OREGON ACCOUNTING MANUAL

Subject:	Accounting and Financial Reporting	**Number:**	15.20.00
Division:	Chief Financial Office	**Effective date:**	July 16, 2015
Chapter:	Accounting and Financial Reporting		
Part:	Derivative Instruments		
Approved:	George Naughton, Chief Financial Officer		Signature on file

PURPOSE: This policy provides guidance on the accounting and financial reporting of derivatives.

AUTHORITY:
ORS 291.015
ORS 293.590
GASB Statement No. 53
GASB Statement No. 59
GASB Statement No. 64

APPLICABILITY: This policy applies to all state agencies included in the state's financial statements, except those agencies specifically exempted by **OAM 01.05.00**.

DEFINITIONS: **Derivative instruments:** Complex financial arrangements used to manage risks or to make investments. Other data, such as bond or commodity prices, or indexes based on those prices, determine the fair values and cash flows of derivative instruments. By entering into these transactions, the parties involved make and receive payments without entering into the related financial or commodity transactions.

A derivative instrument is a financial instrument or other contract that contains all three of the following features:

a. Settlement factors. The derivative has:

- One or more reference rates(1) and
- One or more notional amounts(2) or payment provisions, or both.

b. Leverage. The derivative requires no initial net investment, or the initial net investment is smaller than required for other types of contracts expected to have a similar response to changes in market factors.

(1) A reference rate is an interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable. A reference rate may be a price or rate of an asset or liability but is not the asset or liability itself.

(2) A notional amount is a number of currency units, shares, bushels, pounds, or other units specified in the derivative instrument. The interaction of the notional amount and the reference rate determines the settlement of a derivative instrument.

c. Net Settlement. The derivative terms require or permit net settlement, which can readily be settled net by a means outside of the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

A derivative contract contains a "net settlement" provision if the contract terms meet one of the following criteria:

a. The terms require neither party to deliver an asset associated with the reference rate that has a principal amount, stated amount, face value, number of shares, or other denomination that is equal to the notional amount. For example, most interest rate swaps do not require that either party deliver cash or interest-bearing assets with a principal amount equal to the notional amount of the contract.

b. The terms require one of the parties to deliver an asset that has a principal amount, stated amount, face value, number of shares, or other denomination that is equal to the notional amount, but also provide a method for net settlement. For example, the terms provide for an exchange that offers an opportunity to sell the contract or to enter into an offsetting contract.

c. The terms require one of the parties to deliver an asset that has a principal amount, stated amount, face value, number of shares, or other denomination that is equal to the notional amount, but that asset is convertible to cash or is itself a derivative instrument. An example of that type of contract is a forward contract that requires delivery of an exchange-traded equity security. Even though the number of shares delivered is the same as the notional amount of the contract and the price of the shares is the reference rate, an exchange-traded security is readily convertible to cash.

Some construction or purchase contracts include nonperformance penalty provisions. A penalty payment for nonperformance, either fixed or variable, that is dependent on the failure of the counterparty to comply with a contract term does not meet the net settlement characteristic.

Fully benefit-responsive synthetic guaranteed investment contract, or SGIC: A modified guaranteed investment contract (GIC) in which the underlying assets of the synthetic contract are owned by the plan itself rather than the insurance company, as is the case with the GIC. This ownership right is of particular importance if the long-term financial soundness of an insurance company is doubtful. The synthetic plan segregates the plan's assets from the assets of the insurance company.

Click here for other **definitions**.

POLICY

101. Agency management must ensure the proper accounting and reporting of derivative instruments. Derivative instruments include, but are not limited to:

a. Futures contracts
b. Forward contracts that contain net settlement provisions
c. Option contracts

d. Interest rate and currency swaps
e. Other financial instruments with similar characteristics

102. Agencies must account for derivative instruments as either investments or hedges.

103. Report investment derivative instruments as part of the investments account and report hedging derivative instruments as both an asset and deferred inflow of resources or as a liability and deferred outflow of resources. The deferred inflow and deferred outflow accounts are considered neither assets nor liabilities but should be reported on the face of the statement of net position.

104. Report derivative instruments at fair value with the exception of fully benefit-responsive synthetic guaranteed investment contracts, or SGICs. For an SGIC, report the combination of the underlying investments and the wrap contract at contract value.

105. Report the changes in the fair value of investment derivative instruments, including hedging derivative instruments the agency determines are ineffective, in the operating statement.

