STATE OF FLORIDA FLORIDA BOARD OF GOVERNORS DEBT MANAGEMENT GUIDELINES

WITH VARIABLE RATE DEBT GUIDELINES AND INTEREST RATE SWAP GUIDELINES

AS APPROVED BY THE FLORIDA ATLANTIC UNIVERSITY BOARD OF TRUSTEES ON NOVEMBER 10, 2010

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I. DEBT MANAGEMENT GUIDELINES FOR CAPITAL OUTLAY PROJECTS

A. INTRODUCTION

The Need for and Purpose of Debt Management Guidelines

The state universities of Florida and their direct support organizations ("DSOs") have funded significant investments in infrastructure, such as buildings, equipment, land, and technology, to meet the needs of a growing student population and to upgrade and maintain existing capital assets. A significant amount of the funding for this investment in infrastructure has been provided through the issuance of debt by the State for the benefit of the state universities and by the state universities' direct support organizations ("DSOs").

The purpose of these guidelines is to confirm that the state universities and their DSOs must engage in sound debt management practices and, to that end, the Board of Governors ("Board") has formalized guiding principles for the issuance of debt by the state universities and their DSOs. Each state university shall adopt a debt management policy which is consistent with these guidelines and which shall be approved by the Board.

The following guidelines set forth guiding principles regarding state university and DSO debt-related decisions related to:

- a) The amount of debt which may prudently be issued.
- b) The purposes for which debt may be issued.
- c) Structural features of debt being issued.
- d) The types of debt permissible.
- e) Compliance with securities laws and disclosure requirements.
- f) Compliance with federal tax laws and arbitrage compliance.

These principles will facilitate the management, control and oversight of debt issuances, for the purpose of facilitating ongoing access to the capital markets which is critical to the financing of needed infrastructure.

In furtherance of this objective, the provisions of these guidelines shall be followed in connection with the authorization, issuance and sale of university and DSO debt. However, exceptions to the general principles set forth herein may be appropriate under certain circumstances. Also, additional guidelines and policies may be necessary as new financial products and debt structures evolve over time.

For purposes of these guidelines:

i) "debt" means bonds, loans, promissory notes, lease-purchase

agreements, certificates of participation, installment sales, leases, or any other financing

mechanism or financial arrangement, whether or not a debt for legal purposes, for financing or refinancing, for or on behalf of a state university or a direct support organization, the acquisition, construction, improvement or purchase of capital outlay projects;

- ii) "capital outlay project" means (i) any project to acquire, construct, improve or change the functional use of land, buildings, and other facilities, including furniture and equipment necessary to operate a new or improved building or facility, and (ii) any other acquisition of equipment or software; and
- iii) "financing documents" means those documents and other agreements entered into by the state university or the DSO establishing the terms, conditions and requirements of the debt issuance.
- iv) "auxiliary enterprise" means any activity defined in section 1011.47(1), Florida Statutes, and performed by a university or a direct-support organization.

B. DEBT AFFORDABILITY AND CAPITAL PLANNING

Concept of Affordability

One of the most important components of an effective debt management policy is an analysis of what level of debt is affordable given a particular set of circumstances and assumptions. More comprehensive than simply an analysis of the amount of debt that may be legally issued or supported by a security pledge, the level of debt should be analyzed in relation to the financial resources available to the university and its DSO's on a consolidated basis, to meet its debt service obligations and provide for operating the university.

An analysis of debt affordability should address the impact of existing and proposed debt levels on an issuer's operating budget and offer guidelines or ranges to policymakers for their use in allocating limited resources within the guidelines.

Debts That May Be Issued Without Board of Governors' Approval

The following types of financings, subject to specific approval by the university board of trustees, may be engaged in by the state universities and their DSOs, as applicable, without Board approval:

- o Universities may finance the acquisition of equipment and software provided such financings are accomplished in accordance with the deferred-purchase provisions in Chapter 287, Florida Statutes.
- o DSOs may finance the acquisition of equipment and software financings provided the overall term of the financing, including any extension, renewal or refinancings, hereof, does not exceed five years or the estimated useful life of the equipment or software, whichever is shorter.
- o DSOs may issue promissory notes and grant conventional mortgages, in an amount not to exceed \$1 million, for the acquisition of real property, including improved real property. However, no mortgage or note shall exceed 30 years.
- O University and DSO debt secured solely with gifts and donations and pledges of gifts so long as the maturity of the debt, including extensions, renewals and refundings, does not exceed five years and so long as the facilities being financed have been included in the university's five-year capital improvement plan that has been approved by the Board.
- o Refundings for debt service savings where final maturities are not extended.
- o Fully collaterized lines of credit intended to be used for temporary cash flow needs.
- o Energy Performance-Based Contracts, in accordance with the provisions of section 1013.23, Florida Statutes, not to exceed \$10,000,000.
- Universities may borrow up to \$20,000,000 from a university DSO on a non-recourse basis to finance a capital project. The term of the borrowing may not exceed thirty (30) years, and the interest rate, if any, may not exceed current market interest rates. The university retains legal title to any capital project financed in whole or in part by such loan irrespective of whether the loan is repaid. The DSO is prohibited from transferring the note or any other instrument associated with the borrowing to any other entity.

