financing of the Series 1998B-2 Facilities specified therein (the Master Lease together with Schedule 1998B-2, the "Series 1998B-2 Lease" and the Series 1998B-2 Lease together with the Series 1998B-1 Lease, the "Series 1998B Leases"); and

WHEREAS, the Foundation has entered into a Master Trust Agreement dated as of August 1, 1994 (the "Trust Agreement"), with The Bank of New York Trust Company, N.A. (successor in interest to NationsBank of Florida, N.A.), as trustee (the "Trustee") providing for the issuance of series of Certificates of Participation to the public from time to time, representing undivided proportionate interests in the principal portion and interest portion of the basic lease payments to be made by the School Board under the Master Lease and the Schedule or Schedules relating to such series of Certificates; and

WHEREAS, to accomplish the lease-purchase financing of the Series 2002-1 Facilities and the Series 2002-2 Facilities, the School Board caused the issuance of two series of Certificates of Participation representing undivided proportionate interests in the principal portion and interest portion of the basic lease payments to be made by the School Board under the Series 2002 Leases (the "Series 2002A Certificates" and the "Series 2002B Certificates") pursuant to the Series 2002 Supplemental Trust Agreement dated as of December 1, 2002, between the Foundation and the Trustee (the "Series 2002 Supplemental Trust Agreement"); and

WHEREAS, to accomplish the refinancing of the lease-purchase of the Series 1998B-1 Facilities and the Series 1998B-2 Facilities, the School Board caused the issuance of Certificates of Participation representing undivided proportionate interests in the principal portion and interest portion of the basic lease payments to be made by the School Board under the Series 1998B Leases (the "Series 2003A Certificates") pursuant to the Series 2003A Supplemental Trust Agreement dated as of March 1, 2003, between the Foundation and the Trustee (the "Series 2003A Supplemental Trust Agreement"); and

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WHEREAS, the interest portion of the lease payments under the Series 2002 Leases and the interest portion payable to holders of the Series 2002A Certificates and the Series 2002B Certificates is calculated at an auction rate, as determined from time to time; and

WHEREAS, the interest portion of the lease payments under the Series 1998B Leases and the interest portion payable to holders of the Series 2003A Certificates is calculated at a rate that will be subject to change on August 1, 2008; and

WHEREAS, the School Board has determined that it is in its best interests to exchange its current variable rate obligations for fixed rate obligations in order to provide the flexibility in future financings to issue additional variable rate debt and to manage the interest rate risk associated with the Series 2002 Leases and the Series 2002A Certificates and Series 2002B Certificates and the Series 1998B Leases and the Series 2003A Certificates by soliciting bids to enter into one or more forward interest rate exchange agreements with respect to the Series 2002 Leases and the Series 2002A Certificates and Series 2002B Certificates (collectively, the "Series 2002 Swap") and a forward interest rate exchange agreement with respect to the Series 1998B Leases and the Series 2003A Certificates (the "Series 2003A Swap") with the School Board pursuant to The School Board of Miami-Dade County Forward Interest Rate Swap Program Term Sheet attached hereto as Exhibit A (the "Swap Term Sheet"); and

WHEREAS, because of the volatility of the market and the necessity for the successful bidders to hedge their agreements immediately, it is necessary to delegate the authority to award the Series 2002 Swap and the Series 2003A Swap to the successful bidders and authorize the execution and delivery of an ISDA Master Agreement, together with a schedule, credit support annex, and confirmation thereto (collectively, an "Interest Rate Exchange Agreement") with each of the successful bidders to fix certain details of the Series 2002 Swap (collectively, the "Series 2002 Interest Rate Exchange Agreement") and the Series 2003A Swap (the "Series 2003A Interest Rate Exchange Agreement"), subject to certain restrictions; and

WHEREAS, payments due from the School Board to the counterparty under the Series 2002 Interest Rate Exchange Agreement will be secured by one or more policies (collectively, the "Series 2002 Swap Policy") issued by Ambac Assurance Corporation (the "Series 2002 Swap Insurer"), the issuer of the municipal bond insurance policy for the Series 2002A Certificates and Series 2002B Certificates and under the Series 2003A Interest Rate Exchange Agreement will be secured by a policy (the "Series 2003A Swap Policy" and together with the Series 2002 Swap Policy, the "Swap Policies") issued by MBIA Insurance Corporation (the "Series 2003A Swap Insurer" and together with the Series 2002 Swap Insurer, the "Swap Insurers"), the issuer of the financial guaranty insurance policy for the Series 2003A Certificates;

