

Statewide Accounting Policy & Procedure

Accounting Manual Reference:

Section: Derivative Instruments Sub-section: N/A
 Effective Date:
 07/01/2009

 Revision Date:
 04/11/2012

Index:

Policy Summary Policy Requirements General Accounting Procedures Authority Applicability Definitions

Policy Summary:

The purpose of this policy is to prescribe statewide guidelines for complying with Governmental Accounting Standards Board (GASB) Codification Section D40, *Derivative Instruments*. Governments seeking to manage specific risks associated with assets and liabilities utilize financial contracts that can be described as derivative instruments. These instruments are entered into by governments with the intent to produce investment income (investment derivative instrument) or these instruments may be used by governments to decrease the expense of borrowing or to fix or reduce the volatility of prices (hedging derivative instrument). Hedging derivative instruments utilize hedge accounting when the hedge is effective. If the hedge of a hedging derivative instrument becomes ineffective, hedge accounting is no longer used and the derivative is accounted for in the same manner as investment derivative instruments.

Derivatives can be very complex in nature and include all of the following characteristics:

- Settlement factors including one or more reference rates and one or more notional amounts or payment provisions; or combinations of any of these factors.
- Leverage in that the instruments may require no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- Net Settlement in that the terms of the instrument require or permit net settlement, the instrument can readily be settled net by a means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Codification Section D40 was created to enhance transparency and improve consistency as it relates to the reporting of derivative instruments. Specifically, Codification Section D40 requires the reporting of most derivative instruments at fair value in the entity-wide, proprietary, and fiduciary fund level financial statements. Hedging derivative instruments, like investment derivative instruments, experience changes in fair value, however their historical cost is oftentimes zero. Codification Section D40 requires that these changes in fair value of effectively hedged derivatives be reported in the statement of net assets as deferred inflows/outflows of resources utilizing hedge accounting. Changes in fair value of derivatives entered into with the intent of producing investment income are to be reported within investment income. Changes in the fair value of hedging derivative instruments that have been determined ineffective (ineffective hedging derivative instruments) are also required to be recognized within investment income

for the remaining life of the instrument and no longer recognized as deferred inflows/outflows of resources.

This policy, as with Codification Section D40, uses vocabulary that is specific to derivative markets and the assumption has been made that parties involved in the use of derivative instruments are familiar with this vocabulary. However, a short list of definitions is provided at the end of this policy. If a particular term is not defined, a more complete list of definitions can be found in the Codification Section D40 glossary.

It is important to note that derivative instruments can expose governments to significant risk and liability. Therefore, they should be entered into and monitored with great caution. Examples of potential risks that have been provided in Codification Section D40 (included in the definitions below) are as follows:

- Termination risk
- Credit risk
- Interest rate risk
- Basis risk
- Rollover risk
- Market-access risk
- Foreign currency risk

The scope of this policy is limited to a discussion of Codification Section D40 derivative instrument reporting requirements such as:

- Disclosures for hedging derivative instruments; i.e., interest rate swaps, interest rate locks, commodities forward contracts
- Various hedging derivative instrument effectiveness tests
- Disclosures for investment derivative instruments such as Options and Futures Contracts

The scope of this policy excludes the following types of instruments (as does Codification Section D40):

- Normal purchases and normal sales contracts
- Insurance contracts accounted for under GASB Statement No. 10, Accounting and Financial Reporting for Risk Financing and Related Insurance Issues
- Certain financial guarantee contracts
- Certain contracts that are not exchange-traded
- Loan commitments (e.g., loan commitments to first-time home buyers for mortgage loans)

<u>Policy Requirements</u>:

Organizations included in the State of Georgia financial reporting entity that enter into derivative contracts are required to comply with the recognition, measurement and disclosure provisions of Codification Section D40.

Accounting Requirements

At the fund level, derivative instruments are recorded using the basis of accounting that is appropriate for the fund. Within the government-wide, proprietary fund, and fiduciary fund financial statements, derivative instruments should be recorded on the statement of net assets, or statement of fiduciary net assets, depending on the fair value of the instrument, segmented by type, as either assets or liabilities, i.e., derivative instrument – interest rate swaps, derivative instrument – commodity swaps, etc.

