



Interest Rate Swap Guidelines

Responsible Office:

Senior Vice President for Administration and Finance

Related Law and Policy:

Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act

Virginia College Building Authority Post Issuance Compliance Policy for Tax-Exempt Qualified Obligations

Treasury Board of the Commonwealth of Virginia Post Issuance Compliance Policy for Tax-Exempt Qualified Obligations

University Policy Private Business Use (Use of Buildings Financed with Tax-Exempt Debt)

University Policy Debt Management

I. Scope

The purpose of the Interest Rate Swap Guidelines (“Guidelines”) of the George Mason University (the “University”) is to establish guidelines for the use and management of interest rate swaps.

II. Purpose

These Guidelines shall govern the University’s use and management of all interest rate swaps as required by the Debt Management Policy. While adherence to these Guidelines is required in applicable circumstances, the University recognizes that changes in the capital markets and other unforeseen circumstances may from time to time produce situations that are not covered by these Guidelines and will require modifications or exceptions.

III. Oversight and Approval

The Senior Vice President of Administration and Finance (the “Senior Vice President”) is responsible for structuring, implementing, and managing interest rate swaps.

IV. Reporting, Monitoring, and Compliance

The Senior Vice President is responsible for reporting on, monitoring of, and compliance with these Guidelines.

V. Conditions for the Use of Interest Rate Swaps

A. General Usage

The University will use swaps to lock-in a fixed rate or, alternatively, to create additional variable rate exposure. Interest rate swaps may be used to produce interest rate savings, limit or hedge variable rate payments, alter the pattern of debt service payments, or for asset/liability matching purposes.

In connection with the use of any swaps, the Senior Vice President shall ensure that the authorized swaps will be used in a beneficial manner to alter interest rate risk and/or the cost of borrowing, and will enhance the relationship between risk and return or achieve other strategic objectives of the University.

B. Maximum Notional Amount

The University will limit the total notional amount of outstanding interest rate swaps as set forth in these Guidelines regarding the proper management of risks, calculation of termination exposure and development of a contingency plan.

C. Liquidity Considerations

The University shall consider the impact of any variable rate bonds issued in combination with an interest rate swap on the availability and cost of liquidity support for other University variable rate programs. The University recognizes that there is a limited supply of letter of credit or liquidity facility support for University variable rate bonds and the usage of liquidity support in connection with an interest rate swap may result in higher overall costs.

D. Call Option Value Considerations

When considering the relative advantage of an interest rate swap to fixed rate bonds, the University will consider the value of the call option on fixed rate bonds. The value derived from the ability to call bonds at a future date is foregone when using a swap unless cancellation provisions are explicitly included in the swap. Typically the University sells bonds that are callable after ten (10) years and could be refunded at that time. Interest rate swaps will not have a par call provision, unless the University pays for this option, and cannot be refunded in the future to provide economic savings.

E. Adherence with Dodd-Frank Wall Street Reform and Consumer Protection Act

It is the intent of the University to conform these Guidelines to the requirements relating to

legislation and regulations for derivatives transactions under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act, as supplemented and amended from time to time, including any regulations promulgated in connection therewith (herein collectively referred to as “Dodd-Frank”).

Pursuant to such intent, with respect to each interest rate swap:

- i. each swap advisor engaged or to be engaged by the University will function as the designated qualified independent representative (“designated QIR” of the University);
- ii. each swap advisor will meet the requirements specified in Commodity Futures Trading Commission (“CFTC”) Regulation 23.450(b)(1) or any successor regulation (“Representative Regulation”);
- iii. each swap advisor will provide a written certification to the University to the effect that such swap advisor meets the requirements specified in the Representative Regulation;
- iv. the University will monitor the performance of each swap advisor consistent with the requirements specified in the Representative Regulation;
- v. the University will exercise independent judgment in consultation with its swap advisor in evaluating all recommendations, if any, presented by any swap dealer with respect to transactions authorized pursuant to these Guideline;
- vi. the University will rely on the advice of its swap advisor with respect to interest rate swaps authorized pursuant to these Guidelines and not rely on recommendations, if any, presented by any swap dealer with respect to interest rate swaps authorized pursuant to this guideline ; and
- vii. the University shall obtain and maintain a “legal entity identifier” from a firm designated by the CFTC to provide such numbers.