106. Report the changes in the fair values of hedging derivative instruments as either deferred inflows of resources or deferred outflows of resources in the statement of net position.

107. Determine fair value using the market price if an active market exists. If a market price is not available, agencies may use a forecast of discounted expected cash flows. Formula-based methods and mathematical methods are also acceptable, such as matrix pricing, zero-coupon method, and the par-value method. Agencies may base the fair value of options on option-pricing models. Fair values determined by pricing services are acceptable if the services use the methods described above.

108. Agencies use investment derivative instruments primarily for obtaining income or profit.

109. Agencies use hedging derivative instruments to reduce the risk of adverse changes in cash flows and fair values of assets, liabilities, and expected transactions, e.g., to counter increases in interest costs, to offset commodity price increases, or to protect against losses in fair value.

110. A hedging derivative instrument must meet both of the following criteria:

a. The derivative instrument “associates” with a hedgeable item. This means:

- The notional amount of the derivative instrument is consistent with the principal amount or quantity of the hedgeable item,
- The derivative instrument is in the same fund as the hedgeable item, and
- The term or time period of the derivative instrument is consistent with the term or time period of the hedgeable item.

b. The hedge is effective, meaning it significantly reduces financial risk. Agencies establish *effectiveness* by showing that the changes in cash flows or fair values of the potential hedging derivative instrument substantially offset the changes in cash flows or fair values of the hedgeable item. Hedgeable items can be all or a specific portion of:

- A single asset or liability, for example, an entire bond issue or a specific portion of a bond issue

- Groups of similar assets or liabilities
- An expected transaction

111. Assets and liabilities measured at fair value do not qualify as hedgeable items.

112. To evaluate potential hedging derivative instruments for effectiveness, use one of these methods:

a. The consistent critical terms method (qualitative)
b. The synthetic instrument method (quantitative)
c. The dollar-offset method (quantitative)
d. The regression analysis method (quantitative)
e. Other quantitative methods that meet GASB criteria (quantitative)

113. Risks that an agency may hedge include interest rate, tax, credit, and foreign currency risks. If the hedged risk is interest rate risk, the agency must use an appropriate benchmark interest rate for the evaluation of effectiveness. For tax-exempt debt, the appropriate benchmark interest rates include the SIFMA swap index and the AAA general obligations index. If an agency uses a swap that employs LIBOR or a percentage of LIBOR to hedge tax-exempt debt, evaluate hedge effectiveness using one of the quantitative methods listed above.

114. When a derivative instrument no longer meets the criteria of a hedging derivative instrument, account for it as an investments derivative instrument. Hedge accounting should cease to be applied upon the occurrence of one of the following termination events:

a. The hedging derivative instrument is no longer effective as determined by applying the criteria in paragraphs 26–62 of GASB Statement 53 - *Accounting and Financial Reporting for Derivative Instruments*.

b. The likelihood that a hedged expected transaction will occur is no longer probable.

c. The hedged asset or liability, such as a hedged bond, is sold or retired but not reported as a current refunding or advanced refunding resulting in a defeasance of debt.

d. The hedging derivative instrument is terminated unless an effective hedging relationship continues (described in 115 below)

e. A current refunding or advanced refunding resulting in the defeasance of the hedged debt is executed.

f. The hedged expected transaction occurs, such as the purchase of an energy commodity or the sale of bonds.

115. An effective hedging relationship continues when all of the following criteria are met, despite the termination of the hedging derivative, noted in 114(d) above:

a. Collectability of swap payments is considered probable.

b. The swap counterparty of the interest rate swap or commodity swap, or the swap counterparty's credit support provider, is replaced with an assignment or in-substance assignment (defined at 116 and 117).

c. 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.

116. An *assignment* occurs when a swap agreement is amended to replace an original swap counterparty, or the swap counterparty's credit support provider, but all of the other terms of the swap agreement remain unchanged.

117. An *in-substance assignment* occurs when all of the following criteria are met*:*

a. The original swap counterparty, or the swap counterparty's credit support provider, is replaced;

b. The original swap agreement is ended, and the replaced swap agreement is entered into on the same date; and

c. The terms of that affect changes in fair values and cash flows in the original and replacement swap agreements are identical.