NOW THEREFORE, BE IT RESOLVED BY THE SCHOOL BOARD OF MIAMIDADE COUNTY, FLORIDA THAT:

Section 1. The School Board hereby authorizes the solicitation of bids in accordance with the Swap Term Sheet, the form of which is attached hereto as Exhibit A, and subject to the conditions for award set forth in Section 3 hereof. The School Board hereby authorizes and

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directs the Superintendent to award the Series 2002 Swap and the Series 2003A Swap to the respective successful bidders pursuant to the terms of the Swap Term Sheet and the conditions set forth in Section 3 hereof.

Section 2. The form of the Interest Rate Exchange Agreement submitted to this meeting and attached hereto as Exhibit B is hereby approved, with such insertions, modifications and changes with respect to each of the Series 2002 Swap and the Series 2003A Swap as may be approved by the Superintendent. The Chair, Vice Chair, Superintendent or Deputy Superintendent, Business Operations and the Secretary, upon such approval by the Superintendent, are each hereby authorized and directed to execute the Series 2002 Interest Rate Exchange Agreement and the Series 2003A Interest Rate Exchange Agreement. The execution and delivery of such Interest Rate Exchange Agreements by the Chair, Vice Chair, Superintendent or Deputy Superintendent, Business Operations and the Secretary shall constitute conclusive evidence of the approval thereof.

Section 3. The Superintendent or Deputy Superintendent, Business Operations, upon the advice of the School Board's Swap Advisor, Financial Advisor and the School Board's Special Tax Counsel, are hereby directed to negotiate the terms of the Interest Rate Exchange Agreement, subject to the following conditions:

With respect to the Series 2002 Interest Rate Exchange Agreement:

- (i) The synthetic fixed rate shall not exceed 4.00% per annum;
- (ii) The aggregate notional amount of the Series 2002 Interest Rate Exchange Agreement shall not exceed \$139,880,000; and
- (iii) The stated termination date of the Series 2002 Interest Rate Exchange Agreement shall be no later August 1, 2027.

With respect to the Series 2003A Interest Rate Exchange Agreement:

- (i) The synthetic fixed rate shall not exceed 4.00% per annum;
- (ii) The notional amount of the Series 2003A Interest Rate Exchange Agreement shall not exceed \$57,950,000; and
- (iii) The stated termination date of the Series 2003A Interest Rate Exchange Agreement shall be no later August 1, 2027.
- Section 4. The Chair, Vice Chair, Superintendent and Deputy Superintendent, Business Operations are each further authorized to identify the details of the Series 2002 Interest Rate Exchange Agreement and Series 2003A Interest Rate Exchange Agreement for purposes of Treasury Regulation §1.148-4(h)(2)(viii), by executing an Identification of Hedge.

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Section 5. The Superintendent or Deputy Superintendent, Business Operations, are hereby authorized to negotiate the terms of the Swap Policies and to execute and deliver such credit enhancement agreements with the Swap Insurers as are necessary or desirable with respect to the issuance of the Swap Policies.

Section 6. The Chair, Vice Chair, Secretary, Superintendent, Chief Financial Officer, Treasurer, Deputy Superintendent, Business Operations and School Board Attorney are each authorized and directed to execute and deliver all additional documents, contracts, instruments and certificates, including, without limitation, amendments, supplements, restatements or other modifications to the Series 2002 Leases, the Series 1998B Leases, the Series 2002 Supplemental Trust Agreement, the Series 2003A Supplemental Trust Agreement and any other documents related to the Series 2002 Certificates and the Series 2003A Certificates and to take all actions and steps, including without limitation to change the dated date of any and all documents, and to incur such costs on behalf of the School Board which are necessary or desirable in connection with the Series 2002 Interest Rate Exchange Agreement, the Series 2003A Interest Rate Exchange Agreement, the Series 2003A Swap Policy and which are not inconsistent with the terms and provisions of this Resolution.

