Nancy K. Kopp
State Treasurer

Bernadette T. Benik
Chief Deputy Treasurer

State of Maryland
Debt Management and Interest Rate Exchange Agreement Policies

1.0 Objective

This Debt Management and Interest Rate Exchange Agreement Policy (Policy), prepared by the Maryland State Treasurer's Office provides guidance for the prudent use of debt to finance the State's Capital Improvement Program ("CIP") and the use of derivative products to hedge and otherwise tailor financial risks, particularly as related to interest rates, tax rates and liquidity.

The goal of this Policy is to establish principles that will result in lowering the State's long-term cost of capital. This Policy will be applicable to all General Obligation bonds and will be reviewed annually to ensure financial flexibility and operational capability is maintained.

The State will adhere to all statutory requirements, comply with all applicable tax regulations, strive to maintain the AAA rating, meet all existing bond covenants, manage financial risk and be guided by governmental best practices while taking proactive steps to maximize value.

2.0 Introduction and Rationale for Policy

Debt financing either through the issuance of fixed or variable rate bonds allows the State to pay for capital assets over a period of time. The Maryland Constitution limits the term of general obligation bonds to 15 years. Although the State has the authority to make short-term borrowings in anticipation of taxes and bond proceeds up to a maximum of $100 million, the State has not issued short-term Revenue Anticipation Notes or made any other similar short-term borrowings for cash flow purposes and this policy does not address procedures for such short term debt. Short term borrowing may be utilized for the temporary funding of CIP cash flow deficits in lieu of internal borrowing if it is determined to be cost effective.

Variable rate debt can be a valuable tool for the State to use in the management of its assets and liabilities, providing a greater diversification in its debt portfolio as well as reducing the overall cost of borrowing. Derivative products, such as interest rate exchange agreements, offer the State additional tools to lower its overall borrowing cost, hedge exposure to interest rate risk, and manage other financial risks. These financial tools, when used prudently for non-speculative purposes, can give the State additional means by which it may manage its debt, asset, and risk portfolios.

The use of debt and derivatives should be considered in light of, and prudently constrained by, the State's financial strength, both current and projected, credit ratings, and debt capacity, as well as the types and amounts of financial risk attendant to the State's debt, asset and risk portfolios.

The following Debt Management and Interest Rate Exchange Agreement Policies establish the guidelines and procedures for State activities related to the issuance of debt and the use of derivative products. Adherence to these Policies will help ensure that the State's financial risk is effectively managed. Debt Management Policy is discussed in Sections 4.0 through 7.0, and policies related to Interest Rate Exchange Agreements are found in Section 8.0. Also addressed in this document are the methods of bond sale, procurement of fiscal agents, rating agency relations, reporting and disclosure (Sections 9.0 through 16.0)

3.0 Statutory Authority
Actions described in this Policy are authorized under Title 8 of the State Finance and Procurement Article ("SF&P") of the Annotated Code of Maryland, which will supersede this Policy in the event of conflict.

4.0 Authorizations Required to Incur Debt
The General Assembly annually approves general obligation bond enabling acts authorizing funds for various capital projects and programs to be financed through the sale of State general obligation bonds. The General Assembly also exercises legislative oversight, control, and review of all forms of State obligations to maintain the State's existing bond rating and to protect the fiscal integrity of the State.

The Board of Public Works ("BPW") is responsible for general supervision of State debt, and by resolution provides for the dates, place, amounts, terms, conditions, security, sale, delivery, replacement, and payment of State general obligation bonds authorized by one or more enabling acts and consolidated for purposes of a bond sale. The BPW has delegated primary responsibility for the preparation and conduct of bond sales to the Treasurer. Upon the recommendation of the Treasurer the BPW, by resolution adopted approximately 30 days in advance of a bond sale, authorizes the consolidation of various debt authorizations, and approves the date and place of sale, the amount and form of the bonds, the manner of sale and the payment dates of the bond issue. (SF&P §8-118 to §8-124).

For Interest Rate Exchange Agreements, the BPW has to authorize the transaction and approve the form of the agreement and the Treasurer has the power to enter into the Agreement (SF&P §8-136).

Prior to each issuance of bonds, the Debt Management Division in the State Treasurer's Office will brief the Treasurer and Chief Deputy Treasurer on the expected issuance, its compliance with this policy, the justification for the use of variable rate debt and/or swaps in the issue, a financial analysis of projected debt service and the status of refunding opportunities. The Debt Management Division recommends the amount of each bond sale using projections from the most recent Capital Debt Affordability Report and by monitoring the rates of bond expenditures and the balance of bond proceeds in the State and Local Facilities Loan Fund. Recommendations on the timing of bond sales will seek to avoid periods of potential market turmoil due to scheduled releases of national economic data.