The changes in fair values of effectively hedged hedging derivative instruments are reported utilizing hedge accounting as deferred inflows and deferred outflows on the statement of net assets. The changes in fair value of other derivative instruments that are investment derivative instruments or ineffectively

hedged hedging derivative instruments are reported as income or loss in the investment revenue classification in the current year.

Fair value information may be provided by the counterparty. However, reporting organizations will be responsible for making sure that fair value calculations reported have been performed in accordance with Codification Section D40. If possible, documentation should be obtained from the counterparty outlining the calculation methods used.

Hedging Derivative Instruments Effectiveness Testing:

To be considered effective and reported utilizing hedge accounting, hedging derivative instruments must be evaluated using either quantitative or qualitative evaluation methods at the end of each fiscal year. A hedge can be considered effective by successfully passing one of the following acceptable methods:

- *Consistent critical terms method:* This method is considered a qualitative method and tests the terms of the derivative instrument with the terms of the hedgeable item to determine that they are either the same or essentially similar in terms. To successfully pass this test, an organization must show that the critical terms of the hedgeable item and hedging derivative instrument are the same or similar and will result in changes and cash flows of one offsetting the other. An interest rate swap should address the following requirements to be considered an effective hedge:
 - o The fair value of derivative instrument at inception must be zero.
 - The fixed rate must remain the same throughout the life of the swap.
 - The notional amount of the swap must equal the principal amount of the item being hedged throughout the life of the derivative.
 - A swap instrument is based on a benchmark interest rate.
 - The derivative term is less than or equal to the item being hedged.
 - The instrument and the hedgeable item should contain no floor or cap unless they are both the same.
 - The time interval between rate resets is the same as the hedgeable item.
 - Rate reset dates must be within 6 days of the rate reset of the hedgeable item.
 - The periodic payments must be within 15 days of the periodic payments of the hedgeable item.

Similar requirements exist for the evaluation of commodity swaps and forward contracts under the consistent critical terms method.

- *Synthetic instrument method:* This method is considered a quantitative method. It is used to test the effectiveness of cash flow hedges. It essentially determines the effectiveness of a potential hedge by treating a derivative instrument and an associated hedgeable item as a single synthetic instrument and then comparing actual performance to intended performance to determine that the former approximates the latter. As an example, combine the cash flows from both the derivative and the hedgeable item and calculate the rate of return. Compare this rate to that of the swap fixed rate. If the actual result compared to the intended result is between 90% and 111%, the hedge is effective.
- *Dollar-offset method:* This method is also a quantitative method. It determines the effectiveness of a potential hedge by directly comparing changes in cash flows or changes in fair values of the derivative and of the item with which it is associated. To qualify as effective, the results of dividing one by the other must be between 80% and 125% inclusive.
- *Regression analysis:* This method is another quantitative method and it requires an understanding of statistics. It is used to establish that a hedge is effective and requires that:
 - R-squared be at least .80.
 - F-statistic demonstrates significance by using at least a 95% confidence interval.
 - Regression coefficient for the slope is between -1.25 and -0.80.

It is permissible for the evaluation of effectiveness to be performed by an outside party so long as the method used is verifiable and understandable by the reporting organization.

Depending on market conditions, hedging derivative instruments initially may be determined to be effectively hedged; however, in future years, the hedge may become ineffective. As indicated above, when a derivative instrument becomes ineffectively hedged, it essentially reverts to an investment derivative for the remaining life and should be accounted for appropriately (i.e., changes in fair value from year to year should be recorded on the statement of activities; statement of revenues, expenses, and changes in fund net assets; and statement of changes in fiduciary net assets) in the investment income classification. In addition, the occurrence of any of the following events would require the termination of hedge accounting:

- The likelihood that a hedged expected transaction will occur is no longer probable.
- The hedged asset or liability, such as a hedged bond, is sold or retired but not reported as a current refunding or advance refunding resulting in a defeasance of debt.
- The hedging derivative instrument is terminated and an effective hedging relationship does not continue. The termination of hedge accounting may not be required for hedging derivative instruments where the swap agreement has been amended. The effective hedging relationship continues when all of the following criteria are met:
 - Swap payment collection is considered probable
 - The swap agreement has been amended by replacing the original swap counterparty or swap counterparty's credit support provider, through assignment or in-substance assignment.
 - The government enters into the assignment or in-substance assignment in response to the swap counterparty, or the swap counterparty's credit support provider, either committing or experiencing an act of default or a termination event as both are described in the swap agreement.
- A current refunding or advance refunding resulting in the defeasance of the hedging debt is executed.
- The hedged expected transaction occurs, such as the purchase of an energy commodity or the sale of bonds.

The occurrence of any of the termination events described above would require the recognition of investment income/loss and the elimination of the associated deferral. The change from effective to ineffective should also be disclosed in the note to the financial statements.

Recognition and Measurement

Changes in fair value of investment derivative instruments (i.e., purchased for the primary purpose of investment income) should be reported within investment income in the statement of activities; statement of revenue, expenses and changes in fund net assets; and statement of changes in fiduciary net assets, as appropriate. This would include derivative instruments that do not meet the criteria for the use of hedge accounting and hedge derivatives that are determined to be ineffective.

Changes in fair value of hedging derivative instruments should be recognized through the application of hedge accounting – that is to say that the changes in fair value should be reported as either deferred inflow of resources or deferred outflow of resources on the statement of net assets.

Hedge accounting should be applied beginning in the period that the hedging derivative instrument is established and continue until it is terminated or becomes ineffective.

Fair value of the investment derivative instrument should be measured by market price unless unavailable. Usually the market price can be obtained from the counterparty. If the market price is unavailable it may be advisable to obtain an outside pricing service for assistance in estimating the fair value.

Basis of Accounting

Funds that operate on a statutory basis must convert their accounting activity to the modified accrual and/or accrual bases of accounting for the Comprehensive Annual Financial Report (CAFR). Proprietary and fiduciary funds that do not operate on a statutory basis use the accrual basis of accounting throughout the year.

- Statutory Basis for Budgetary Compliance Reporting Codification Section D40 does not apply because statements are not prepared in accordance with GAAP.
- Converting to Modified Accrual Basis for CAFR Reporting Codification Section D40 does not change existing requirements for reporting investments, investment earnings, bond proceeds, etc.
- Converting to Accrual Basis for CAFR Reporting Current and noncurrent derivative instrument assets and liabilities must be recognized for government-wide reporting purposes.
- Accrual Basis for Funds Not Reporting on a Statutory Basis Activity in these proprietary and fiduciary funds is reported throughout the year using the full accrual basis of accounting.

Disclosure Requirements

Footnote disclosures related to derivative instruments are required and must include the following items:

- A summary of derivative instrument activity during the reporting period and balances at the end of the reporting period. These should be disclosed by governmental activities, business type activities, and fiduciary funds.
- Derivative instruments are to be divided into the following categories:
 - Hedging derivative instruments (distinguished between fair value hedges and cash flow hedges).
 - Investment derivative instruments.

Within each category, derivative instruments should be aggregated by type (for example, receive-fixed swaps, pay-fixed swaps, swaptions, rate caps, basis swaps, or futures contracts).

Required information presented should include the following:

- Notional amount.
- Changes in fair value during the reporting period and the classification in the financial statements where those changes in fair value are reported.
- Fair value as of the end of the reporting period and the classification in the financial statement where those fair values are reported if derivative instrument fair values are based on other than quoted market prices, the methods and significant assumptions used to estimate those fair values should be disclosed.
- Fair value of derivative instruments reclassified from hedging derivative instruments to investment derivative instruments there also should be disclosure of the deferral amount that was reported within investment income upon the reclassifications.

Disclosures specifically required for hedging derivative instruments include the following:

- Objectives including the reason for entering into those instruments, the context needed to understand those objectives, the strategies for achieving those objectives, and the types of derivative instruments entered into.
- Significant terms that should be disclosed include the following:
 - Notional amount.
 - Reference rates, such as indexes or interest rates.
 - Embedded options, such as caps, floors, or collars.
 - The dates when the hedging derivative instrument was entered into and when it is scheduled to terminate or mature.
 - The amount of cash paid or received, if any, when a forward contract or swap (including swaptions) was entered into.