Section 7. This Resolution shall take effect immediately upon its adoption.

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Adonted	this	15 th	day	of March,	2006.
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Chair, The School Board of Miami-Dade County, Florida

Attest:

Secretary, The School Board of Miami-Dade County, Florida

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ATTACHMENT B

Business Operations Ofelia San Pedro, Deputy Superintendent

SUBJECT: REPORT ON AWARD OF \$197,830,000 FORWARD INTEREST RATE

SWAPS & AUTHORIZING RESOLUTION 06-28 AMENDING SCHEDULES AND OTHER DOCUMENTS RELATED TO THE SERIES 2002A, 2002B &

2003A CERTIFICATES OF PARTICIPATION

COMMITTEE: INNOVATION, EFFICIENCY & GOVERNMENTAL RELATIONS

The District executed and awarded on Monday April 3, 2006 the competitive placement of \$197,830,000 notional amount Forward Interest Rate Swaps associated with the Series 2002A, 2002B, & 2003A Certificates of Participation (COP's). These COP's were originally issued on a variable rate basis. The Interest Rate Swaps will permit us to fix the rate on these instruments at today's low level of interest rates. Details of the award are as follows:

	SERIES	NOTIONAL AMOUNT	EFFECTIVE DATE	TERMINATION DATE	WINNING BID *	SWAP PROVIDER
SWAP I	2002A	69,765,000	4/1/2007	8/1/2027	3.809%	Royal Bank of Canada
	2002B	70,115,000	4/1/2007	8/1/2027	3.809%	Royal Bank of Canada
SWAP II	2003A	57,440,000	8/1/2008	8/1/2027	3.872%	Merrill Lynch Capital Markets

^{*} The winning bid excludes cost of issuance for Bond Counsel and Financial Advisory Services, which when added increase the rates by 0.012% to 3.821% and 3.884% respectively. The rate on the 2003A Series is slightly higher because of the longer forward period and the longer average life of the associated debt.

Most swaps executed by Florida School Districts to date have been negotiated. The District was able to achieve more favorable rates via a competitive sale in that the spreads to "midmarket" were 1.5 and 0.3 basis points higher respectively, while under a negotiated sale the swap rates are generally 5 to 10 basis points higher. A 10 basis point increase would represent approximately \$1.6 million in additional costs. Mid-market is determined by the District's Derivative Financial Advisor, Swap Financial Group, and is addressed in their attached Results of Competitive Swap Bid Memorandum (Attachment A) dated April 4, 2006.

The competitive sale also permitted the District to set favorable credit and business terms up front on the Term Sheet. Attachment B is a schedule prepared by Greenberg Traurig, P.A., the District's Bond Counsel, outlining the different favorable terms the District was able to achieve under a Competitive Sale. These favorable terms did not affect the approved bidder's participation in the sale. Of the 14 bidders contacted 12 were pre-approved and chose to bid on the 2002A and 2002B Series. Nine of these also were pre-approved and chose to bid on the 2003A Series. Approval was subject to credit standards and insurer's pre-qualification.

The District was able to obtain an approximate present value savings of \$12.2 million by executing a fixed forward swap as opposed to an issuance of new, fixed Certificates of Participation (COP's), of a similar maturity, on the same day.

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As stated in the Board Item dated March 15, 2006 authorizing the sale and award, the fundamental objective is replacing uncertainty with certainty at a time of low long-term interest rates for a portion of the District's Capital Plan. By fixing existing variable rate debt, the District will have the flexibility to issue additional variable rate debt in the future in response to changing market conditions. The swap is a hedge that requires ongoing monitoring by staff and annual reports to the Board as required by the District's Debt Management Policies under the proposed revision to Board Rule 6Gx13- 3A-1.012. In addition, the Governmental Accounting Standard Board requires ongoing disclosures in a footnote to the Audited Financial Statements. Disclosures include the significant terms, the fair value of the swap and any applicable risks. Risks on the swaps include counter party risk, basis risk, and termination risk.