On the date of the bond sale, held during a regularly scheduled BPW meeting, and upon the recommendation of the Treasurer, the BPW approves the sale of Maryland State General Obligation Bonds by resolution accepting bids or proposals and approving bond maturities and interest rates.

4.1 Expenditure of Bond Proceeds
The expenditure of bond proceeds is accounted for on a "cash flow" basis rather than on a "project" basis. The proceeds from the sale of general obligation bonds are deposited in the State and Local Facilities Loan Fund and expended as needed on any project authorized by an enabling act. "Project" accounting is maintained by the Comptroller of the Treasury to assure that individual project expenditures will not exceed individual project authorizations (SF&P §8-125,127).

5.0 Debt Guidelines
When evaluating debt and other debt-related structures, the State will consider three primary factors: cost of capital, capital structure/balance sheet management, and interest rate risk management.

5.1. Cost of Capital
The State will evaluate the risk-adjusted cost of capital inherent in any financing or capital funding strategy. This evaluation will consider the risks associated with the strategy and interest rate sensitivity analysis (to the extent applicable) to estimate the probable and potential cost of the strategy.
The evaluation will also require the development of a rationale for the funding strategy that considers not only the economics and risks of the strategy, but also its probable and potential budgetary impact.
More particularly:

- The State should use tax-exempt debt whenever the interest subsidy inherent therein produces an economic benefit;

- The State should compare the cost of capital of any federally authorized bonds that have subsidies or tax credits with traditional tax-exempt bonds;
- If the expected use characteristics of a financed facility preclude the use of tax-exempt debt under federal tax law, the State may issue taxable debt and the use of taxable debt will be specifically reviewed by the office of the Attorney General and, if necessary, Bond Counsel prior to issuance;
- The State will continue to finance multiple CIP projects within a given bond issuance to reduce issuance costs by consolidating various enabling act authorizations into semi-annual bond sales and using the cash flow method described in Section 4.1
- The State will consider all costs, including any costs specific to variable rate debt such as liquidity and remarketing fees, when evaluating the benefits of variable and fixed rate debt.

5.2. Capital Structure / Balance Sheet Management

The Maryland Constitution limits the term of general obligation bonds to 15 years. As a matter of practice, the State has issued bonds to mature in serial installments designed to provide payment of interest only during the first two years and an approximately level annual payment of principal and interest over the remaining 13 years. The State may structure principal and interest payments to achieve debt service objectives, such as:

- Vary the term of bonds provided the maturity is less than 15 years;
- Use either level principal payment or level debt service;
- Structure the bonds either as serial or serial and term bonds after considering the marketability of serial and term bonds and the cost benefit of either structure.
- Pay principal in the first two years.

5.3 Risk Management

The State will manage its financial risks by considering:

- The optimal mix of fixed-rate and variable-rate debt, in light of the amount of liquid short-term General Fund assets whose earnings may serve as a hedge against the debt portfolio (i.e., asset-liability management);
- Liquidity risks and exposures; and
- Current and expected market interest rates.

6.0 Fixed Rate Debt

The State will evaluate the issuance of fixed rate debt to fund the CIP in light of the Debt Guidelines defined above. Because fixed rate debt transfers most financial risks to bondholders, fixed rate debt will always be considered a viable financing alternative for all long-term capital projects when practicable and economically viable. The State will monitor its fixed rate debt portfolio on an ongoing basis to identify possible refunding opportunities.

6.1. Permitted Types of Fixed Rate Debt

The State may consider the use of all alternative structures and types of fixed rate debt to the extent permitted by law including serial bonds and term bonds. Currently, Maryland historically structures its fixed rate bonds as serial bonds with principal repayments in years 3 to 15. Interest only payments are made in years 1 and 2. If term bonds are used, they should normally be retired with annual sinking fund payments.

6.2. Permitted Features for Fixed Rate Debt

The State may consider the use of alternative structural features for fixed-rate debt to the extent such features are reasonably expected to produce a lower cost of capital for the State. In evaluating the relative value of alternative coupon structures, the State will consider the expected impact such alternative coupons may have on the future value of its debt portfolio. These features include, but are not limited to:

- The bonds can be sold at par or as premium bonds or discount bonds.
    - If bonds are sold with a premium, the premium shall be deposited to a Premium and Expense Account and used to pay bond issuance costs, and any remainder transferred to the Annuity Bond Fund to pay debt service on State bonds.