PROCEDURES

Evaluation of Effectiveness of Hedging Instrument

118. *Evaluation of effectiveness in the first reporting period.* If the agency first evaluates a potential hedging derivative instrument using the consistent critical terms method, and the instrument does not meet the criteria, apply at least one quantitative method before concluding that the potential hedging derivative instrument is ineffective. If the agency first evaluates a potential hedging derivative instrument using a quantitative method and the instrument does not meet the criteria, an agency may apply another quantitative method(s) before concluding the derivative is ineffective. If the agency determines that a potential hedging derivative is ineffective in the first reporting period, do not evaluate for effectiveness in subsequent reporting periods.

119. *Evaluation of effectiveness in subsequent reporting periods.* Re-evaluate all hedging derivative instruments at the end of the current reporting period. Use the method applied in the prior reporting period. If the agency applies that method and the hedging derivative instrument no longer meets the criteria for effectiveness, the agency may apply another method(s) before concluding that the hedging derivative instrument is no longer effective.

Accounting for Derivative Instruments as Hedges

120. If, after following the guidance for evaluating effectiveness, agencies find a derivative instrument to be effective in reducing a financial risk, report and disclose that derivative in accordance with hedge accounting.

121. Under hedge accounting, agencies report the change in fair value of a hedging derivative instrument in the statement of net position as deferred inflows of resources (accumulated increases in fair value) or deferred outflows of resources (accumulated decreases in fair value) rather than as investment income or loss in the operating statement. Add each year's change in fair value to the deferral in the statement of net position. If the hedging derivative instrument remains effective and continues until its planned conclusion, the deferrals will balance out the fair value of the derivative until that value declines to zero when it concludes.

122. If a hedging derivative instrument ceases to be effective during its term or terminates early, agencies remove the deferred amounts from the statement of net position. Agencies then report the investment income or loss, plus or minus the changes in fair value for that year, in the operating statement. However, if a hedging derivative instrument hedges a liability such as a current or advanced refunding, then include the deferral amounts in the amortization associated with the refunding.

123. In the initial year, if an agency determines a derivative instrument is an effective hedge, consider the hedging derivative instrument effective for the current and previous reporting periods. On the other hand, if an agency determines that a derivative instrument is no longer effective at the end of the initial year, then evaluate the derivative instrument as of the end of the previous reporting period.

124. Use the entries below to report the fair value of an effective hedging derivative instrument in the statement of net position.

T-code 474/475: To record the fair value of a derivative instrument at the end of the initial year if the fair value is positive.

T-code 474		
DR 0998 Derivative Instrument-Asset	$100	
CR 2951 System Clearing GL Level Only		$100
T-code 475		
DR 2951 System Clearing GL Level Only	$100	
CR 1850 Deferred Inflows-Hedging Derivatives		$100

T-code 474/475: To record the fair value of the derivative instrument at the end of the initial year if the fair value is negative.

T-code 474		
DR 0999 Deferred Outflows-Hedging Derivative	$100	
CR 2951 System Clearing GL Level Only		$100
T-code 475		
DR 2951 System Clearing GL Level Only	$100	
CR 1785 Derivative Instrument-Liability		$100

These entries record the fair value of the hedging derivative instrument as offsetting assets and liabilities. Record similar entries in subsequent years provided the hedging derivative instrument is still effective.

125. If, at the end of a following year, an agency finds that a previously effective hedging derivative instrument is no longer effective, reverse the accumulated deferral amounts and immediately recognize the accumulated change in fair value in the operating statement.

T-code 487: To record the fair value of a previously effective hedge in the operating statement if the fair value balance is positive, using comptroller object 0830 – Net Increase (Decrease) in Fair Value of Investments.

DR 0245 Investment Valuation Account	$500	
CR 3200 GAAP Revenue Offset (C/O 0830)		$500

T-code 487R: To record the fair value of a previously effective hedge in the operating statement if the fair value balance is negative, using comptroller object 0830.

DR 3200 GAAP Revenue Offset (C/O 0830)	$500	
CR 0245 Investment Valuation Account		$500

T-code 487: To record the current year's change in fair value in the operating statement if positive, using comptroller object 0830:

DR 0245 Investment Valuation Account	$200	
CR 3200 GAAP Revenue Offset (C/O 0830)		$200

T-code 487R: To record the current year's change in fair value in the operating statement if negative, using comptroller object 0830:

DR 3200 GAAP Revenue Offset (C/O 0830)	$200	
CR 0245 Investment Valuation Account		$200

126. If, however, the hedging derivative instrument remains effective until the termination date, remove the previously deferred accumulated amounts from the accounting records with T-code 474R and T-code 475R:

T-code 475R/474R: To remove the asset and previously deferred inflows.