Costs of Issuance on the swaps are as follows:

Greenberg Traurig, P.A.	\$118,440
Swap Financial Group	62,000
DeLara Associates	10,000

The execution and award of the Swap is the culmination of work performed by staff, the Treasury Advisory Committee, and the professional consultants that based on best practices crafted a solution for the District that was highly beneficial as outlined above and in the Board Item dated March 15, 2006. Best practices include procuring a Derivatives Financial Advisor that was able to successfully manage the competitive placement of the swaps. In addition, Swap Financial Group provided services related to drafting Swap Policies incorporated in the District's Debt Management Policies, portfolio analysis, evaluation of derivative proposals, training of staff and ongoing support. Maximum total costs per year are \$125,000 under a two year contract.

Resolution 06-28 is requesting authority to amend the schedules and certain other documents related to the associated outstanding COP's Series 2002A, 2002B, & 2003A. The applicable documents must be amended, among other things, to provide for a prioritization of Additional Lease Payments in the event that there are not sufficient funds to pay all Additional Lease Payments. The Additional Lease Payments include those related to the swap transactions. This is a condition of the Insurer(s) on the swap transactions.

An additional amendment is being requested to utilize unused proceeds from the Series 2002A and 2002B Certificates to provide funding for a modular at Ernest Graham Elementary. The District experienced certain construction savings in the 2002A & 2002B COP's, namely in the Doral Senior High School Project, which will allow up to \$8.5 million to fund the modular at Ernest Graham Elementary.

RECOMMENDED: That The School Board of Miami-Dade County, Florida:

- 1) receive the report on Award of \$197,830,000 Forward Interest Rate Swaps, and
- 2) approve Resolution 06-28 (Attachment C) amending schedules related to the Series 2002A, 2002B & 2003A Certificates of Participation

Swap Financial Group

Swap Financial Group, LLC 76 South Orange Avenue, Suite 6 South Orange, NJ 07079 (973) 378-5500, fax (973) 378-5575

MEMORANDUM

To:

Silvia Rojas

School Board of Miami-Dade County

From:

Peter Shapiro

Concerning:

Results of Competitive Swap Bid

Date:

April 4, 2006

Below are the results of the competitive placement of the three forward-starting interest rate swaps entered into by the School Board of Miami-Dade County (the "Board") on April 3, 2006. The swaps are being used to create synthetic fixed rate exposure associated with the debt of three outstanding Certificates of Participation (COPs) issuances of the Board (Series 2002A, 2002B and 2003A) starting in 2007 and 2008.

Prior to the bid, Swap Financial Group distributed a bid package on behalf of the Board to fourteen different counterparties. Participation was strong despite highly asymmetrical credit and business terms favorable to the Board, including one-way collateralization requirements and ratings-based termination events tilted strongly in the Board's favor. Of the fourteen solicited counterparties, twelve decided to submit bids. The outcome of the bidding showed quite clearly that the favorable terms had no negative effect whatsoever on swap pricing.

The auction was conducted between 11:00 and 11:35 AM Eastern Time on April 3, 2006. Throughout this time, markets remained stable, with the 10-year Treasury Note yielding 4.86%. At 11:00 AM, the swaps associated with Series 2002A and 2002B (the "Group I Swaps") were bid together. These swaps are nearly identical in structure and are both insured by Ambac. Eligible counterparties submitted bids in the form of a single fixed rate that the Board would pay on both swaps. Following the award of the Group I Swaps, bids were received for the "Group II Swap" (associated with the 2003A COPs) at 11:30 AM. For the purpose of counterparty diversification, the winning swap provider from Group I was precluded from bidding on the Group II Swap. All bids that were received are shown on following page (listed in alphabetical order) and the winning bids appear in bold.

	Group I	Group II
Swap Provider	(2002A and 2002B)	(2003A)
Bear Stearns Financial Products	3.8190%	3.9040%
BNP Paribas	3.8097%	3.8870%
Citibank	3.8690%	3.9470%
Depfa Bank	3.8280%	3.8975%
Deutsche Bank	3.8210%	3.8960%
Dexia	3.8098%	3.8792%
Goldman Sachs Capital Markets	3.8273%	_
JPMorgan Chase Bank	3.8310%	3.8917%
Merrill Lynch Capital Markets	3.8320%	3.8720%
Morgan Stanley Capital Services	3.8180%	3.8980%
Rice Financial	3.8300%	-
Royal Bank of Canada	3.8090%	-

In the auction, Royal Bank of Canada and Merrill Lynch Capital Services offered the lowest fixed rates to be paid by the Board for the Group I and Group II swaps, respectively. The Group II swap rate is slightly higher due to the longer forward period and longer average life of the associated debt. These rates exclude the cost of the Board's professional fees incurred in connection with the transactions. Including these fees, the all-in fixed rates are 0.012% higher, or 3.8210% and 3.8840% respectively.