    - Whenever bonds are sold at a discount, the BPW shall by resolution determine the manner in which the cash proceeds shall be allocated among the loans financed by that sale, in accordance with SF&P §8-122.1
- The State will consider and evaluate the cost of capital of the following call options over the life of the bonds.
    - Discount and premium coupons issued for callable bonds should generally range from 97% to 103% of par value, but may vary outside that range if marginal value is demonstrable.
    - Bonds with shorter periods of call protection and/or higher call premiums
    - Non-callable bonds
- Because the State currently has AAA ratings, the use of credit enhancement is not necessary. However, in the event of a ratings downgrade, the State may consider using credit enhancement, such as municipal bond insurance, if using such credit enhancement will lower the cost of capital over the life of the bond series. Any insurance premiums will be considered a cost of capital.
- Reserve accounts for debt service will not be maintained unless required by the rating agencies.
- Capital Appreciation Bonds as described in SF&P §8-123.1 may be issued at a negotiated sale to provide greater access to resident Maryland investors.
- Small Denomination Bonds as described in SF&P §8-123.2 may be issued at a negotiated sale for reasons of efficiency or economy, or to provide greater access to resident Maryland investors.
- The State may issue any federally authorized or subsidized bond such as tax credit bonds or taxable bonds with a federal subsidy provided the State Treasurer's Office complies with all Maryland statutes and policies.

6.3 Refunding Opportunities

The State Treasurer's Office and the State's Financial Advisor, under contract to the State Treasurer's Office, will monitor the markets and the State's debt portfolio for opportunities to refund existing fixed rate debt for savings (SF&P §8-131). When considering the refunding or refinancing of State Debt, the State shall calculate the net present value (NPV) savings for the refunding transaction as a whole and on a maturity-by-maturity basis.

The NPV savings shall be estimated net of all costs of issuance and any other associated costs. Additionally, the State shall calculate the Opportunity Cost Index (OCI) for each bond/maturity. The OCI can be calculated by dividing the NPV savings 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.

The State may consider refunding outstanding bonds if debt service savings calculated on a present value basis, net of financing costs, meet the following guidelines:

- Net present value savings of greater than 3% of the refunded par amount and that each maturity being refunded has NPV savings of 1% and the percentage of OCI is greater than 70%.
- In no event will a refunding occur that extends the maturity beyond the initial 15 years.
- To the extent permitted by tax law, bonds may be current or advance refunded.
- The State may refund outstanding debt if present value savings is less than 3% as long there is positive debt service savings in certain maturities that are unlikely to be refunded in the near future (e.g., near term calls and stranded maturities).

7.0 Variable Rate Debt

Variable rate debt affords the State the opportunity to access historically lower cost debt. In addition, variable rate debt has other advantages such as:

- Diversification of investor base;
- Increased flexibility for principal repayment and amortization;
- Enhanced management of assets and liabilities (matching short-term debt with the State's short-term investments). When considering the use of variable rate exposure, the State shall assess its investment portfolio and the amount of short term investments since the earnings from these funds can serve as a natural hedge offsetting variable rate interest risk. In other words, interest rates on variable rate debt and investments tend to move in sync and offset each other.
- Diversification of interest rate exposure.

Variable rate debt, however, subjects issuers to additional risks (relative to fixed rate bonds), including interest rate risk, tax risk (defined in 7.3), and certain risks related to providing liquidity for certain types of variable rate debt.

The State may consider and use variable rate debt to the extent the benefit expected due to lower projected interest cost is determined to be prudent, taking into account the additional risks (SF&P §8-123.4).

Repayment of variable rate debt must comply with the maturity limits of 15 years. Ratings on variable rate debt should be commensurate with fixed rate debt at the time being considered. Currently, fixed rate debt is rated AAA and therefore variable rate debt should be at the highest short term rating.

Before recommending variable rate debt, the State Treasurer's Office will advise the General Accounting Division so that the accounting for this type of debt is properly recorded in the State's Financial Statements.

The method of sale for fixed rate and variable rate bonds is discussed in Section 9.0.

7.1 Permissible Types of Variable-Rate Debt

The State may consider the use of all alternative structures and modes of variable rate debt to the extent permissible under State law and will make determinations among different types and modes of variable-rate debt based on cost, benefit, and risk factors. The State Treasurer shall consider the following in choosing the type of variable rate debt:

- Interest cost and market conditions (including the shape of the yield curves and relative value considerations) for both the traditional "cash" market and the swap market;
- Interest rate outlook for the term of the instrument;
- Projected debt service savings;
- Market demand;
- Costs of implementation and administration;
- Cost and availability of liquidity facilities (lines of credit necessary for VRDOs and commercial paper in the event that the bonds are not successfully remarketed);
- Ability to convert to another mode (daily, monthly, fixed).

7.2 Definition and Limitation of Variable-Rate Exposure

Maryland law requires, at the time of issuance, the aggregate par value of the State's general obligation unhedged variable interest rate bonds shall comprise no more than 15% of the outstanding general obligation indebtedness of the State (SF&P§8-123.4).

For purposes of this Policy, the State's variable-rate exposure shall include the principal amount of debt issued and outstanding as direct variable-rate debt for which the periodic interest reset period is less than 365 days plus the amount of synthetic variable-rate swaps.

