State of Ohio

Debt and Interest Rate Risk Management Policy

Ohio Public Facilities Commission

Treasurer of State

Office of Budget and Management

January 2012

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I. INTRODUCTION

The State of Ohio (the "State") has significant capital program requirements, both for the funding of new facilities and the renovation and replacement of existing facilities. The State provides funding for its capital program requirements primarily through the issuance of debt secured by the State's General Revenue Fund (GRF) receipts, Highway User Receipts, Net Liquor Profits, and other revenues.

This Debt and Interest Rate Risk Management Policy (the "Policy") provides a policy framework and guidance, through the Office of Budget and Management (OBM), to issuers of debt backed by State revenue, specifically, the Ohio Public Facilities Commission (OPFC) and the Treasurer of State (Treasurer) (collectively, the "State Issuers"), for the structuring, issuance, management, and the ongoing evaluation of, and reporting on, all debt obligations and derivative products.

The State through OBM and the State Issuers may waive or modify aspects of these policies in the manner provided herein.

This Policy largely formalizes existing practices and procedures (including those required by State statutes and existing bond documents, as well as the State's financial planning, management, budget, and disclosure documents.) This Policy benefited from similar efforts by other highly rated governmental agencies, rating agency guidelines, and industry best practices. The State will continue to reflect such sources as it periodically reviews and revises the Policy, as specified herein.

A. General Policy Statement

In managing its debt, it is the State of Ohio's policy to:

- Achieve the lowest cost of capital.
- Ensure high credit quality.
- Maximize access to the capital debt markets.
- Preserve financial flexibility.
- Manage interest rate risk exposure.
- Limit exposure to third party credit and financial risk.

B. Goals and Objectives

The State is establishing debt policies and procedures as tools to ensure that financial resources are adequate to meet the State's long-term capital program and financial planning objectives. In particular, this Policy is intended to ensure that financings undertaken by the State Issuers satisfy established standards which allow the State to protect its financial resources and position in order to meet its long-term capital needs. The adoption of clear and comprehensive financial policies is intended to enhance the internal financial management of the State.

<u>General Objectives</u>: This Policy establishes parameters for issuing debt and managing a debt portfolio by State Issuers based upon the State's overall capital improvement needs; ability to repay financial obligations; and existing legal, economic, financial and debt market conditions. Specifically, this Policy is intended to assist in the following:

- To guide decision making and promote prudent financial management of State debt.
- To promote cooperation, coordination and consistency within the State with respect to the structuring, issuance and management of debt.
- To protect and enhance the State's credit rating.
- To ensure the legal use of the State's debt issuance authority.
- To maintain appropriate resources and funding capacity for present and future capital needs.
- To promote and maintain balance between interest rate risk and the long-term cost of capital.
- To promote the appropriate diversification within the debt portfolio to balance risk and liquidity.
- To promote the evaluation of the State's debt portfolio in the context of asset-liability management.

Interest Rate Risk Management Objectives: As part of the management of interest rate risk and the long-term cost of capital, the State, in addition to the opportunistic issuance of fixed rate debt in low interest rate environments, makes use of variable rate debt and interest rate exchange contracts (referred to herein also as "interest rate swaps", "swaps", "derivative products" or "derivatives") as tools to manage its borrowing and access to the capital debt markets. While these types of structures and products provide opportunities to lower the cost of borrowing and enhance the State's financial position, they also introduce risks not borne in the fixed rate market that require more intensive and ongoing oversight.

To ensure that the State uses derivative financial tools prudently and effectively, this Policy also provides a framework outlining purposes, procedures and limitations with respect to:

- The use and management of derivative products.
- The management of interest rate risk with respect to the State's debt portfolio.
- The use of variable interest rate debt either through direct issuance or through the execution of derivative products.
- The use of third party liquidity facilities and the provision of self-liquidity by the State.

II. THRESHOLD CONSIDERATIONS FOR DEBT ISSUANCE

A. Authorization and Approval

Pursuant to Article VIII of the Ohio Constitution and Ohio Revised Code (ORC) Sections 9.98, 5531.10 and Chapters 133, 151, 152, 154, 164 and 166, the State, by and through the State Issuers as applicable, is permitted to issue fixed rate debt, variable rate debt and to enter into interest rate swaps and other derivative products in connection with the issuance and management of State debt.

Pursuant to ORC Section 126.11, OBM is authorized and required to review and approve the issuance of State debt including any derivative products to be associated with that debt. In furtherance of this provision, State Issuers must submit proposed debt and derivative product transactions to OBM for review and approval prior to execution. OBM review and approval will include review of compliance with applicable ORC authorization provisions and the Policy.

In assessing compliance with the limitations set forth in the Policy, OBM shall take into account existing or pending debt issuances and interest rate exchange contracts under which payments do not begin until a future date. If the limitations set forth in the Policy are to be exceeded, OBM and the affected State Issuer(s) will examine suitable means to achieve compliance with those limitations, including, but not limited to, fixed and variable rate debt issuance, the termination or commencement of permissible derivative products, and consideration of alternate debt amortization schedules.

Each State Issuer shall consider the use and execution of fixed rate debt, variable rate debt and derivative products in a manner consistent with the authorization, structuring requirements, limitations and approval process contained in applicable sections of the ORC and pursuant to the provisions of the Policy. Each State Issuer shall have the discretion to adopt its own debt and interest rate risk management policy provided that its provisions are no less stringent than those contained in the Policy.

B. Debt Limitations

1) Compliance with Constitutional and Statutory Authorizations

   It is the responsibility of each State Issuer to ensure that its debt is issued in accordance with applicable provisions of the Ohio Constitution and State statutes and laws, as well as federal tax law and securities law requirements.