The decision to use competitive bidding for the swaps produced discernible benefits in the rates achieved. Based on our models, the winning bids were 1.5 basis points and 0.3 basis points from the theoretical "mid-market" swap rate for each of the two swaps. We determined the mid-market level through the use of multiple rigorous modeling systems that our firm maintains, and confirmed the accuracy of our models through checking with several swap providers (other than the winning bidder). The term "mid-market" refers to the half-way point between the bid and the offered sides of the market – a point at which no swap provider would be willing to trade, as the provider couldn't even cover his costs, not to mention earn a profit. By comparison, in a negotiated transaction, the swap rate is generally between 5 and 10 basis points above the mid-market level.

The swaps were designed to provide the Board with known future fixed rates for the financing of its capital needs. An alternative approach the Board could have used instead of the swaps was a forward sale of conventional COPs. As a point of comparison with the swaps, we examined market rates for such COPs at the same time that the swaps were priced. Using data provided by Municipal Market Data Inc. ("MMD"), and making appropriate adjustments for the scheduled forward sale dates, we estimate that the conventional COPs would have been priced at 4.55% and 4.78%, respectively, or 74 basis points and 91 basis points higher than the corresponding swap rates. To make an apples-to-apples comparison, however, the swap rates should be adjusted upward by 26 basis points, to reflect the on-going costs (auction fees or remarketing and liquidity fees) of the associated variable rate bonds. With this adjustment, the swap rates are better by 48 basis points and 65 basis points, respectively. In present value terms, the aggregate financial benefit is equal to approximately \$12,200,000, using the relevant swap rates as

School Board of Miami-Dade County Swap Bid Report Page 3

the discount factor. It is important to point out that the two types of transactions are not precisely comparable, as each entails different risks and benefits.

Part of the relative benefit of the swaps stems from the lower cost of using swaps to lock in forward rates. The forward premiums on the Group I Swap and Group II Swap were 1.3 bps and 3.2 bps, respectively (equivalent to a present value of \$145,000 and \$166,000). This compares with forward premiums for a forward sale of COPs that is estimated at 15 bps and 30 bps respectively (equivalent to a present value of \$1,695,000 and \$1,560,000).

COMPETITIVE VERSUS NEGOTIATED INTEREST RATE EXCHANGE AGREEMENT

Competitive bidding of an interest rate exchange agreement gives the School Board the opportunity to require certain provisions in the agreement. Below are some of the provisions that the bidders had to agree to.

Minimum Ratings

Negotiated: typically minimum ratings (which trigger various adverse consequences) are the same for both parties

Competitive: the minimum ratings are more favorable for the School Board, with a higher minimum rating (A-/A3) required of the swap providers than that required of the School Board (BBB-/Baa3) – this differential is reflective of the lower likelihood of default by public entities as opposed to financial corporations

• Specified Indebtedness

Negotiated: specified indebtedness (which also could trigger various adverse consequences) for the counterparty (the School Board) covers all obligations of the counterparty or, if limited, covers all obligations of the counterparty to the swap provider pursuant to any agreement

Competitive: specified indebtedness for the School Board is limited to other obligations under the Master Lease

Transferability

Negotiated: typically does not provide the counterparty with the ability to assign its rights and obligations under the swap agreement

Competitive: permits the School Board, subject to certain conditions, to assign its rights and obligations under the swap agreement, allowing significantly more flexibility to the School Board if it decides it wants to exit the agreement in advance of its scheduled maturity

Replacement

Negotiated: typically does not give the counterparty the right to replace the swap provider as an alternative to an early termination upon a downgrade of the swap provider's ratings

Competitive: gives the School Board the option to replace the swap provider rather than call an event of early termination upon a downgrade of the swap provider's ratings