Not included in the definition of variable-rate exposure is the par amount of variable rate debt for which interest-rate risk has been substantially eliminated by virtue of:

- Interest rate exchange agreements;
- Other executed hedging transactions, such as interest rate caps, collars, and floors

The State Treasurer's Office will monitor the State's variable-rate exposure so that the amount of variable rate debt adheres to statutory requirements and this policy.

7.3 Risk Assessment and Mitigation Provisions

The State Treasurer's Office will evaluate the State's variable rate portfolio to assess the types and amounts of risks, considering all available means to mitigate those risks. The State Treasurer's Office will also evaluate all proposed variable rate bond transactions for consistency with the objectives and constraints

defined in this Policy. Where appropriate, risk assessment conducted by the State should include analyses which quantify tax risk, basis risk and other risks where possible on a sensitivity basis over the life of the proposed transaction, considering key variables (such as changes in the highest marginal federal tax rate, LIBOR rates, etc.) affecting expected financial results.

- ***Interest Rate Risk and Tax Risk*** - The risk that market interest rates increase on direct variable-rate bonds or synthetic variable-rate swaps because of market conditions, changes in taxation of municipal bond interest, or reductions in tax rates. *Mitigation* - Limit total variable rate exposure per the defined limits and match the variable rate liabilities with short term assets. Evaluate the use of caps and collars on synthetic variable-rate debt. Take advantage of low interest rate environments to fix variable rate debt.
- ***Liquidity/Remarketing Risk*** - The risk that holders of variable rate bonds exercise their "put" option and tender their bonds back to the State, requiring the State to repurchase the bonds or pay a higher rate of interest to a financial institution (third-party liquidity provider). *Mitigation* - Limit total direct variable-rate and synthetic fixed-rate exposure. Negotiate competitive rates based on market proxies for third-party liquidity or use self-liquidity, if appropriate. (See policy/criteria for self-liquidity in 7.4 below.) Bonds must be subject to mandatory tender payable from the liquidity facility with sufficient time prior to the expiration of the liquidity agreement to ensure payment to the bondholders unless the liquidity facility is extended or replaced.
- ***Liquidity/Rollover Risk*** - The risk that arises due to the shorter term of most liquidity provider agreements (2-10 years) relative to the longer-term amortization schedule of the State variable-rate bonds. In particular, (1) the State may incur higher renewal fees when renewal agreements are negotiated and (2) the liquidity bank market constricts such that it is difficult to secure third party liquidity at any interest rate. *Mitigation* - Negotiate longer terms on provider contracts to minimize the number of rollovers or use self-liquidity if appropriate.

7.4 Liquidity

For variable rate debt requiring liquidity facilities to protect against remarketing risk, the State will evaluate:

- Alternative forms of liquidity, including direct pay letters of credit, standby letters of credit, and lines of credit, in order to balance the protection offered against the economic costs associated with each alternative;
- Credit ratings of liquidity providers, seeking the highest short-term credit ratings but in no case shall the bank liquidity facility be less than A-1;
- Diversification among liquidity providers, thereby limiting exposure to any individual liquidity provider;
- Alternative Reimbursement Agreements to identify and negotiate the most favorable contractual terms;
- Relative trading values for bonds secured by alternative liquidity facilities, seeking input from market participants for such guidance;
- All cost components attendant to the liquidity facility, including commitment fees, standby fees, draw fees, and interest rates charged against liquidity draws;
- The term of the facility, selecting the provider offering the longest term all other factors being equal;
- The potential use of self liquidity. Before using internal liquidity, the State will consider its financial strength and availability to fund maximum tender requirements for VRDOS without disrupting normal operations. It will also evaluate and ensure that there is sufficient management expertise to administer payments to bondholders. Finally, it will consider the bond ratings for variable rate bonds with self-liquidity.
- A comparative analysis and evaluation of the cost of external liquidity providers compared to the requirements for self-liquidity.
- The capacity of the human resources and technology in the State Treasurer’s Office to manage and report on variable rate debt.

8.0 Derivatives (Interest rate exchange agreements)
Section 8-136 of the State Finance and Procurement Article states:
"If the Board has authorized the transaction and approved the form of the agreement, to improve the management of State general obligation debt or to reduce the cost of servicing such debt, and after giving due consideration to the creditworthiness of the counterparties, the Treasurer may:

(1) Enter into interest rate exchange agreements or contracts providing for payments based on levels of or changes in interest rates; and
(2) Appoint any agents necessary to implement and administer such agreements or contracts."

Derivative products include (among others) interest rate swaps, swaptions, caps, floors, collars, forwards, and rate locks. These products offer the State additional tools to lower its overall borrowing cost, hedge exposure to interest rate risk, and manage other financial risks. These financial tools, when used prudently for non-speculative purposes, may give the State additional means by which it may manage its debt, asset, and risk portfolios.