As required by CFTC, in connection with the execution of any swap entered into on or after September 9, 2013, the University shall complete and maintain an annual filing regarding how it generally meets its financial obligations associated with entering into uncleared swaps.

Comprehensive records shall be maintained, either in paper or electronic form, of any interest rate swap entered into by the University for at least five (5) years following the termination thereof. Such records shall be retrievable within five (5) business days and shall be open to inspection by the CFTC.

VI. Interest Rate Swap Features

A. Interest Rate Swap Agreement

The University will use terms and conditions as set forth in the International Swap and Derivatives Association, Inc. (“ISDA”) Master Agreement. The swap agreement between the University and each counterparty shall include payment, term, security, collateral, default, remedy, termination, and other terms, conditions, provisions and safeguards as the University,

in consultation with its legal counsel, deems necessary or desirable.

Subject to the provisions contained herein, the terms of any University swap agreement shall include the following:

- i. Downgrade provisions triggering termination shall in no event be worse than those affecting the counterparty.
- ii. Preferred governing law for swaps will be Virginia. Exceptions to Virginia law must be approved by Bond Counsel and University Counsel.
- iii. The specified indebtedness related to credit events in any swap agreement should be narrowly defined and refer only to indebtedness of the University that could have a materially adverse effect on the University's ability to perform its obligations under the swap. Debt should typically only include obligations within the same lien as the swap obligation.
- iv. Collateral thresholds for the swap provider should be set on a sliding scale reflective of credit ratings. Collateral requirements should be established and based upon the credit ratings of the swap provider or guarantor.
- v. Eligible collateral should generally be limited to the list of permitted investments as outlined in the University's enabling legislation.
- vi. The University shall have the right to optionally terminate a swap agreement at "market," at any time over the term of the agreement.
- vii. Termination value should be set by a "market quotation" methodology, unless the University deems an alternate appropriate.

B. Interest Rate Swap Counterparties

1. Credit Criteria

The University will make its best efforts to work with qualified swap counterparties that have a general credit rating of: (i) at least "Aa3" or "AA-" by one of the nationally recognized rating agencies and not rated lower than "A2" or "A" by any nationally recognized rating agency, or (ii) have a "AAA" subsidiary as rated by at least one nationally recognized credit rating agency. The nationally recognized rating agencies are Moody's Investors Services, Inc., Standard and Poor's Rating Services, and Fitch Ratings.

For lower rated (below "Aa3 or "AA-") counterparties, the University will seek credit enhancement in the form of:

- i. Contingent credit support or enhancement;
- ii. Collateral consistent with the policies contained herein;
- iii. Ratings downgrade triggers; and
- iv. Guaranty of parent, if any.

In addition, qualified swap counterparties must have a demonstrated record of successfully executing swap transactions as well as creating and implementing innovative ideas in the swap

market.

2. Counterparty Exposure

The University shall endeavor to diversify its exposure to counterparties. To that end, before entering into a swap agreement, the University will determine its exposure to the relevant counterparty or counterparties and determine how the proposed transaction would affect that exposure. The exposure should be measured in terms of notional amount, mark to market valuation and volatility. The University shall also take into account the University exposure to any related entities of a particular counterparty as well as other credit facilities outstanding between the University and the counterparty.

C. Term and Notional Amount

In connection with the issuance or carrying of bonds, the term of the swap agreement shall not extend beyond the final maturity date of the related bonds. The total “net notional amount” of all swaps related to a bond issue should not exceed the amount of outstanding bonds. For purposes of calculating the net notional amount, credit shall be given to any fixed versus variable rate swaps that offset for a specific bond transaction.