Deferral of Termination Payments

Negotiated: usually requires immediate payment by counterparty upon an early termination

Competitive: The School Board is given time to amend the budget and appropriate for termination payments

ATTACHMENT C

THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA NOTES TO THE FINANCIAL STATEMENTS For the Fiscal year Ended June 30, 2008

11. <u>OBLIGATIONS UNDER LEASE PURCHASE AGREEMENT</u> – CERTIFICATES OF PARTICIPATION, Continued:

Forward Interest Rate Swaps:

Objectives: The District entered into forward interest rate swaps (referred to herein collectively as "Swaps") in order to lower its cost of capital and protect against rising interest rates. The Swaps are a hedge on the District's floating rate debt and were executed to manage its mix of fixed and floating rate exposure in its on-going borrowing program.

Summary of Swap Transactions by Category:

Forward Synthetic Fixed Rate Swap Transactions

Date of Execution	Notional Amount Outstanding	Effective Date	Termination Date	Associated Certificates	Fixed Payable Swap Rate	Variable Receivable Swap Rate	Counterparty Credit Rating at June 30, 2008	Fair Value at June 30, 2008
04-03-2006	\$68,070,000	04-01-07	08-01-2027	COP 2002A	3,821%	70% 1Mo LIBOR	Aaa/AA-	(\$3,076,839)
04-03-2006	\$68,070,000	04-01-07	08-01-2027	COP 2002B	3.821%	70% 1 M o LIBOR	Aaa/AA-	(\$3,086,440)
04-03-2006	\$57,440,000	08-01-08	07-15-2027	COP 2003A	3.884%	70% 1Mo LIBOR	A2/A	(\$3,024,269)

Swap Payments and Associated Debt: As of June 30, 2008, debt service requirements and net swap payments were as follows (in thousands):

Fiscal Year	<u>Principal</u>	<u>Interest</u>	Swap Net Interest	Total Interest
2008	\$3,945	\$5,278	\$1,003	\$6,281

Using rates as of June 30, 2008, debt service requirements for variable rate debt and net Swap payment, assuming current interest rates remain the same, were as follows (in thousands):

Fiscal Year	P	rincipal	la	nterest	Swap I	Net Interest	Total	Interest
2009	\$	3,945	\$	3,968	\$	2,781	\$	6,749
2010	\$	4,155	\$	3,845	\$	2,693	\$	6,538
2011	\$	4,375	\$	3,531	\$	2,473	\$	6,004
2012	\$	4,915	\$	3,558	\$	2,484	\$	6,042
2013	\$	4,865	\$	3,422	\$	2,393	\$	5,815
2014 - 2018	\$	28,530	\$	14,663	\$	10,261	\$	24,924
2019 - 2023	\$	37,245	\$	9,576	\$	6,696	\$	16,272
2024 - 2028	\$	48,110	_\$_	3,230	\$	2,258	\$	5,488
Total	\$	136,140	\$	45,793	\$	32,039	\$	77,832

Risk Disclosure:

Credit Risk. The Swaps rely upon the performance of the third parties who serve as swap counterparties, and as a result the District is exposed to credit risk, or the risk that a swap counterparty fails to perform according to its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swaps, as shown in the columns labeled Fair Value in the tables above. All Fair Values have been calculated using the Par Value Method. To mitigate credit risk, the District maintains strict credit standards for swap counterparties. The current swap counterparties have ratings in single-A category or better. To further mitigate credit risk, the District's swap documents require counterparties to post collateral for the District's benefit if they are downgraded below a designated threshold.