Prior to recommending the use of any derivative, the Debt Management Division in the State Treasurer's Office will brief the Treasurer and Chief Deputy Treasurer on the derivative, its compliance with this Policy, the risks associated with the derivative, the justification of its use, and a financial analysis of projected debt service savings. At the direction of the Treasurer, the Debt Management Division shall prepare the appropriate resolutions for consideration by the BPW authorizing the transaction and the form of the agreement.

8.1 Permitted Derivative Instruments and Transaction Types
The State may use any derivative transaction or alternative derivative structure if doing so helps the State meet its financial objectives, subject to and consistent with statute, this Policy and in consideration of the attendant risks. Since derivatives are complex financial instruments, the State may consider retaining an independent swap advisor in addition to its Financial Advisor.

8.2 Use of Derivatives
The use of derivative transactions should further one or more of the following objectives:

- Lower the cost of capital, reducing the fixed or variable rate of interest payable by the State versus its cash market equivalent;
- Manage current interest rate risk;
- Hedge future interest rate risk;
- Optimize the State's capital structure and risk profile;
- Improve the State's financial flexibility;
- Create a structure otherwise not available in the cash market;
- Manage the State's exposure to the risk of changes in the legal and regulatory treatment of tax-exempt bonds.

The use of derivatives is not permitted for the following purposes, among others, which are inconsistent with the overall purposes and objectives of this Policy:

- When they would constitute a speculative transaction or create significant leverage;
- When the fair market value of the transaction cannot be readily and reliably determined;
- When the transaction structure and terms result in a lack of liquidity that would compromise the State's ability to terminate the transaction;
- If the notional amount of the swap exceeds the total amount outstanding of the underlying general obligation debt;
- If the term of the swap agreement between the State and qualified counterparties extends beyond the final maturity date of the underlying debt.

8.3 Limitation on Overall Level of Derivatives

The State will limit the total notional amount of derivatives to less than 20% of the total outstanding debt, i.e., unhedged variable rate debt plus hedged variable rate debt plus fixed rate debt. Derivative transactions in which the State assumes tax risk (i.e., basis swaps) shall not exceed 10% of the total outstanding debt.

8.4 Risk Assessment and Mitigation Provisions

The State Treasurer's Office will evaluate each derivative transaction to assess the types and amounts of risks associated with that transaction, considering all available means to mitigate those risks. The State Treasurer's Office will also evaluate all proposed transactions for consistency with the objectives and constraints defined in this Policy. Where appropriate, risk assessment conducted by the State should include analyses which quantify tax risk, basis risk and other risks where possible on a sensitivity basis over the life of the proposed transaction, considering key variables (such as the highest marginal federal tax rate, LIBOR rates, etc.) affecting expected financial results.

In particular, the State will consider (among others):

- ***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 a limit on total notional amount of derivatives and individual counterparty exposure limits. All Counterparties will have at least a AA rating which will be confirmed at least quarterly by STO. In the event of downgrades, collateral will be required as described below. The State will monitor its counterparties and consider best practice procedures regarding counterparty exposure as articulated by the rating agencies.
- ***Tax Risk*** - The risk associated with a rise in tax-exempt interest rates relative to taxable interest rates that could result from a decrease in the federal marginal corporate or personal income tax rates. *Mitigation* - Limit total direct variable-rate debt, synthetic variable-rate debt, and synthetic fixed-rate debt in which the State receives a variable payment based on a taxable index or rate. The State may instead enter into Swaps in which the counterparty assumes most of the tax risk, such as actual rate or Bond Market Association ("SIFMA") Swaps, as opposed to swaps which are based on a fixed percentage of a taxable index (e.g. LIBOR).
- ***Basis Risk*** - The risk of receiving insufficient receipts from the variable receipt component of a synthetic fixed-rate swap to pay the interest due on the underlying variable-rate debt issued by the State. *Mitigation* - The State will consider the potential savings and risk of different indices.
- ***Termination Risk*** - The risk that a swap could be terminated and a market based termination payment would be required from the State 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. Generally, the State needs to integrate swaps with bonds for tax purposes so that bond proceeds can be used for termination payments. Endeavor to incorporate in swap documentation nonparallel downgrade provisions benefiting the State. For example, if a termination is the result of a ratings downgrade of the counterparty, Maryland would not be required to make a termination payment.
- ***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 variable rate bonds to which the swap is allocated. *Mitigation* - Match swap amortization with the amortization schedule of associated debt.
- ***Operational Risk*** - the risk that the State 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 develop and test policies and practices to ensure timely compliance by the State Treasurer's Office with applicable swap agreement provisions. Ensure that there is sufficient staff for these responsibilities and that they have adequate experience and continuing training. Consult with Financial Advisor and/or Swap Advisor before entering any derivative contract. Invest in and update technology necessary to monitor these agreements. Implement an ongoing monitoring and reporting program for all derivative agreements.