Hedging Derivative Instruments Risk Disclosures:

- The following information about credit risks for hedging derivatives is required:
 - Credit quality ratings of counterparties based on a nationally recognized statistical rating organization.
 - Maximum amount of loss due to credit risk the State would incur if the counterparties to the hedging derivative instrument fail to perform according to the terms, without respect to any collateral or other security or netting arrangement.
 - Policy of requiring collateral.
 - Policy of entering into master netting arrangements.
 - Aggregate fair value of hedging derivative instruments in an assets position, net of collateral posted by the counterparties, and the effect of master netting arrangements.
 - Significant concentrations of net exposure to credit risks.
- Interest rate risks of hedging derivative instruments.
- Basis risks.
- Termination risks such as any terminations events that have occurred, dates that the hedging derivative instrument may be terminated, and out of the ordinary termination events.
- Rollover risks including the maturity of the hedging derivative instrument and the maturity of the hedged item.
- Market-access risks.
- Foreign currency risks.

If the hedged item is a debt obligation, governments should disclose the hedging derivative instrument's net cash flows based on the requirements established by Statement No. 38.

Investment Derivative Instruments Risk Disclosures:

- Credit risk disclosures for investment derivative instruments listed as assets are the same as credit risk disclosures associated with hedging derivative instruments.
- Interest rate risk disclosures for investment derivative instruments should be reported based on the requirements in GASB Statement No. 40.
- Foreign currency risk disclosure should be disclosed based on GASB Statement No. 40.

General Accounting Procedures:

Identifying Transactions

To ensure compliance with the provisions of Codification Section D40, State of Georgia reporting organizations must establish internal controls to ensure that derivative instruments are properly identified and reported as required by this policy. The controls should address requirements to document the

purpose for the use of derivative instruments and document and monitor risks associated with such instruments.

Accounting Transactions and Journal Entries

Codification Section D40 does not change existing requirements for reporting investments, investment earnings, bond proceeds, etc., on either the statutory or modified accrual bases. The full accrual basis of accounting will, however, require that these instruments be recognized at fair value and that effectively hedged derivative instrument changes be deferred on the statement of net assets. This will require reporting derivative investment activity and note disclosure information at year-end. A comprehensive example of the entries to convert from the statutory basis of accounting to other bases is provided in Attachment 1. An example of the entries required to account for a hedging derivative that no longer provides an effective hedge is provided in Attachment 2.

Year-End Accounting Procedures

Those State reporting organizations that record day-to-day revenues and receivables transactions on a basis of accounting that varies from the GAAP reporting basis requirements must identify and provide to the State Accounting Office reconciling differences between the bases of accounting. This process enables the conversion to the appropriate GAAP basis of accounting for GAAP financial reporting purposes. The year-end reporting package, as provided by SAO, accommodates the process of the identification and submission of these differences. Timely completion of each form facilitates the conversion process.

The SAO will request information about derivative instrument investments and hedging activity as part of its year-end reporting package. Refer to the year-end form titled "Investments." Reporting organizations must provide the requested information to ensure that appropriate accrual basis adjusting entries are recorded in the annual financial reports.

Authority:

- GASB Statement No. 34, Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments
- GASB Statement No. 38, Certain Financial Statement Note Disclosures
- GASB Statement No. 40, *Deposit and Investment Risk Disclosures*
- GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments
- GASB Statement No. 64, Derivative Instruments: Application of Hedge Accounting Termination Provisions
- GASB Codification Section D40, Derivative Instruments

Applicability:

This policy is applicable to all State of Georgia reporting organizations that enter into derivative instruments, as they are defined in Codification Section D40. Personnel with accounting and reporting responsibilities at these reporting organizations should be knowledgeable of this policy. It is also highly recommended that personnel be knowledgeable of Codification Section D40.

Definitions:

Basis Risk – The risk that arises when variable rates or prices of a hedging derivative instrument and a hedged item are based on different reference rates.