T-code 475R

DR 1850 Deferred Inflows-Hedging Derivatives	$2,000	
CR 2951 System Clearing GL Level Only		$2,000

T-code 474R

DR 2951 System Clearing GL Level Only	$2,000	
CR 0998 Derivative Instrument-Asset		$2,000

T-code 475R/474R: To remove the liability and previously deferred outflows.

T-code 475R

DR 1785 Derivative Instrument-Liability	$2,000	
CR 2951 System Clearing GL Level Only		$2,000

T-code 474R

DR 2951 System Clearing GL Level Only	$2,000	
CR 0999 Deferred Outflows-Hedging Derivatives		$2,000

Accounting for Derivative Instruments as Investments

127. Account for investment derivatives, which also include previously effective hedging derivatives that are no longer effective, similarly to other investments. Report changes in fair value for the current year in the operating statement.

T-code 487: To record a positive change in fair value using comptroller object 0830.

DR 0245 Investment Valuation Account	$100	
CR 3200 GAAP Revenue Offset (C/O 0830)		$100

T-code 487R: To record a negative change in fair value using comptroller object 0830.

DR	3200 GAAP Revenue Offset (C/O 0830)	$100	
CR	0245 Investment Valuation Account		$100

Hedging Derivative Instruments Disclosure Requirements

128. Report the following disclosures for hedging derivative instruments:

a. The objectives for entering into the derivative, the context needed to understand those objectives, the strategies for achieving those objectives, and the types of derivative instruments used.

b. Significant terms of the transaction, including:

- Notional amount;
- Reference rates, such as indexes or interest rates;
- Embedded options, such as caps, floors, or collars;
- The date when the agency entered into the derivative instrument and when it will terminate or mature;
- The amount of cash paid or received, if any, when an agency initiates a forward contract or swap.

c. Exposure to the following risks:

- *Credit risk* is the risk that another party to a transaction will not fulfill its obligations. Disclosures for credit risk include:

1. The credit quality ratings of counterparties as described by nationally recognized rating agencies as of the end of the reporting period. If the counterparty has no rating, indicate this fact.

2. The maximum amount of loss due to credit risk, based on the fair value of the hedging derivative instrument as of the end of the reporting period. The agency would incur this loss if the counterparties to the hedging derivative instrument failed to perform according to the terms of the contract (without respect to any collateral or other security, or netting arrangement).

3. The policy of requiring collateral or other security to support hedging derivative instruments subject to credit risk; a summary description and the aggregate amount of the collateral or other security that reduces credit risk exposure; and information about access to that collateral or other security.

4. The policy of entering into master netting arrangements, including a summary description and the aggregate amount of liabilities included in those arrangements. Master netting arrangements occur when (a) each party owes the other determinable amounts, (b) the government has the right to set off the amount owed with the amount owed by the counterparty, and (c) the right of setoff is legally enforceable.

5. The aggregate fair value of hedging derivative instruments in asset (positive) positions, net of collateral posted by the counterparty, and the effect of master netting arrangements.

6. Significant concentrations of net exposure to credit risk with individual counterparties or groups of counterparties. Group concentrations of credit risk exist if a number of counterparties engage in similar activities and have similar economic characteristics that would cause changes in economic or other conditions that would similarly affect their ability to meet contractual obligations.

7. Credit risk disclosures do not extend to derivatives that are exchange-traded, such as futures contracts. For those derivatives, evaluate the amounts held by broker-dealers by applying the custodial credit risk disclosures in **OAM 15.15.00**.

- *Interest rate risk* is 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. Disclosures for interest rate risk include the increased exposure itself and the hedging derivative instrument's terms that increase this risk.

- *Basis risk* is the risk that arises when variable interest rates on a derivative and an associated bond or other interest paying financial instrument have different indexes. Disclosures for basis risk include the basis risk itself, the hedging derivative instrument's terms, and the payment terms of the hedged item that creates the basis risk.

- *Termination risk* is the risk that a derivative's unscheduled end will affect a government's asset/liability strategy or will present the government with significant unscheduled termination payments to the counterparty. Disclosures for termination risk include the termination risk itself, any termination events that have occurred, dates that the hedging derivative instrument might terminate, and any out-of-the-ordinary termination events contained in contractual documents.