8.5 Form and Content of SWAP Agreements

- The State will document all derivative transactions using standard International Swap and Derivatives Association, Inc. ("ISDA') swap documentation, including the Schedule to the Master Agreement and a Credit Support Annex. The State may use additional documentation if the product is proprietary or the State deems in its sole discretion that such documentation is otherwise in its interest.
- The State Treasurer's Office, in consultation with the Office of the Attorney General, will monitor market developments regarding the standard form of agreements and related practices, and subsequently modify its market agreement standards as appropriate for and applicable to governmental Issuers.

8.6 Swap Terms and Provisions

Subject to the ongoing monitoring of market developments noted in the previous section, the terms and provisions of swap documentation negotiated by the State shall at a minimum reflect the following guidelines:

- Terms of Swap Agreements - The State Treasurer's Office shall determine the appropriate term for an interest rate swap agreement on a case-by-case basis. The term of the swap agreement between the State and qualified swap counterparty in no event shall extend beyond the final maturity date of the related bonds.
- General Terms - Swap contracts between the State and each counterparty shall endeavor to include, but not be limited to the following terms and reflect the following considerations:
    - Optional termination provisions shall be the sole right of the State (i.e., unilateral). All swap transactions shall contain provisions granting the State the right to terminate the swap agreement, at its discretion, anytime during the term of the agreement. Optional termination should benefit the State through the receipt of payment from the counterparty or, in the event of a payment by the State, the ability to pursue more advantageous financial options. The Treasurer, in consultation with the Financial Advisor, Office of the Attorney General and bond counsel, shall determine the appropriateness of terminating a swap agreement.
    - Downgrade provisions triggering termination shall at least be bilateral and may be asymmetric in the State's favor;
    - The Substantive Law governing swaps will be New York law;
    - Since the State has waived immunity in contract only in the courts of this State, the Jurisdiction of Adjudication shall be Maryland State Court;
    - The specified indebtedness related to credit events in any swap agreement should be narrowly drafted;
    - Provisions relating to Collateral shall be as set forth in the Counterparty Collateral Requirements section (§8.10) below;
    - Termination value should be set by "market quotation" methodology;
    - The State should only agree to an Additional Termination Event for the State to the extent that the ratings on the applicable State bonds fall below a ratings trigger acceptable to the State and the counterparty, and no form of credit support or enhancement is in place;
    - Termination payments should be subordinate to debt service payments and efforts should be made to pay them out over a period of more than one year.
    - Default – If possible, the State should negotiate in its agreements that a counterparty default resulting in the termination of the swap would require no payment from the State.

8.7 Benefit Expectation
Comparative savings analyses shall be conducted to determine the relative benefit of using a given derivative structure versus the benefit garnered using a "cash" market alternative structure. All such analyses shall also consider structural differences in comparing traditional versus derivative alternatives (e.g., the non-callable nature of derivative transactions, costs of remarketing and liquidity facilities, basis risk, etc.). To this end:

- Financial transactions, using fixed-rate swaps or other derivative products based on the London Inter-Bank Offered Rate (LIBOR) or similar taxable indices should generate at least 5% greater projected NPV savings compared to the 3% NPV benchmark for a traditional cash market refunding;
- Reasonable exceptions on a case-by-case basis are acceptable, as this 5% threshold should serve as a guideline and would not apply should the transaction, in the Treasurer's sole judgment, help to meet other objectives outlined herein.

8.8 Swap Counterparties
The State shall enter into derivative transactions only with qualified swap counterparties. In particular, at the time of the execution of any given transaction, qualified swap counterparties (by definition) shall be rated at least in the double-A category (i.e., Aa3, AA-, or equivalent) by any two of the nationally recognized rating agencies (i.e. Moody's Investors Service, Standard and Poor's Ratings Services, and Fitch Ratings), or have as support for their obligations a triple-A (i.e., Aaa or AAA) subsidiary or other guarantor (e.g. bond insurer) as rated by at least one nationally recognized rating agency. The State will not consider entering into a swap with a "terminating " derivative product company (DPC) which can terminate its existence upon short notice to bond issuers with no penalty.

The State Treasurer's office will undertake to monitor creditworthiness of all counterparties on a regular basis over the term of any given swap contract.

8.9 Counterparty Downgrade Provisions
The State will structure swap agreements to protect itself from credit deterioration of counter parties, including the use of credit support annexes or other forms of credit enhancement to secure counterparty performance. If a counterparty rating falls below the double-A category (i.e., Aa3, or AA-) by any 2 of 3 rating agencies, the counterparty must provide collateral as required by a credit support annex. Such protection shall include any terms and conditions that in the Treasurer's sole discretion are necessary or appropriate or in the State's best interest, and generally consistent with collateral requirements in §8.10.