2) General Revenue Fund Debt Limitations

   a) 5% Debt Service Limitation. Section 17 of Article VIII of the Ohio Constitution establishes an annual debt service "cap" applicable to future issuances of State direct obligations payable from the GRF or net State lottery proceeds. Generally, new GRF-backed obligations may not be issued if debt service for any future fiscal year on those new and then outstanding GRF-backed bonds would exceed 5% of the total of estimated GRF revenue plus net State lottery proceeds for the fiscal year of issuance. GRF-backed obligations include those payable directly from the GRF (general obligation and appropriation-backed debt), excluding (i) general obligation debt payable from non-GRF sources and (ii) general obligation debt for third frontier research and development, site development, and veteran's compensation.

   b) 1% Debt Service Limitation. Excluding State debt subject to the constitutional 5% debt service limitation, all other securitized obligations backed by the State's GRF (including third frontier, site development, and veteran's compensation bonds and certificates of participation) may not be issued if debt service on the new and any existing obligations would exceed 1% of the total of estimated GRF revenue plus net State lottery proceeds for the fiscal year of issuance.

   c) 50% Amortized within 10 Years. The State will manage the issuance of its GRF-backed debt obligations to ensure that, in aggregate, at least 50% of GRF-backed debt outstanding at any time is amortized within 10 years.

   d) Maximum Term of 25 Years. The final maturity of any GRF-backed debt issuance of the State must be no more than 25 years from the date of issuance.

3) Debt Covenants for Non-GRF Obligations

   State Issuers are to adhere to all covenants detailed in appropriate bond documents (e.g., trust indenture) for all GRF and non-GRF supported bonds. For all non-GRF supported debt, State Issuer's are required to maintain compliance with all revenue related covenants detailed in the bond documentation, including, but not limited to:

   - Additional Bonds Test.
   - Debt Service Coverage Test.
   - Flow of Funds Requirements.
   - Maintenance and Operation Requirements.

C. Funding of Capital Projects

Subject to General Assembly authorization, the State and State Issuers are permitted to fund capital projects through cash (pay-as-you-go) and through the issuance of debt. Debt financing is generally employed when the cost of the capital project is significant and the asset has a relatively long useful life (five years or longer).

The State typically issues debt on a program basis to fund capital cash flow needs over a short term (e.g., 12-24 months). As bond proceeds are depleted, new debt can be issued to provide funding for ensuing periods. This "cash-flow" borrowing approach safeguards against over issuance, unnecessary interest costs and provides for a rate of spend-down that is consistent with arbitrage temporary periods and exceptions to rebate. In certain situations dictated by financial market conditions or State capital program requirements, State Issuers may issue debt for funding cash-flow requirements for longer or shorter periods.

In addition to this approach, the State can consider borrowing on a "project" basis, whereby debt is issued upfront to generate proceeds to pay for a capital project with a multi-year spend-down. This approach can be implemented, when appropriate, to lock-in relatively low long-term fixed interest rates, and minimize costs of issuance.

D. Rating/Credit Objectives

The State will seek to maintain the highest possible credit ratings for all categories of State debt within the context of fulfilling financial responsibilities and policy objectives. State debt should be structured consistent with the best practice standards established by Moody's Investors Services, Standard & Poor's Ratings Services and Fitch Ratings. These standards include, but are not limited to:

- Rapid Debt Amortization.
- Stringent Additional Bonds Test (revenue-backed debt).
- Flow of Funds (lock-box or debt service priority of payment – revenue-backed debt).

III. DEBT MANAGEMENT

A. Fixed Rate Debt and Variable Rate Debt

1) Definitions

   a) Fixed Rate Debt – securities whose rate of interest is fixed at the time of issuance.

   b) Variable Rate Debt – securities whose rate of interest varies according to a pre-determined formula or results from a periodic remarketing of the securities.

2) Permissible Types of Debt

   To the extent authorized by State law, permissible types of fixed and variable rate debt include the following:

   a) Fixed-Rate
      - Bonds
      - Bond Anticipation Notes (BANS)
      - Direct Bank Loans
      - Certificates of Participation (COPS)

   b) Variable-Rate
      - Variable Rate Demand Obligations (VRDOs)
      - Bond Anticipation Notes (BANS)
      - Floating Rate Notes (FRNs)
      - Direct Bank Loans

- Commercial Paper (CP)

For permitted types of derivatives, see section **V. INTEREST RATE SWAPS AND DERIVATIVES – C. Permitted Derivative Instruments and Transaction Types.**

3) <u>Use and Allocation of Fixed and Variable Rate Debt</u>

Each State Issuer will make determinations and allocations among the different types and modes of debt based on cost/benefit and risk factors, including but not limited to the following:

- Interest cost and market conditions (including the shape of yield curves and relative value considerations) for both the bond and swap markets.
- Self-liquidity thresholds and capacity as specified by the Policy.
- Cost and availability of third-party liquidity.
- Exposure to third-party credit and financial risk.
- Cost and availability of bond insurance.
- Integration of fixed rate and alternative modes of variable rate debt within the framework of the Policy.

See section **IV. VARIABLE RATE EXPOSURE AND LIQUIDITY** for standards relating to the use of variable rate debt, limitations on variable rate exposure and the use of liquidity facilities.

4) <u>Managing Variable Rate Debt</u>

Each State Issuer should evaluate the merits of utilizing the following financial service providers in the issuance and ongoing management of its variable rate debt:

- Broker Dealers.
- Remarketing Agents.
- Third Party Liquidity Facility Providers.

The Treasurer of State, as paying agent for the State, will be responsible for evaluating each remarketing agent's performance in relation to the Securities Industry and Financial Markets Association Index (SIFMA) or other tax-exempt indices.

For each service being procured, the criteria for evaluating each provider should include, but is not limited to:

- Experience of Provider (especially in the municipal market).
- Cost of Service.
- Provider Capital Position.
- Provider Market Position.
- Provider Credit Ratings.

B. Structuring Considerations

1) <u>Final Maturity/Rapidity of Debt Repayment</u>

The length of State debt should comply with statutory limitations as well as applicable federal tax law. The final maturity of a State debt issuance should not exceed the useful life of the financed project(s). More rapid amortization should be considered when the level of pledged revenues is sufficient to support a shorter amortization. When the projects or improvements financed have the potential to change from public to private use, the shortest feasible amortization schedule should be used.

With respect to refunding debt issued solely to achieve economic savings, the final maturity of the refunding debt should not exceed the final maturity of the debt being refunded.