D. Collateral Requirements

As part of any swap agreement, the University may, based on credit ratings of the counterparty, require collateralization or other forms of credit enhancements to secure any or all swap payment obligations. As appropriate, the University, in consultation with Bond Counsel and swap advisor, may require collateral or other credit enhancement to be posted by any swap counterparty if the credit rating of the counterparty or parent falls below the “AA” credit 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 collateral support agreement to each counterparty with the University.

Threshold collateral amounts shall be determined by the University on a case-by-case basis. The University will determine the reasonable threshold limits for the initial deposit and for increments of collateral posting thereafter. Collateral shall be deposited with a third party trustee, or as mutually agreed upon between the University and the counterparty. 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 each swap counterparty. The market value of the collateral shall be determined on a monthly basis or more frequently if the University determines it is in its best interest given the specific collateral security.

E. Prohibited Interest Rate Swap Features

The University will not use interest rate swaps that:

- are speculative or create extraordinary leverage or risk
- lack adequate liquidity to terminate without incurring a significant bid/ask spread
- provide insufficient price transparency to allow reasonable valuation
- are used as investments
- cause the total swapped debt to exceed fifty percent (50%) of the University's total debt outstanding

VII. Evaluation and Management of Interest Rate Swap Risks

Prior to the execution of any swap transaction, the Senior Vice President, the University's swap advisor and Bond Counsel shall evaluate the proposed transaction and the Senior Vice President shall report to the Board. The University's review will include the identification of the proposed benefits and potential risks of the new swap. The annual evaluation will also include the review of these benefits and potential risks for any existing interest rate swaps.

A. Managing Interest Rate Swap Risks

1. The swap evaluations will include the following information:

- i. A description of all outstanding interest rate swaps, including related bond series, types of swaps, rates paid and received by University, existing notional amount, the average life and remaining term of each swap agreement, and the current termination value of all outstanding swaps.
- ii. Separately for each swap, the actual debt service requirements versus the projected debt service on the swap transaction; and for any swaps used as part of a refunding, the actual cumulative savings versus the projected savings at the time the swap was executed.
- iii. The credit rating of each swap counterparty, parent, guarantor, and credit enhancer insuring swap payments, if any.
- iv. Actual collateral posting by swap counterparty, if any, per swap agreement and in total by swap counterparty.
- v. Information concerning any material event involving outstanding swap agreements, including a default by a swap counterparty, counterparty downgrade, or termination.
- vi. An updated contingency plan to replace or fund a termination payment in the event an outstanding swap is terminated.
- vii. The status of any liquidity support used in connection with interest rate swaps, including the remaining term and current fee.

2. Contingency Plan

The University shall compute the termination exposure of each of its swaps and its total swap termination payment exposure at least annually and prepare a contingency plan to either replace the swaps or fund the termination payments, if any, in the event one or more outstanding swaps are terminated. The University shall assess its ability to obtain replacement swaps and identify revenue sources to fund potential termination payments.

B. Terminating Interest Rate Swaps

1. Optional Termination

The University, in consultation with its swap advisor and Bond Counsel, may terminate a swap if it is determined that it is financially advantageous.

2. Mandatory Termination

In the event a swap is terminated as a result of a termination event, such as a default or a decrease in credit rating of either the University or the counterparty, the University will evaluate whether it is financially advantageous to obtain a replacement swap or, depending on market value, make or receive a termination payment.

In the event the University makes a swap termination payment, the University shall attempt to follow the process identified in its swap contingency plan. The University shall also evaluate the economic costs and benefits of incorporating a provision into the swap agreement that will allow the University to make termination payments over time.

VIII. Selecting and Procuring Interest Rate Swaps

A. Financing Team

The University will retain the services of a nationally recognized municipal bond counsel firm and qualified swap advisor for all interest rate swaps.

B. Underwriter Selection

In the event bonds are issued in connection with interest rate swaps, the University will select an Underwriter based on criteria established by the Senior Vice President and taking into account the experience level of each firm in regards to interest rate swaps.