8.10 Counterparty Collateral Requirements
As part of any swap agreement, the State may require collateralization or other forms of credit enhancements to secure any or all swap payment obligations. As appropriate, the State may require collateral or other credit enhancement to be posted by each swap counterparty with the following provisions:

- Each counterparty may be required to post collateral if the credit rating of the counterparty falls below the AA rating category. Additional collateral for further decreases in credit ratings of each counterparty shall be posted by each counterparty in accordance with the provisions contained in the credit support annex;
- Collateral shall be deposited with an independent third party custodian approved or determined by the Treasurer;
- Threshold amounts for the initial deposit and for increments of collateral posting thereafter shall be determined by the State on a case-by-case basis;
- In determining maximum uncollateralized exposure, the State shall also 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;
- 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 the negotiation of the swap agreement with each swap counterparty;

- Eligible collateral should be generally limited to cash, U.S. Treasury securities, and U.S. Government Agencies securities and other securities deemed reasonable and acceptable in the sole discretion of the Treasurer;
- The market value of the collateral shall be determined on at least a monthly basis, or more frequently if the State determines it is in its best interest given the specific collateral security;
- The State shall determine on a case-by-case basis whether other forms of credit enhancement, such as swap insurance, are beneficial.

8.11 Counterparty Exposure Limits
To diversify the State's counterparty credit risk (i.e., to limit the credit exposure to any one counterparty), limits will be established for each 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 State may make exceptions to the limits at any time 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.

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 last quarterly swap valuation report. Projected exposure shall be calculated based on the potential termination value of any proposed swap, 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 exposure limits, which will be reviewed periodically to ensure that they remain appropriate, will also be tied to credit ratings of the counterparties and whether or not collateral has been posted as shown in the table below. If a 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	$50 Million	$80 Million
AA	$30 Million	$60 Million
A	$20 Million	$50 Million
BBB	$0	$30 Million

If the exposure limit is exceeded by a counter party, the State Treasurer's Office shall conduct a review of the exposure limit of that counterparty and shall explore remedial strategies to mitigate this exposure.

9.0 Method of Sale
The competitive method of sale is the preferred method. Competitive sales are generally used for fixed rate bond issues that are typically sold to investment bank syndicates. The State currently uses the electronic closed auction method for competitive sales. However, the State Treasurer's Office will stay abreast of industry developments to recommend the most efficient and cost-effective auction method.

Variable rate debt can be sold through selected underwriters in a negotiated sale. In addition, the State may also choose to use a negotiated sale for either fixed rate small denomination bonds, as defined in SF&P §8-123.2 in a retail only order period, or capital appreciation bonds, as defined in SF&P §8-123.1. The negotiated sale could either be separate or in conjunction with a competitive sale. Negotiated sales are also permitted if the Board of Public Works determines that:

- There are extraordinary market conditions, and
- The terms and conditions of a negotiated sale would be more advantageous to the State

Retail only order periods may occur a few days before a competitive sale when underwriters can sell only to retail accounts, thereby giving Maryland citizens an opportunity to directly purchase and own Maryland general obligation bonds. After the retail only order period, the amount of the competitive sale is adjusted by the amount of bonds that were sold to retail investors. The selection of underwriters will follow procurement guidelines identified in Section 10.0.

10.0 Procurement

All procurement activity will be in accordance with state procurement laws and regulations. Underwriters, liquidity providers, printers, financial advisors, rebate consultants, swap advisors and bidding platforms will be procured using the competitive proposal method of selection. The evaluation of firms and the awarding of contracts related to the issuance of State debt is the responsibility of the State Treasurer's Office.

The State may use various methods, including both competitive proposals and negotiated placement, to procure swaps and other derivative products. However, the State will have a preference for competitive procurement for financial products of a general nature that are nonproprietary and widely available in the marketplace. On a product-by-product basis, the State may negotiate the procurement of financial products that are proprietary or have customized or specific attributes designed on its behalf. The State Treasurer's Office will be responsible for determining the method of procurement for swaps and related financial products.

Competitive bidding to procure swaps and other derivative products should be considered. A negotiated approach may be appropriate to procure financial products that are proprietary or that have been customized to meet the needs of the State. For both competitive and negotiated procurements, the execution of any interest rate swap or option transaction shall be the subject of an independent review and analysis by the Financial Advisor and/or the swap advisor and a finding that its terms and conditions reflect a fair market value of such agreement as of the date and time of its execution.

11.0 Budgeting of Debt Service

The State Treasurer's Office and the Department of Budget and Management will forecast debt service at an assumed rate of interest, which will be evaluated and adjusted as required to reflect current projected market rates. Budgets will include estimates of premium revenue and fiscal agent costs related to variable rate debt will be added to the projected variable rate debt service.