2) Debt Service Payment Structure

In general, State debt should be structured to produce a level annual debt service payment. Level principal payment structures should be considered for non-GRF supported debt when the useful life of the asset is short and the coverage ratio (annual projected revenue over annual debt service) is high. Debt service for non-GRF supported debt may also be structured to match the pledged revenue stream.

3) Coupon Structure

State debt can be structured using discount, par, or premium coupons or any combination thereof within any applicable limitations in statute or the bond proceedings. State Issuers should utilize the coupon structure that produces the lowest True Interest Cost (TIC) taking into consideration the call option value of any callable maturities. When comparing yields associated with callable premium and callable discount bonds of the same maturity, the yield to maturity should be evaluated in addition to the yield to call date.

4) Optional Redemption Provisions

In general, State debt (both taxable and tax-exempt) should be issued with the earliest optional redemption date that is determined to be cost-effective. When State debt is issued with a make-whole call or as non-callable, an analysis should be prepared to determine the value of a par call option to ensure the State Issuer is being fairly compensated for foregoing that par call option.

5) Debt Service Payment Dates

Interest on fixed rate bonds and variable rate obligations should be payable on a semiannual basis. With the consent of OBM and the Treasurer, alternate payment frequencies may be utilized. State debt issued as part of an ongoing debt program (e.g., multiple issues of bonds under the same trust indenture) should maintain consistent principal and interest payment dates. For debt issued pursuant to a trust indenture, debt service transfers to the trustee should be made as few days in advance of the actual payment date as possible.

6) Serial and Term Bonds

State debt may be structured with serial or term bonds or any combination thereof. All term bonds must be subject to mandatory annual sinking fund redemptions. When issuing bonds in parts of the yield curve that are upward sloping, State Issuers should evaluate the cost-effectiveness of serial bonds versus term bonds.

7) Capital Appreciation Bonds/Zero Coupon Bonds

The use of capital appreciation bonds or zero coupon bonds should be avoided unless they are necessary for legal and/or bond structuring reasons (e.g., refunding bonds with par-to-par restrictions), they produce the lowest TIC compared to other structures (e.g., relative to term bonds), or they are issued for programmatic reasons (e.g., college savings program).

8) Credit Enhancement

Credit enhancement facilities should be utilized when they provide net economic benefit to the State.

a) Bond Insurance – When considering the use of bond insurance, the State Issuer should perform a maturity-by-maturity insurance feasibility analysis. The assumed insured and uninsured yields utilized in the analysis should be documented. The economic feasibility of insurance should be determined based on the value of insurance as priced to the maturities first applicable call date. The State Issuer may insure bonds that are borderline from an economic feasibility standpoint if warranted by other factors (e.g., use of insurance to attract investor interest where certain bond maturities might otherwise be difficult to sell).

b) Letter of Credit – Evaluations of the economic feasibility of a credit facility should take into account the trading spread of the particular issuer, the cost of the facility and the interest costs of the State's debt if enhanced.

9) Taxable Debt

Taxable debt should only be considered when tax-exempt financing is not permissible due to federal tax law provisions, or it provides necessary flexibility not provided through tax-exempt debt issuance (e.g., paying debt service with proceeds, over issuance constraints, the need to terminate unduly burdensome trust indenture provisions, etc.)

10) Costs of Issuance

Costs of issuance (COI) accounts created to hold proceeds for payment of bond counsel, financial adviser, rating agencies, and other expenses of the issuer should be closed within six months. Any funds remaining after payment of all COI expenses or expiration of this six-month guideline should be deposited into the applicable bond service or project improvement fund.

C. Method of Sale

Each State Issuer is responsible for determining the method of sale for its issuances. Unless otherwise specified in applicable sections of the ORC, State Issuers may issue debt through competitive bidding or negotiation.

1) Competitive Bids

Competitive bids should be awarded on a TIC basis. When issuing bonds on a competitive basis, the following factors should be considered and/or addressed in the bid specifications:

- Maximum and minimum bid limitations on the total purchase price.
- Maximum and minimum coupons.
- The number of coupons per maturity and the allowable coupon rates (i.e., generally multiples of five basis points and one-eighths of a percent).
- Maturities subject to optional prior redemption should have a minimum initial reoffering price or a specified coupon range (to minimize variations in call option value and increase the opportunity to refund those maturities for economic savings).
- Use of an electronic bidding platform.
- Use of investor presentations.

2) Negotiated Sales

The following factors should be considered when issuing bonds on a negotiated basis:

- Priority of orders.
- Designation policy.
- Underwriter compensation (takedown, management fee and allowable expenses).
- Use of a retail order period.
- Use of investor presentations.
- Method of allocating and filling orders.
- Use of a selling group.

For swap and derivative product procurement guidelines, see section **V. INTEREST RATE SWAPS AND DERIVATIVES – E. Procurement, Approval and Execution.**

D. Refunding and Restructurings

1) Advance Refunding Savings Criteria

When considering the advance refunding of State Debt, each State Issuer should calculate the net present value (NPV) savings for the refunding transaction as a whole and on a maturity-by-maturity basis. The NPV savings should be estimated net of all costs of issuance and any other associated costs. Additionally, the State Issuer should calculate one of the following statistics for each bond/maturity being considered for refunding:

- Opportunity Cost Index (OCI) – NPV savings divided by potential NPV savings associated with a current refunding of the callable bond at its call date assuming relatively low interest rates at the time of the call date.
- % Option Value – NPV savings divided by the callable bond's Option Value (projected dollar value of the call option based on implied forward rates in current market yield curve); or

In general, an advance refunding transaction should generate NPV savings of 3.0% or greater. Additionally, each bond/maturity being refunded should meet ***both*** of the following criteria:

- NPV savings of 1.0%; ***and***
- % Option Value ***or*** OCI of about 70% or greater

The implied forward rates and historical interest rates to be used in the OCI and/or Option Value are to be reviewed by the State Issuer. Refunding candidates that do not meet the above criteria or the criteria developed by a State Issuer may still be refunded if they provide some other economic benefit, such as mitigating negative arbitrage in an escrow, or providing positive savings and are unlikely to be refunded in the future (e.g., near-term calls and stranded maturities).