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THE SCHOOL BOARD OF MIAMI-DADE COUNTY, FLORIDA NOTES TO THE FINANCIAL STATEMENTS For the Fiscal year Ended June 30, 2008

11. <u>OBLIGATIONS UNDER LEASE PURCHASE AGREEMENT</u> – <u>CERTIFICATES OF PARTICIPATION, Continued</u>:

Basis Risk. The District's Swaps expose the District to basis risk should the relationship between the floating rates the District will receive on the swaps (70% of LIBOR) fall short of the variable rate on the associated bonds the expected savings may not be realized. On August 1, 2008 the 2003A certificates were called under a mandatory tender (put) and new variable rate bonds were issued and are subject to the same basis risk. The Series 2002A & B were originally issued as insured auction rate certificates whose floating rate was expected to correspond closely with the floating rate the District would receive on the swaps. Because of the severe disruption in the auction rate market in early 2008, the floating rate on the certificates rose sharply and the District chose to enter into a private placement of the certificates. The private placement has reduced the rate on the certificates from the elevated levels created by the market disruption. However the rate on the certificates, relative to floating rate market benchmarks, is higher than originally anticipated when the swaps were first executed, creating a higher all-in cost to the District. As of June 30, 2008 the variable rate was 2.96%, while the LIBOR rate was 2.46% and the District received 1.72% (70%).

Termination Risk. The District's swap agreements do not contain any out-of-the-ordinary termination events that would expose it to significant termination risk. In keeping with market standards the District or the counterparty may terminate each swap if the other party fails to perform under the terms of the contract. In addition, the swap documents allow either party to terminate in the event of a significant loss of creditworthiness. The District views such events to be remote at this time. If at the time of the termination a swap has a negative value, the District would be liable to the counterparty for a payment equal to the fair value of such swap.

12. **DEBT SERVICE:**

The amount available for debt service consists of resources from the Debt Service Funds legally required to be used for debt service until the related debt is extinguished (in thousands):

Categories:	<u>Amounts</u>	
Reserved for Payment of State Board of Education and Capital Outlay Bonds	\$	2,590
Designated for Payment of District Bond Funds		68,105
Reserved for Other Debt Service		21,462
Total Available in Debt Service Funds	\$	92,157

All Certificates of Participation Lease Payments and all other amounts required to be paid by the School Board under the various Series under the Master Lease and all other Leases are made from legally available funds appropriated for such purpose by the School Board. The substantive portion for these payments is provided by the Local Optional Millage Levy on ad-valorem property. Separate Lease Payment Accounts are established for each series of Certificates issued under the Trust Agreement. Lease Payments are due under the Master Lease on an all-or-none basis and are payable on a parity basis solely from legally available funds appropriated by the School Board for such purpose. Such payments are normally transferred to the Trustee 15 days before Lease Payments are due.

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Miami-Dade County Public Schools Anti-Discrimination Policy

Federal and State Laws

The School Board of Miami-Dade County, Florida adheres to a policy of nondiscrimination in employment and educational programs/activities and strives affirmatively to provide equal opportunity for all as required by:

<u>Title VI of the Civil Rights Act of 1964</u> - prohibits discrimination on the basis of race, color, religion, or national origin.

<u>Title VII of the Civil Rights Act of 1964 as amended</u> - prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

<u>Title IX of the Education Amendments of 1972</u> - prohibits discrimination on the basis of gender.

Age Discrimination in Employment Act of 1967 (ADEA) as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

<u>The Equal Pay Act of 1963 as amended</u> - prohibits gender discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 - prohibits discrimination against the disabled.

<u>Americans with Disabilities Act of 1990 (ADA)</u> - prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) - requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

<u>The Pregnancy Discrimination Act of 1978</u> - prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) - prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

<u>Florida Civil Rights Act of 1992</u> - secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

<u>Title II of the Genetic Information Nondiscrimination Act of 2008 (GINA)</u> - Prohibits discrimination against employees or applicants because of genetic information.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.

In Addition:

School Board Policies 1362, 3362, 4362, and 5517 - Prohibit harassment and/or discrimination against students, employees, or applicants on the basis of sex, race, color, ethnic or national origin, religion, marital status, disability, genetic information, age, political beliefs, sexual orientation, gender, gender identification, social and family background, linguistic preference, pregnancy, and any other legally prohibited basis. Retaliation for engaging in a protected activity is also prohibited.

Revised: (05.12)

INTERNAL AUDIT REPORT

Audit of Internal Controls Over Derivative Instruments Management



MIAMI-DADE COUNTY PUBLIC SCHOOLS Office of Management and Compliance Audits 1450 N.E. 2nd Avenue, Room 415 Miami, Florida 33132

Telephone: (305)995-1318 ♦ Fax: (305)995-1331 http://mca.dadeschools.net