- *Rollover risk* is the risk that a derivative instrument associated with a government's debt does not extend to the maturity of that debt. When the derivative terminates, the associated debt will no longer have the benefit of the derivative. Disclosures for rollover risk include the maturity of the hedging derivative instrument and the maturity of the hedged item.

- *Market-access risk* is the risk that a government will not be able to enter credit markets or that credit will become more costly. Disclose any exposure to market-access risk.

- *Foreign currency risk* – if the hedging derivative exposes the government to foreign currency risk, disclose the U.S. dollar balance of the hedging derivative instrument, organized by currency and by type of derivative.

d. If the hedged item is a debt obligation, disclose the hedging derivative instrument's net cash flows based on the requirements of **OAM 15.15.00.**

Example of hedging derivative instruments disclosures:

Fiscal Year Ending June 30,	Principal	Interest	Hedging Derivatives, Net	Total
20X1	$6,000	$7,786	$(1,253)	$12,533
20X2	10,000	7,525	(1,211)	16,314
20X3	27,000	7,090	(1,141)	32,949
20X4	33,000	5,916	(952)	37,964
20X5	15,000	4,480	(721)	18,759
20X6-20Y0	29,000	19,140	(3,080)	45,060
20Y1-20Y5	15,000	12,385	1,475	28,860
20Y6-20Z0	14,000	9,570	(528)	23,042
20Z1-20Z3	30,000	6,310	(300)	36,010
Total	$179,000	$80,202	$(7,711)	$251,491

Investment Derivative Instruments Disclosure Requirements

129. Disclose the following for investment derivative instruments:

a. *Credit risk.* If the investment derivative instrument has an exposure to credit risk, disclose that risk consistent with the requirements for credit risk as outlined above.

b. *Interest rate risk.* If the investment derivative instrument has an exposure to interest rate risk, disclose that risk consistent with the requirements of **OAM 15.15.00**. Furthermore, an investment derivative instrument that is an interest rate swap is an additional example of an investment that has a fair value that is highly sensitive to interest rate changes, which requires disclosure of the fair value, notional amount, reference rate, and embedded options, as applicable.

c. *Foreign currency risk.* If the investment derivative instrument has an exposure to foreign currency risk, disclose that risk consistent with the requirements of **OAM 15.15.00.**

Summary Disclosure Requirements

130. Statewide Accounting and Reporting Services (SARS) discloses derivative information at the statewide level in Oregon's Comprehensive Annual Financial Report (CAFR). Agencies that issue separate audited financial statements report their derivatives at the agency level. In either case, the disclosure process includes the following steps:

a. Divide each category between (1) *hedging* derivative instruments and (2) *investment* derivative instruments, distinguishing between fair value hedges and cash flow hedges.

b. Within each subcategory, aggregate the derivative instruments by type (receive-fixed swaps, pay-fixed swaps, swaptions, rate caps, basis swaps, or futures contracts).

131. Include the following information in the disclosures, using a columnar display, narrative form, or a combination of both.

a. Notional amounts

b. Changes in fair value during the reporting period and the classification in the financial statements where those changes in fair value appear.

c. Fair values as of the end of the reporting period and the classification in the financial statements where those fair values appear. If fair value determinations are contingent upon quoted market prices, then disclose the method and significant assumptions used to estimate the fair values.

d. If an agency relies on a pricing service to determine the fair values, the agency is not required to disclose the significant assumptions if the pricing service considers them proprietary. However, the agency should make a reasonable effort to obtain that information. If the pricing service refuses, then disclose that fact.

e. Fair values of derivative instruments reclassified from a hedging derivative instrument to an investment derivative instrument. An agency must also disclose the deferral amount reported within the investment revenue upon reclassification.

Other Disclosures

132. If applicable, also disclose the following:

a. Any contingent features, such as an obligation to post collateral if the credit quality of the hedgeable item declines. Contingent feature disclosures include:

- The existence and nature of contingent features and the circumstances that could trigger those features.

- The aggregate fair value of derivative instruments that contain those features.

- The aggregate fair value of assets required for posting as collateral or transferred in accordance with the provisions related to the triggering of the contingent liabilities.

- The amount posted as collateral by the government as of the end of the reporting period.

b. For SGICs that are fully benefit-responsive, include a description of the nature of the SGIC, and the SGIC's fair value (including separate disclosure of the fair value of the wrap contract and the fair value of the corresponding underlying investments).

133. The Office of the State Treasurer determines the fair value of derivative instruments at year-end for those agencies that hold designated investments.