Final refunding candidate selection should be made as close to the refunding bonds sale date as possible, with the most recent available market interest rates and other assumptions.

2) Current Refunding Savings Criteria

The current refunding of State debt should only be considered when NPV savings are significantly greater than the cost of the refunding transaction.

3) Term and Savings Structure

The term of refunding bonds should not exceed the term of the bonds being refunded, except to achieve other overriding State objectives. Refunding bonds should generally be structured to produce level debt service savings. Alternatively, refunding bonds may be structured to accelerate debt service savings to increase overall NPV savings, or to achieve other identified objectives such as budgetary relief.

4) Escrow Structuring and Restructuring

To the extent possible, State Issuers should utilize State and Local Government Securities (SLGS) in refunding escrows. If utilization of SLGS results in negative arbitrage, State Issuers should consider using open market securities as a means to reduce or eliminate negative arbitrage. Where open market securities are utilized, State Issuers will procure a third party agent to competitively bid the escrow securities, preferably on a security-by-security basis.

State Issuers may restructure escrows (as and if legally allowable) to realize costs savings.

5) Economic v Legal Defeasance

An economic defeasance should only be used when there is significant incremental economic benefit relative to a legal defeasance or there is a compelling legal, administrative, technical or practical advantage of an economic versus legal defeasance. An economic defeasance should be pursued as an alternative to a legal defeasance only when the economic and/or other advantages significantly outweigh the following:

- Effect on State debt capacity.
- Effect on other legal requirements (e.g., coverage requirements).
- Effect on State balance sheet.
- Effect on State credit ratings.

6) Restructuring Considerations

State Issuers may consider debt restructuring when it is in the financial interest of the State. State Issuers may restructure debt to:

- Remove unduly restrictive bond covenants.
- Smooth irregular debt service payments.
- Achieve cost savings.
- Provide budgetary relief.

E. Investment of Bond Proceeds

Bond proceeds that are deposited into the State Treasury will be invested by the Treasurer pursuant to ORC Section 135.143. Funds held by a Bond Trustee under a Trust Indenture will be invested within the terms of that agreement.

IV. VARIABLE RATE EXPOSURE AND LIQUIDITY

A. Rationale for Use of Variable Rate Debt

Variable Rate Debt may be utilized as part of a strategy to realize the State’s primary objectives to (i) lower the cost of capital, (ii) maintain the financial flexibility of the State’s debt portfolio and/or (iii) manage interest rate risk exposure.

Variable Rate Debt should be issued to achieve one or more of the following objectives:

- Reduce borrowing costs by creating an exposure to short-term interest rates as opposed to historically higher long-term fixed interest rates, particularly when fixed, long-term interest rates are high.
- Mitigate interest rate risk of State's asset and liability profile by creating short-term interest rate debt exposure to balance short-term interest rate exposure of the State's investment portfolio.
- Diversify the State's debt portfolio introducing debt instruments that have a historically different investor base and risk profile.

B. Variable Interest Rate Exposure

For purposes of the Policy, the variable rate exposure of the State or of any State Issuer shall be defined as including the following debt and derivative products:

- The principal amount of debt issued and outstanding as direct variable rate debt for which the periodic interest reset period is less than one year.
- The notional amount of any fixed-to-floating interest rate swap pursuant to which a State Issuer pays a variable interest rate for which the periodic interest reset period is less than one year.

Variable rate exposure shall exclude the amount of variable rate debt for which variable interest rate exposure has been substantially eliminated via:

- Interest rate swaps, including floating-to-fixed swaps.
- Other hedging transactions, including interest rate caps, collars, and swaptions.

C. Limitation on Variable Rate Exposure

Recognizing that some level of variable rate debt may be appropriate, the amount of the State's un-hedged variable rate exposure shall be limited to no more than 20% of the total outstanding debt for each of the following categories of debt:

- General obligation and special obligation (appropriation-backed) debt supported by general revenue fund receipts.
- General obligation highway and special obligation (appropriation-backed) debt supported by highway user receipts.
- Special obligation debt for economic development purposes backed by net liquor profit revenues.
- Other types of debt as may become appropriate.

This limitation on variable rate exposure shall include and apply to the tax risk exposure on certain derivatives described in section **V. INTEREST RATE SWAPS AND DERIVATIVES – B. Limitation on Derivatives – 2) Limitation on Tax-Risk Derivatives** of this Policy.

D. Liquidity Facilities

1) <u>Self-Liquidity</u>

For variable rate debt requiring liquidity facilities to protect against remarketing risk, the State acting through the Treasurer will evaluate the merits of providing the required liquidity facility via self-liquidity as a means of reducing the cost and increasing the benefits of variable rate debt. When evaluating the merits of self-liquidity the Treasurer shall consider the following factors and limitations:

- The total amount of self-liquidity obligations currently assumed by the State.
- The ability of the State to provide self-liquidity without adversely impacting investment returns to the State's invested funds.
- The effect of providing self-liquidity on any applicable ratings of the State's investment accounts.
- Self-liquidity shall not be provided for any variable rate obligation in a daily interest mode.
- Other applicable considerations as determined by the Treasurer.

The State will maintain the highest possible short-term credit rating that provides the optimal balance between costs and benefits on all variable rate debt obligations for which the State provides liquidity.

The ability and appropriateness of providing self-liquidity for variable rate debt of the State shall be determined at the discretion of the Treasurer. Each State Issuer shall submit requests for self-liquidity to the Treasurer at least 60 days prior to the applicable debt issuance date. Associated amortization schedules and drafts of documents should be submitted as soon as possible thereafter and the Treasurer shall respond to the request in a timely manner.