Call Option – An option that gives its holder the right but not the obligation to purchase a financial instrument or commodity at a certain price for a period of time.

Cash Flow Hedge – A hedge that protects against the risk of either changes in total variable cash flows or adverse changes in cash flows caused by variable prices, costs, rates, or terms that cause future prices to be uncertain.

Commodity Swap - A swap that has a variable payment based on the price or index of an underlying commodity.

Credit Risk – The risk that a counterparty will not fulfill its obligations.

Critical Term – A significant term of the hedgeable item and potential hedging derivative instrument that affects whether the changes in cash flows or fair values substantially offset. Examples are the notional or principal amounts, payment dates, and in some cases, fair values at inception, indexes, rates, and options.

Foreign Currency Risk – The risk that changes in exchange rates will adversely affect the cash flows or fair value of a transaction.

Forward Contract – A contractual agreement to buy or sell a security, commodity, foreign currency, or other financial instrument, at a certain future date for a specific price. An agreement with a supplier to purchase a quantity of heating oil at a certain future time, for a certain price, and a certain quantity is an example of a forward contract. Forward contracts are not securities and are not exchange-traded. Some forward contracts, rather than taking or making delivery of a commodity or financial instrument, may be settled by a cash payment that is equal to the fair value of the contract.

Futures Contract – An exchange-traded security to buy or sell a security, commodity, foreign currency, or other financial instrument at a certain future date for a specific price. A futures contract obligates a buyer to purchase the commodity or financial instrument and a seller to sell it, unless an offsetting contract is entered into to offset one's obligation. The resources or obligations acquired through these contracts are usually terminated by entering into offsetting contracts.

Hedge Accounting – The financial reporting treatment for hedging derivative instruments that requires that the changes in fair value of hedging derivative instruments be reported as either deferred inflows or deferred outflows.

Hedgeable Item – An asset or liability, or expected transaction that may be associated with a potential hedging derivative instrument.

Hedging Derivative Instrument – A derivative instrument that is 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.

Interest rate Risk – The risk that changes in interest rates will adversely affect the fair values of a government's financial instruments or a government's cash flows.

Interest rate Swap – A swap that has a variable payment based on the price of an underlying interest rate or index.

Investment Derivative Instrument – A derivative instrument that is entered into primarily for the purpose of obtaining income or profit, or a derivative instrument that does not meet the effectiveness criteria of a hedging derivative instrument.

Leverage – The means of enhancing changes in fair value while minimizing or eliminating an initial investment. A leveraged investment has changes in fair value that are disproportionate to the initial net investment. An unleveraged investment requires a far greater initial investment to replicate similar changes in fair values. Derivative instruments are leveraged instruments because their changes in fair value are disproportionate to the initial net investment. For example, an interest rate swap that has a notional value of \$100 million is entered into with no initial net investment. Thereafter, as interest rates change, the swap produces changes in fair value consistent with a \$100 million fixed-rate financial instrument.

Market Risk – The risk that changes in market prices will reduce the fair value of an asset, increase the fair value of a liability, or adversely affect the cash flows of an expected transaction.

Market-access Risk – The risk that a government will not be able to enter credit markets or that credit will become more costly. For example, to complete a derivative instrument's objective, an issuance of refunding bonds may be planned in the future. If at that time the government is unable to enter credit markets, expected cost savings may not be realized.

Notional Amount – The number of currency units, shares, bushels, pounds, or other units specified in the derivative instrument. It is a stated amount on which payments depend. The notional amount is similar to the principal amount of a bond.

Option – A contract that gives its holder the right but not the obligation to buy or sell a financial instrument or commodity at a certain price for a period of time.

Put Option – An option that gives its holder the right but not the obligation to sell a financial instrument or commodity at a certain price for a period of time.

Qualitative Method – A method of evaluating effectiveness by qualitative consideration of the critical terms of the hedgeable item and the potential hedging derivative instrument.

Quantitative Method – A method of evaluating effectiveness using a mathematical relationship. Synthetic instrument, dollar-offset, and regression analysis are the quantitative methods specifically addressed in Codification Section D40 and this policy.