C. Counterparty Selection

The University will utilize a competitive process to select a swap counterparty and execute/price a swap when that process will provide the lowest financing cost. The University may use a competitive process to select a swap counterparty and negotiate the execution and pricing of a swap when it believes market or competitive conditions justify such a process. Conditions that may suggest a negotiated selection are provided below.

- i. Marketing of the swap will require complex explanations about the security for repayment or credit quality.
- ii. Demand is weak among swap counterparties.
- iii. Market timing is important, such as for refundings.
- iv. Coordination of multiple components of the financing is required.
- v. The swap has non-standard features, such as a forward starting swap.
- vi. The par amount for the transaction is significantly larger than normal.

IX. Disclosure and Financial Reporting

The University will take steps to ensure that there is full and complete disclosure of all interest rate swaps to rating agencies and in disclosure documents. Disclosure in marketing documents shall provide a clear summary of the special risks involved with swaps and any potential exposure to interest rate volatility or unusually large and rapid changes in market value. With respect to its financial statements, the University will adhere to the Guidelines for the financing reporting of interest rate swaps, as set forth by the Government Accounting Standards Board.

X. Definitions

Asset/Liability Matching To match the term and amount of assets and liabilities in order to mitigate the impact of changes in interest rates.

Bid/Ask Spread The difference between the bid price (at which a market maker is willing to buy) and the ask price (at which a market maker is willing to sell).

Call Option The right to buy an underlying asset (e.g. a municipal bond) after a certain date and at a certain price. A call option is frequently embedded in a municipal bond, giving the issuer the right to buy, or redeem, the bonds at a certain price.

Collateral Assets pledged to secure an obligation. The assets are potentially subject to seizure in the event of default.

Downgrade A negative change in credit ratings.

Forward Starting Swap Interest rate swaps that start at some time in the future. Used to lock-in current interest rates.

Hedge A transaction that reduces the interest rate risk of an underlying security.

Interest Rate Swap The exchange of a fixed interest rate and a floating interest rate between counterparties.

Liquidity Support An agreement by a bank to make payment on a variable rate security to assure investors that the security can be sold.

LIBOR The London Interbank Offer Rate. Used as an index to compute the variable rate on an interest rate swap.

Notional Amount The amount used to determine the interest payments on a swap.

Termination Payment A payment made by a counterparty that is required to terminate the swap. The payment is commonly based on the market value of the swap, which is computed using the rate on the initial swap and the rate on a replacement swap.

Risk Summary

Type of Risk	Description	Evaluation Methodology
Basis risk	The mismatch between actual variable rate debt service and variable rate indices used to determine swap payments.	The University will review historical trading differentials between the variable rate bonds and the index.
Tax risk	The risk created by potential tax events that could affect swap payments.	The University will review the tax events in proposed swap agreements. The University will evaluate the impact of potential changes in tax law on LIBOR indexed swaps.
Counterparty risk	The failure of the counterparty to make required payments.	The University will monitor exposure levels, ratings thresholds, and collateralization requirements.
Termination risk	The need to terminate the transaction in a market that dictates a termination payment by the issuer.	The University will compute its termination exposure for all existing and proposed swaps at market value.
Rollover risk	The mismatch of the maturity of the swap and the maturity of the underlying bonds.	The University will determine its capacity to issue variable rate bonds that may be outstanding after the maturity of the swap.
Liquidity risk	The inability to continue or renew a liquidity facility.	The University will evaluate the expected availability of liquidity support for swapped and unhedged variable rate debt.
Credit risk	The occurrence of an event modifying the credit rating of the issuer or its counterparty.	The University will monitor the ratings of its counterparties and insurers.

XI. Effective Date

These Guidelines will become effective upon the date of approval by the Senior Vice President for Administration and Finance.

XII. Timetable for Review

These Guidelines shall be reviewed as needed based on changes in market conditions, related law or policy.

XIII. Signature

Approved:



**Senior Vice President for Administration
and Finance**

Date: 2/6/2018