2) <u>Third-Party Liquidity</u>

The use of third-party liquidity providers should generally be limited due to the various risks associated with such an agreement (e.g. exposure risk of the provider, renewal risk). Where the use of third-party liquidity facilities is required or appropriate, State Issuers shall consider the following factors and shall select the provider that offers the optimal combination of these factors:

- <u>Type of Liquidity Facility</u> - Different forms of liquidity should be evaluated in order to balance the protection offered against the economic costs associated with each structure. These forms may include, but are not limited to, direct pay letters of credit, standby letters of credit and lines of credit.
- <u>Provider Credit Ratings</u> - State Issuers should seek out liquidity providers that have the highest short-term credit ratings.
- <u>Reimbursement Agreement</u> - In addition to credit ratings, State Issuers should seek providers willing to accept the contractual provisions most favorable to the State. Those provisions, negotiated as part of the Reimbursement Agreement, should include, but not be limited to, the following: (i) term, (ii) loan provisions, and (iii) termination events.
- <u>Provider Trading Values</u> - Prior to awarding liquidity facility provider contracts, State Issuers should seek input from market participants, including financial advisors, on anticipated trading levels and general market acceptance of bonds secured by similar types of liquidity facilities of the various providers.
- <u>Costs</u> - All costs associated with a proposed liquidity facility, including commitment fees, standby fees, draw fees, and interest rates charged when a draw occurs, should be evaluated.
- <u>Term of Facility</u> - State Issuers shall select liquidity providers offering the longest facility term when all other factors listed herein are the same.

V. INTEREST RATE SWAPS AND DERIVATIVES

A. Rationale for Use of Derivatives

The use of derivatives and related financial instruments should balance the State's primary goals of: (i) reducing the cost of capital; (ii) minimizing interest rate volatility; and (iii) gaining flexibility in structuring and managing its debt portfolio over time.

In particular the use of derivative transactions should, either at time of issuance or in connection with outstanding debt, further one or more of the following objectives:

- Reduce expected borrowing costs (e.g., achieving a lower fixed or variable rate of interest at the time of issuance than is available via a direct issuance in the traditional "cash" market).
- Achieve the desired balance between fixed and variable interest rate exposure, including asset liability management considerations (e.g., through the creation of prudent levels of variable interest rate exposure via fixed-to-floating interest rate swaps, or through the purchase of an interest rate cap, collar or floor).
- Manage and hedge future interest rate risk (e.g., through locking in current market rates via a forward starting floating-to-fixed interest rate swap).
- Optimize the State's capital structure or create benefits not available through traditional financing structures (e.g., through the sale of an option (swaption) to enter into a forward starting floating-to-fixed swap to extract refunding savings on callable bonds that are not eligible for advanced refunding).
- Improve the State's financial position or flexibility (e.g., through altering the schedule of debt service payments, or through changing the index associated with floating rate receipt of the swap, or through the receipt of an upfront payment via the sale of an option (swaption)).

The use of a particular derivative product is not permitted if:

- The rationale for using the derivative is based predominantly on speculation regarding the future direction or level of interest rates.
- The fair market value of the transaction cannot be readily and reliably determined at all times by the State Issuer or its agents.
- The transaction structure and terms result in a lack of liquidity and the inability to timely terminate the transaction at market.
- The transaction is inconsistent with the overall intent of the Policy.

In general, the State will have a bias toward using derivatives that have greater price transparency and liquidity unless the State Issuer determine there is a compelling reason to enter into a more complex financial instrument (e.g. no other suitable hedge substitute exists).

B. Limitation on Derivatives

1) <u>Overall Limitation</u>

   Within each category of debt backed by a distinct fund or source of revenue (i.e., general revenue fund, highway user receipts, and net liquor profits), the State shall limit the total notional amount of derivatives to an amount not to exceed 20% of the outstanding debt backed by that fund or revenue source. In assessing compliance with this limitation, OBM shall take into account (i) existing or pending interest rate exchange contracts under which payments do not begin until a future date; and (ii) overall financial exposure to existing credit or liquidity facilities and other investment providers.

2) Limitation on Tax-Risk Derivatives

Derivative transactions in which the State assumes tax risk (e.g., synthetic fixed rate debt in which the variable receipt is based on a taxable index and basis swaps) shall not exceed 10% of the total outstanding debt for each category of debt backed by a distinct fund or source of revenue (i.e., general revenue fund, highway user receipts, and net liquor profits). Tax-risk derivatives shall also be included in the limitation on variable rate exposure described in section **IV. VARIABLE RATE EXPOSURE AND LIQUIDITY – C. Limitation on Variable Rate Exposure** of this Policy.

C. Permitted Derivative Instruments and Transaction Types

According to the applicable provisions of State law:

- Derivative transactions executed by the State must be tied to specifically identified State debt.
- There can be no amortization risk with respect to such derivatives (i.e., the notional amount and amortization of any derivative must replicate the principal amount and amortization of the State debt to which it is linked).

State Issuers may use the following types of derivatives, after identifying the financial objectives to be realized and assessing the attendant risks, pursuant to section D below, associated with each. State Issuers must submit the identified objectives and risk assessment to OBM as part of the review and approval process required under ORC Section 126.11.

1) Interest rate swaps, including, but not limited to:
    - Fixed-to-floating rate swap (synthetic variable).
    - Floating-to-fixed rate swap (synthetic fixed).
    - Forward starting swaps.
    - Swaps with cancellation options.
    - Floating-to-floating (basis) swaps.
2) Rate locks and other products designed to hedge interest rate risk associated with future issuance.
3) Interest rate caps, floors and collars, including but not limited to:
    - Interest rate caps and floors embedded in approved swap transactions.
    - Purchased caps.
    - Purchased floors.
    - Purchased collars (buy cap/sell floor).
4) Options on swaps (swaptions), including but not limited to:
    - Floating-to-fixed rate swaption purchases or sales.
    - Fixed-to-floating rate swaption purchases or sales.
5) Other swap-related financial products that OBM and State Issuers consider appropriate for use pursuant to the terms of the Policy.