Reference Rate – The rate to which a derivative instrument's variable payment is linked. Common reference rates are LIBOR, the SIFMA swap index, the AAA general obligations index, and the pricing point of a commodity.

Regression Analysis Method – A statistical technique that measures the relationship between a dependent variable and one or more independent variables. The future value of the dependent variable is predicted by measuring the size and significance of each independent variable in relation to the dependent variable. Regression analysis included in the text of this policy and Codification Section D40 uses only one independent variable.

Rollover Risk – The risk that a hedging derivative instrument associated with a hedgeable item does not extend to the maturity of that hedgeable item. When the hedging derivative instrument terminates, the hedgeable item will no longer have the benefit of the hedging derivative instrument.

Swap – A type of derivative instrument in which there is an agreement to exchange future cash flows. These cash flows may be either fixed or variable and may be either received or paid. Variable cash flows depend on a reference rate. *Swaption* – An option to enter into a swap. When a swaption is an interest rate option, it may be used to hedge long-term debt. When a government sells a swaption a cash payment may be received. Options pricing theory, including time and volatility measures, is used to value swaptions.

Synthetic Instrument Method – A method of evaluating effectiveness that combines a hedge item and a potential hedging derivative instrument into a hypothetical financial instrument to evaluate whether the hypothetical financial instrument pays a substantively fixed rate.

Termination Risk – The risk that a hedging derivative instrument's unscheduled end will affect a government's asset and liability strategy or will present the government with potentially significant unscheduled termination payments to the counterparty.

Zero Fair Value – Value of a derivative instrument that is either entered into or exited with no consideration being exchanged. A zero fair value should be within a dealer's normal bid/offer spread.

Attachment 1

Hedging Derivative Instrument – Conversion from Statutory Basis of Accounting to Other Bases

Assumptions:

 <u>\$1000.000</u> sale of bond issue with interest rate swap contract executed during year 1: \$15,000 net swap payment in year 1; \$16,000 net swap payment in year 2 \$10,000 interest payment to bondholders in year 1; \$9,000 interest payment to bondholders in year 2 \$30,000 interest rate swap liability in year 1; \$15,000 interest rate swap liability in year 2 \$50,000 Beginning Cash and Fund Balance/Net Assets

Basis of Accounting	Journal Entry / Year-End Balance Descriptions	Governmental Funds that Operate on a Modified Accrual Basis		Proprietary & Fiduciary Funds that Operate Only on the Full Accrual Basis	
	Debit / (Credit)	Year 1	Year 2	Year 1	Year 2
Beginning balances	Expenditure/Fund Balance Cash	(50,000) 50,000	(1,025,000) 1,025,000		
Modified Accrual Basis:					
Executed purchase year 1:	Cash Other Financing Sources (uses)	1,000,000 (1,000,000)			
Interest Expense year 1: (net swap payment)	Expenditure Cash	15,000 (15,000)	16000	N/A	N/A
Interest Expense year 2: (net swap payment)	Expenditure Cash		16,000 (16,000)		
Interest Expense year 1: (payment to bondholders)	Expenditure Cash	10,000 (10,000)	0.000		
Interest Expense year 2: (payment to bondholders)	Expenditure Cash		9,000 (9,000)		
Year-end balances	Expenditure/Fund Balance Cash	(1,025,000) 1,025,000	(1,000,000) 1,000,000		
Full Accrual Basis:					
Executed purchase year 1: (Full Accrual Only)	Cash Bonds payable			1,000,000 (1,000,000)	
Interest Expense year 1: (net swap payment)	Expenditure/Expense Cash			15,000 (15,000)	
Interest Expense year 2: (net swap payment) (Full Accrual Only)	Expenditure/Expense Cash				16,000 (16,000)
Interest Expense year 1: (payment to bondholders)	Expenditure/Expense Cash			10,000 (10,000)	
Interest Expense year 2: (payment to bondholders) (Full Accrual Only)	Expenditure/Expense Cash				9,000 (9,000)
Full Accrual Conversion of other Financing Sources (uses)	Other Financing Sources (uses)	1,000,000			
to bond debt.	Bonds Payable	(1,000,000)			
Recognize beginning balance of bond debt on accrual basis	Fund Balance - July 1 Bonds Payable		1,000,000 (1,000,000)		
Establish derivative instrument asset/liability and corresponding deferred inflow/outflow:	Deferred outflow Derivative instrument swap	30,000 (30,000)		30,000 (30,000)	
(based on fair value of derivative instrument)	Derivative instrument swap Deferred outflow		15,000 (15,000)		15,000 (15,000)
Year-end balances	Expense/Net Assets Bonds Payable	(25,000) (1,000,000)	- (1,000,000)	(25,000) (1,000,000)	- (1,000,000)
	Cash Derivative instrument - interest rate swap	1,025,000 (30,000)	1,000,000 (15,000)	1,025,000 (30,000)	1,000,000 (15,000)
	Deferred outflow of resources	30,000	15,000	30,000	15,000