12.0 Ongoing Management and Reporting

- With respect to each outstanding derivative transaction, the State Treasurer's Office will monitor on a quarterly basis at a minimum: a) identities of counterparties and their ratings, and b) the market valuation of the derivative transactions. If a swap agreement has been terminated in that month, the State Treasurer's Office will provide a summary of that agreement including the date and amount of any termination payment or receipt. The STO will also report on the actual debt service that was paid on the variable rate bonds plus the payment to the counterparty less the payment from the counterparty and compare this net debt service with the expected fixed rate at the time the swap was executed.
- With respect to variable rate debt, the Division of Debt Management in the State Treasurer's Office will report quarterly to the Treasurer on the results of the variable rate debt by calculating actual variable rate debt service and comparing to the debt service on the same amount using the fixed rates for the concurrent sale. This comparison shall take into account any premium/discount generated in the concurrent sale.
- After each fixed rate bond sale, the Division of Debt Management in the State Treasurer's Office and the State's financial advisor will compare the Maryland yields with other similar bond issues at about the same time and with MMD and report their findings to the State Treasurer.
- The State Treasurer's Office will monitor the variable rates by remarketing agents and compare remarketing agents to achieve the most favorable rates for the State.

13.0 Disclosure
The State Treasurer's Office will comply with all SEC requirements for disclosure by providing annual financial information and notices of material events as outlined in the Continuing Disclosure Agreement executed for each series of bonds. In addition, the State Treasurer's Office will also comply with disclosure requirements for all other bonds that covenant disclosure of the State's financial information. Finally, the State Treasurer's Office will facilitate disclosure for all interested parties by maintaining links to Official Statements on the Treasurer's website.

Information relating to bonds is included in the State Comprehensive Annual Financial Report ("CAFR"). Before the State enters into a derivative contract, the General Accounting Division in the Comptroller's Office will be notified so that they can properly plan for additional information in the Notes to the Financial Statements.

14.0 Bond Ratings and Rating Agency Relations
The State will seek to maintain AAA credit ratings:

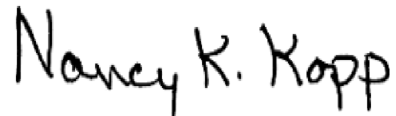
- The State will consider published ratings guidelines in developing its capital funding and debt strategy.
- The State will compare its credit ratings and financial performance versus those of its peer groups as a measure of absolute and relative performance. (To this end, the State Treasurer's Office will regularly monitor a series of appropriate financial ratios and operating measures based on audited financial statements and other readily available data).
- If the State's credit ratings are downgraded below the AAA rating, the capital funding and debt strategy will immediately be reviewed and necessary steps taken to avoid additional downgrades and to restore the AAA rating.
- The State Treasurer's Office is responsible for the communication of information to the rating agencies and keeping them informed of significant developments throughout the year. The State Treasurer's Office will schedule rating agency calls and/or visits prior to the issuance of General Obligation bonds. Some reports that should be transmitted to the Rating Agencies include the Reports issued by the Board of Revenue Estimates, the proposed budget, the adopted budget, the Capital Debt Affordability Committee report, and the CAFR. The State Treasurer's Office will also schedule all other meetings with the rating agencies and coordinate these meetings with other state officials.
- The State Treasurer's Office will engage the relevant Rating Agencies in advance, in the event that the State decides to move forward with a plan of finance that includes variable rate debt or the use of derivatives.

15.0 Legal and Tax Compliance
The State will comply with:

- All debt covenants. Such covenants will be monitored by the State Treasurer's Office and Office of the Attorney General and external auditors;
- Federal tax law to establish and maintain the exclusion from gross income the interest on State bonds. The State Treasurer's Office will particularly focus on arbitrage, private use and SF&P §8-131.1 and will evaluate and ensure compliance with all applicable tax law during the debt issuance process, and on an ongoing basis thereafter, monitoring the State' s debt portfolio in light of regulatory changes and case law, including:
    - private use rules for all financed facilities (especially as they relate to research and clinical activities);
    - Arbitrage rules, including the State's arbitrage rebate position and any attendant rebate liability, as defined in § 148 of the Tax Code.
- To the extent tax-exempt debt is issued, bond sales will be timed and structured (if possible) to take advantage of all possible relief and benefits articulated in tax law, including (but not limited to) "spending exceptions" to the rebate requirement, as defined in the Arbitrage Regulations (§ 148 of

16.0 Policy Review and Revision
Staff will meet at least annually to consider changes and updates to the Policy, as well as recommend any necessary or desirable statutory changes.

The review, among other matters, will focus on assuring that the Policy meets all regulatory, credit rating, and disclosure guidelines, as well as the State's fundamental objectives of capital structure development and financial risk management. The changes and updates made shall be approved by the State Treasurer.



Date: January 1, 2011

Nancy K. Kopp
State Treasurer