D. Risk Assessment and Mitigation

State Issuers shall evaluate each proposed derivative transaction to assess the types and degree of risk associated with that transaction and to consider what means are available and can be taken to mitigate such risks. The risk and risk mitigation strategies to be assessed include, but are not limited to the following:

1) Interest Rate Risk – The rate of interest paid may increase on direct variable rate bonds or synthetic variable rate swaps. *Mitigation – Limit total variable rate exposure. Utilize caps and collars on synthetic variable rate debt. Take advantage of low interest rate environments to fix out variable rate debt and to terminate synthetic variable rate swaps.*

2) Counterparty Risk – The risk that the counterparty does not perform pursuant to the terms of the interest rate exchange agreement. *Mitigation – Limit total counterparty exposure through limit on total notional amount of derivatives and incorporate individual counterparty exposure limits and minimum ratings requirements.*

3) Tax Risk – The risk associated with a rise in tax-exempt interest rates relative to taxable interest rates as would result from a decrease in the federal marginal corporate or personal income tax rates, or the full or partial elimination of the exemption from taxation of debt issued by state and local governments. *Mitigation – Limit total direct variable rate and synthetic fixed rate debt in which a State Issuer receives a variable payment based on a taxable index or rate.*

4) Termination Risk – The risk that a swap could be terminated and a market based termination payment required due to any of several events, which may include ratings downgrade, covenant violations, swap or bond payment defaults. *Mitigation – Progressive collateralization and budgeting of potential termination payments as conditions increase the possibility of a termination payment and the incorporation in swap documentation of nonparallel downgrade provisions to the benefit of the State Issuer.*

5) Liquidity/Remarketing Risk – The risk that holders of variable rate bonds exercise their "put" option to tender their bonds back to the State Issuer. If those bonds cannot be immediately remarketed, the Treasurer must purchase and hold those bonds as an investment (self-liquidity) or the State Issuer may have to pay a higher rate of interest to a financial institution (third-party liquidity). *Mitigation – Limit total direct variable and synthetic fixed rate exposure. Utilize self-liquidity as a preferred option and negotiate competitive rates for third party liquidity.*

6) Liquidity/Rollover Risk – Two risks arise when the term of the liquidity facility is shorter than the term of the applicable bonds: i) the State Issuer may incur higher renewal fees when new agreements are negotiated; ii) the liquidity bank market constricts such that it is difficult to secure third-party liquidity at any interest rate. *Mitigation – Utilize self-liquidity as a preferred option and negotiate longer terms on provider contracts to minimize the number of rollovers.*

7) Basis Risk – The risk of receiving insufficient payments from the variable receipt component of a synthetic fixed rate swap to pay the interest due on the underlying variable rate debt issued by a State Issuer. *Mitigation: Carefully construct variable rate swap formulas so that they closely match the anticipated trading pattern of the State's variable rate debt across a range of interest rate environments. Limit total exposure to variable receipts based on taxable indices that support tax-exempt variable debt issued by the State.*

8) Amortization Risk – The risk that the notional value of a swap contract could become mismatched versus the amortization of a particular series of fixed or floating rate bonds to which the swap is tied. *Mitigation: Swap agreements must have the flexibility to adjust notional amounts, including optional termination provisions, to ensure a one-to-*

one match with the underlying bonds throughout the life of the swap (as required by Ohio law).

9) Operational Risk – The risk that the a State Issuer or the counterparty may not have the adequate systems, policies, or practices to ensure timely and accurate cash flow exchanges and compliance with collateral provisions. *Mitigation: Continue to refine policies and practices to ensure timely compliance by State Issuers with applicable swap agreement provisions.*

When appropriate, the risk assessment conducted by State Issuers should include analyses which quantify tax risk, basis risk and other risks on a sensitivity basis over the life of the proposed derivative transaction, considering key variables (e.g., federal marginal tax rates, taxable and tax-exempt index rates, etc.) affecting expected financial results and benefits.

E. Procurement, Approval and Execution

Each State Issuer is responsible for determining the method of procurement for swaps and related financial products. Unless otherwise specified in applicable sections of the ORC, State Issuers may use competitive bidding or a negotiation process to procure swaps and other derivative products; however, competitive bidding for financial products that are non-proprietary and widely available in the marketplace is recommended. A negotiated approach may be appropriate to procure financial products that are proprietary, in order to manage overall counterparty exposure, or that have been customized to meet the needs of the State or the State Issuer.

All derivative transactions proposed for execution by a State Issuer shall be submitted to OBM for review and approval pursuant to ORC Section 126.11. OBM review will include the proposed transaction's compliance with the applicable authorization provisions under State law and with the Policy, as well as compliance with federal law.

Each derivative executed by a State Issuer shall be subject to an independent review and analysis by a financial advisor or other qualified party and include a finding that its terms and conditions reflected a fair market value as of the date and time of its execution. A State Issuer shall secure the necessary opinions from legal counsel to the counterparties and its credit support provider, if applicable, in connection with each swap to the effect that such swap and any related credit support agreement is a legal, valid and binding obligation of each respective party.

F. Documentation

1) Form of Agreements

   State Issuers will use standard International Swaps & Derivatives Association, Inc. (ISDA) swap documentation including the Schedule to the Master Agreement and a Credit Support Annex. It is intended that certain provisions of these standard documents will be modified in favor of the State. State Issuers may use additional documentation if the product is proprietary or if the State Issuer deems in its sole discretion that such documentation is otherwise in its interest.

2) Swap Terms and Provisions

   The swap documentation negotiated by a State Issuer shall include, but not be limited to, payment, duration, security, collateral, default, and remedy and should include, as appropriate, the following terms and provisions:

   a) The State shall have the option to terminate at market at any time over the entire term of the agreement.

b) Credit rating downgrade provisions triggering termination shall be bilateral.

c) Governing law for swaps will be New York law, but should reflect Ohio law authorization provisions.

d) The Jurisdiction of Adjudication shall be Ohio.

e) An amortization schedule of the notional amount and the requirement to modify that schedule to ensure a one-to-one match with the principal amount of the underlying bonds throughout the life of the swap.

f) The specified indebtedness related to credit events should be narrowly drafted referring only to specific debt and be reflective of the categorization of State debt described in section **IV. VARIABLE RATE EXPOSURE AND LIQUIDITY – C. Limitation on Variable Rate Exposure** of the Policy.

g) Minimum counterparty credit rating post-trade execution of “BBB+/Baa1”. Counterparty credit ratings below these levels shall trigger an Additional Termination Event.

h) The Counterparty Collateral Requirements set forth in section **V. INTEREST RATE SWAPS AND DERIVATIVES – G. Swap Counterparties – 3) Counterparty Collateral Provisions** below.

i) Termination value upon an Event of Default or an Additional Termination Event should be set by “market quotation” methodology.

j) The State Issuer should only agree to an Additional Termination Event when the ratings on the applicable bonds fall below a ratings downgrade trigger set by the State Issuer and the counterparty and the State fails to provide collateral or other credit support as may be permitted under the swap documentation. Such ratings downgrade trigger should be set sufficiently below the State Issuer’s current ratings to allow for a multi-notch downgrade.

k) Termination currency shall be U.S. Dollars.