Attachment 2

Hedging Derivative Instrument - Termination - Conversion from Statutory Basis of Accounting to Other Bases

Assumptions:
 Hedging derivative instrument from Attachment 1 terminated beginning of year 3 for any of the following reasons:
 Hedging derivative instrument was determined to be ineffective at hedging risk
 Derivative instrument with hedging derivative called, redemed, or matured

- \$15,000 Derivative instrument fair value when determined ineffective or terminated should be recognized
- as an investment income.
- Derivative instrument fair value at year end was \$16,000

Basis of Accounting	Journal Entry / Year-End Balance Descriptions	Governmental Funds that Operate on a Modified Accrual Basis		Proprietary & Fiduciary Funds that Operate Only on the Full Accrual Basis	
	Debit / (Credit)	Year 2	Year 3	Year 2	Year 3
Beginning balances	Expenditure/Fund Balance Cash	(1,025,000) 1,025,000	(1,000,000) 1,000,000		
Modified Accrual Basis:		,,	,,		
Executed redemption year 3:	Debt Service - Principal Cash		1,000,000 (1,000,000)	N/A	N/A
Interest Expense year 2: (net swap payment)	Expenditure Cash	16,000 (16,000)			
Interest Expense year 2: (payment to bondholders)	Expenditure Cash	9,000 (9,000)			
Year-end balances	Expenditure/Fund Balance Cash	(1,000,000) 1,000,000	-		
Full Accrual Basis:					
Interest Expense year 2: (net swap payment) (Full Accrual Only)	Expenditure/Expense Cash			16,000 (16,000)	
Interest Expense year 2: (payment to bondholders) (Full Accrual Only)	Expenditure/Expense Cash			9,000 (9,000)	
Establish derivative instrument asset/liability and corresponding deferred inflow/outflow: (based on fair value of derivative instrument)	Derivative instrument swap Deferred outflow	15,000 (15,000)		15,000 (15,000)	
Executed redemption year 3: (Full Accrual Only)	Bonds payable Cash				1,000,000 (1,000,000)
Recognize beginning balance of bond debt on accrual basis	Fund Balance - July 1 Bonds Payable	1,000,000 (1,000,000)	1,000,000 (1,000,000)		
Full Accrual Conversion of other Financing Sources (uses)	Bonds Payable		1,000,000		
for the redemption of bond payable.	Debt Service - Principal		(1,000,000)		
Establish derivative instrument asset/liability and corresponding deferred inflow/outflow:	Investment Income Deferred outflow		15,000 (15,000)		15,000 (15,000)
(based on fair value of derivative instrument)	Derivative instrument swap Investment Income		16,000 (16,000)		16,000 (16,000)
Eliminate Derivative instrument - interest rate swap (for hedge derivative instrument no longer effective)	Investments Derivative instrument swap		1,000 (1,000)		5,000 (5,000)
Year-end balances	Income/Expense/Net Assets Bonds Payable Cash	- (1,000,000) 1,000,000	(1,000)	- (1,000,000) 1,000,000	(1,000)
	Investments Derivative instrument -	(15,000)	1,000	(15,000)	1,000
	interest rate swap Deferred outflow of resources	15,000	-	15,000	-