G. Swap Counterparties

1) Counterparty Qualifications

State Issuers shall enter into interest rate swap transactions only with qualified swap counterparties that meet the following requirements:

a) Credit Rating

i. Qualified counterparties, or their guarantor or credit support provider, shall be rated at least “Aa3” or “AA-”, or equivalent by at least two of the three nationally recognized rating agencies (i.e., Moody’s, Standard and Poor’s, and Fitch) or have, as support for their obligations, a “AAA” subsidiary or other entity (e.g., bond insurer) as rated by at least one nationally recognized rating agency.

b) Other Qualifications

i. Demonstrated experience successfully executing swap transactions with other municipal entities, and in the case of swaps associated with non-general obligation debt of the State, a willingness to accept one-way collateral provisions.

2) Counterparty Downgrade Provisions

State Issuers should structure swap agreements to provide protection against credit deterioration of counterparties, including the use of credit support annexes or other forms of credit enhancement to secure counterparty performance. If a counterparty rating falls below "AA-/Aa3/AA-" by any 2 of 3 rating agencies, the counterparty must provide collateral as required by a credit support annex, subject to negotiated posting thresholds. Such protection shall include any terms and conditions that the State Issuer deems necessary or appropriate or in the State's best interest.

3) Counterparty Collateral Requirements

To secure any or all swap payment obligations, a State Issuer may require collateral or other credit enhancement to be posted by the swap counterparty with the following provisions:

a) In the case of swaps associated with non-general obligation debt of the State, collateral provisions shall provide for one-way collateral by counterparties (i.e., no collateral posting required for the State Issuer).

b) In the case of swaps associated with general obligation debt of the State, one-way collateral by the counterparties is preferred, but not required. Provisions must ensure that the counterparty provide the State Issuer and OBM with written notice of their intent to liquidate any collateral posted by the State a minimum of five business days prior to any liquidation.

c) The counterparty shall be required to post collateral, subject to negotiated thresholds, if the credit rating of the counterparty falls below the "AA-/Aa3/AA-" category and the mark-to-market value of the swap is positive to the State Issuer. Additional collateral for further decreases in counterparty credit ratings shall be posted by the counterparty in accordance with the provisions of the credit support annex.

d) When required, collateral thresholds should be set on a non-parallel structure incorporating a two or more rating step differential between the State Issuer and the counterparty, reflecting the relative credit strength of the State.

e) Threshold amounts for the initial deposit and for increments of collateral posting thereafter shall be determined by the State Issuer on a case-by-case basis.

f) In determining maximum uncollateralized exposure, the State Issuer shall consider and include, as applicable, financial exposure to the same corporate entities that it may have through other forms of financial dealings, such as securities lending agreements and commercial paper investments.

g) Collateral shall be deposited with a third party trustee, or as mutually agreed upon between the State Issuer and the counterparty.

h) A list of acceptable securities that may be posted as collateral and the valuation of such collateral will be determined and mutually agreed upon during negotiation of the swap agreement with the swap counterparty. Eligible collateral should be limited to cash (U.S. Dollars), U.S. Treasury securities and Federal Agency securities that are fully guaranteed with respect to principal and interest payments.

i) The market value of the collateral shall be determined on at least a weekly basis, or more frequently if the State Issuer determines it is in the best interest of the State.

4) Counterparty Exposure Limitation

In order to diversify the State's counterparty credit risk (i.e., to limit credit and financial exposure to any one counterparty), limits will be established for each counterparty serving in that capacity or as a credit support provider for another counterparty, based upon both the credit rating of the counterparty as well as the relative level of risk associated with each existing and proposed swap transaction. The following table provides general termination exposure limits as a factor to be considered by the State when deciding whether to enter into an additional transaction with an existing counterparty. The State may make exceptions to the guidelines to the extent that the execution of a swap achieves one or more of the goals outlined herein or provides other benefits to the State or State Issuer. The maximum Net Termination Exposure (defined below) to any single counterparty should be set so that it does not exceed a prudent level as measured against gross revenues, available assets or other financial resources of the State.

Under this approach, the State will set limits on individual counterparty exposure based on existing, as well as pending or proposed transactions. The sum of the **current market value** and the **projected exposure** shall constitute the Maximum Net Termination Exposure. For outstanding transactions, current exposure will be based on the market value as of the most recent swap valuation report. Projected exposure shall be calculated annually based on the swap's potential termination value taking into account possible adverse changes in interest rates as implied by historical or projected measures of potential rate changes applied over the remaining term of the swap.

The aggregate maximum exposure thresholds for a single counterparty are shown in the table below and depend on the credit ratings of the counterparty and whether or not collateral has been posted. If the counterparty has more than one rating, the lowest rating will govern for purposes of the calculating the level of exposure.

Counterparty Credit Ratings	Maximum Uncollateralized Net Termination Value	Maximum Net Termination Exposure*
AAA Category	$50 million	$100 million
AA Category	$35 million	$70 million
A Category	$15 million	$30 million
BBB+/Baa1	$0	$10 million
BBB or Below	None	None

*Includes collateralized and uncollateralized net termination exposure.

These guidelines are not intended to retroactively require additional collateral posting for existing transactions, or mandate or otherwise force automatic termination of existing agreements. The guidelines will be used in making a determination as to whether a particular proposed transaction should be executed given certain levels of existing and projected net termination exposure to a specific counterparty. If the exposure limit is exceeded by a counterparty, OBM, in consultation with its legal counsel and financial advisor, shall explore remedial strategies to mitigate this exposure.

H. Benefit Expectation

Interest rate swaps, or other derivative products based on the SIFMA Index or other tax-exempt indices, should generate at least 20% greater savings than the State Issuer's benefit threshold then in effect for comparable traditional "cash market" transactions. If based on the London Inter-bank Offered Rate (LIBOR) or other taxable indices, savings should be greater by at least 50%. Reasonable exceptions on a case-by-case basis are acceptable if the State Issuer determines such exceptions are necessary to meet other objectives outlined herein. The higher savings target reflects the greater complexity and higher risk of derivative products.

Comparative savings analyses shall include the consideration of the probability (based on historical interest rate indices or other accepted analytic techniques) of the realization of savings for both the derivative and traditional structures. All such analyses shall also consider structural differences in comparing traditional vs. derivative alternatives, such as the non-callable nature of derivatives, costs of remarketing and liquidity facilities, basis risk, etc.

I. Ongoing Management and Reporting

With respect to each outstanding derivative, the State Issuer will monitor on a monthly basis or more frequently: (i) identities of counterparties and their ratings, and (ii) the market valuation of the derivative. If a swap agreement is to be terminated or has been terminated in that month, the State Issuer will immediately notify OBM and provide a summary of that agreement including the date and amount of any termination payment or receipt.

Within 30 days of the end of each fiscal year, each State Issuer will provide or cause to be provided to OBM a written report fully describing each outstanding interest rate swap or derivative product, including (i) the type of swap, (ii) the applicable bond series, (iii) hedge performance (e.g., net amount of rates paid and received), (iv) total notional amount, (v) remaining life, (vi) counterparty and their ratings, (vii) collateral postings and credit enhancement (if any), (viii) market valuation, and (ix) other information that may be requested by OBM as necessary to comply with GASB or SEC disclosure requirements.

VI. GENERAL PROVISIONS

A. Asset / Liability Management

The State will continue to monitor its debt and interest rate risk profile in the context of an asset-liability management strategy. To this end, the State may evaluate and quantify the difference between the State's debt interest costs (variable and fixed rate) and its investment income (variable and fixed).

B. Budgeting Methodology

OBM establishes and monitors debt service appropriations within various agency budgets to ensure that debt service payments are authorized and that sufficient resources are available to ensure full and timely payment. Funds for ongoing debt-related administrative expenses are included in the debt service appropriations or other appropriations in the budget.

For outstanding bonds and swaps, OBM will budget debt service as follows:

1) Fixed-Rate Bonds - the actual principal and interest payments.

2) Variable Rate Bonds and Synthetic Variable Swaps - actual principal and estimated interest payments. Variable interest rate payments are estimated by utilizing the greater of (i) the 10-year average of the SIFMA index plus one standard deviation; (ii) current SIFMA Index rates plus 50 basis points; or (iii) three percent.

3) Synthetic Fixed Rate Swaps (receipt based on the SIFMA index) - the variable swap receipt is assumed to equal the variable interest payment on the State bonds, resulting in a budgeted payment equal to the fixed payor rate under the swap.

4) Synthetic Fixed Rate Swaps (receipt based on the LIBOR index) - the variable swap receipt is assumed to be 25 basis points lower than the variable interest payment on the State bonds. Thus, the budgeted payment is equal to the fixed payor rate under the swap plus the 25 basis points.

For new issues, OBM will assume a fixed rate structure and budget debt service based upon the sum of current Municipal Market Data AAA tax-exempt rates plus approximately one hundred basis points and amortized on a level debt service basis over the expected term of the bonds. It is important to note that State general obligation bonds do not require an appropriation for the State to make debt service payments; however, State practice is to include appropriations in the budget for accounting and tracking purposes.

State special obligation lease-rental bonds do require an appropriation for debt service. Appropriations are included in each budget bill along with accompanying temporary law stating that if the appropriation is insufficient, additional amounts are automatically appropriated. Appropriations and related temporary law are included in the budget for all State bonds, including those backed by net liquor profits, federal highway grants, and certificates of participation.

C. Continuing Primary and Secondary Market Disclosure

Pursuant to ORC 126.11(E), OBM is responsible for ensuring compliance by State Issuers with SEC Rule 15c2-12 which requires the timely filing of annual information, general purpose financial statements (when and if available), and material event notices. OBM also maintains "Information Concerning the State of Ohio" that is included as Appendix A in each official statement for bonds backed by State revenues. The Appendix provides comprehensive up-to-date information on the State budget and finances, State debt, certain economic and demographic information, and other information deemed necessary to comply with the federal continuing disclosure regulations.

D. Arbitrage Compliance

The State and the State Issuers shall maintain a system of record keeping and reporting in order to comply with the Arbitrage Rebate Compliance Requirements of the Internal Revenue Code of 1986, as amended. The State is committed to minimizing the cost of arbitrage rebate and yield restriction, while strictly complying with these requirements. The Treasurer serves as the arbitrage compliance agent for all issuances of State debt.

E. Post-Issuance Compliance Procedures

State Issuers are responsible for developing and maintaining post issuance compliance procedures to help ensure compliance with federal tax laws over the term of each issuance of tax-exempt bonds or Build America Bonds (BABs). These post-issuance procedures work in tandem with the tax compliance certificate executed in connection with each issuance of tax-exempt bonds or BABs.

F. Policy Review and Revision

OBM and each State Issuer will meet prior to the end of each capital biennium (i.e., June 30 of each biennium ending in an even number, beginning June 30, 2014), or anytime upon request of OBM or a State Issuer, to consider changes and updates to the Policy. The review will focus on assuring that the Policy meets all regulatory, rating and disclosure guidelines and requirements and the State's fundamental objectives of debt and interest rate risk management. The changes and updates made shall be approved by each of the State Issuers prior to becoming part of the Policy.