C. GENERAL DEBT ISSUANCE GUIDELINES PROCESS FOR SUBMITTING DEBT FOR APPROVAL

Timing. The submission of proposed debt for approval by the Board shall be governed by the following process¹:

- a) The university shall formally transmit to the Board Office a request for debt approval no later than 60 days prior to the next regularly scheduled meeting of Board. The university shall also provide a copy to the State Division of Bond Finance ("DBF"). The formal transmittal to the Board Office shall be in duplicate, hard copy, and bound in a three-ring binder, and include all the information required by these guidelines. Electronic copies of supporting documentation should be provided to the Board Office and the DBF, to the extent available. The formal letter of transmission must be signed by the official point of contact for the university, and any exceptions to these Debt Guidelines shall be noted and explained. If the university board of trustees has not yet formally approved the debt being requested, the proposed board of trustees meeting date shall be provided.
- b) During the review period, the Board Office shall review the information submitted for compliance with these guidelines and State law, analyze general credit issues associated with the proposed indebtedness, and review any analysis provided by the DBF staff.
- c) Board and DBF staff shall jointly discuss with the university or DSO any issues, concerns or suggestions resulting from the review during the review period. As a result of these discussions, the university may amend the information submitted or explain why the suggestions were not incorporated. The Board Office will advise the university if it believes that any amended information is so significant that reauthorization by the board of trustees and/or DSO is required. During this period, if the debt being requested for approval is to be issued by the DBF on behalf of a state university, DBF shall submit to the Board Office a form of a resolution for adoption requesting that DBF issue the debt.
- d) After the review period, the Board Office shall submit the agenda item with supporting documentation and all appropriate and required analyses to the Board for consideration at its next meeting. Supporting documentation for the agenda item shall also include the resolution to

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¹ Although not required, universities are encouraged to consult with the Board Office and the State Division of Bond Finance 30 days prior to formal approval of debt by the university board of trustees or the DSO, particularly for any debt with unusual features.

be adopted by the Board requesting issuance of the debt by DBF or a resolution approving issuance of the debt by the DSO.

Information Required for Submission. The following information shall be submitted to the Board Office in support of a request for approval of the issuance of debt. Additionally, the university or DSO shall complete the "Checklist of Information Required for Submission to the Board Pursuant to Debt Management Guidelines", and provide any additional information requested by the Board Office or DBF staff in connection with review of any proposed debt issuance.

- a) A resolution of the DSO board of directors approving the debt issuances, if applicable, and a resolution of the university board of trustees approving the debt issuance and authorizing the university to request Board approval of the debt issuance. For debt to be issued by DBF, at the request of the university, DBF staff will work with the university to determine a not-to-exceed amount of debt to be included in the board of trustees requesting resolution to the Board and in preparing required debt service and source-and-use schedules.
- b) The project program, feasibility studies or consultant reports (if available), and an explanation of how the project being proposed is consistent with the mission of the university.
- c) Estimated project cost, with schedules drawn by month and including start and completion dates, estimated useful life, and the date bond proceeds are required.
- d) The sources-and-uses of funds, clearly depicting all costs, funding sources expected to be used to complete the project and the estimated amount of the debt to be issued.
- e) An estimated debt service schedule with the assumed interest rate on the debt clearly disclosed. If the proposed debt service is not structured on a level debt service basis, an explanation shall be provided which gives the reason why it is desirable to deviate from a level debt structure.
- f) One consolidated debt service schedules separately showing all outstanding debt related to or impacting the debt being proposed, the proposed debt and the new estimated total debt service.
- g) A description of the security supporting the repayment of the proposed debt and the lien position the debt will have on that security. If the lien is junior to any other debt, the senior debt must be

described. Furthermore, a description of why the debt is proposed to be issued on a junior lien basis must be provided. A statement citing the legal authority for the source of revenues securing repayment must also be provided.

- h) If debt is to be incurred on a parity basis with outstanding debt, a schedule showing estimated compliance with any additional bonds requirement set forth in the documents governing the outstanding debt. The applicable provisions of the documents for bonds of DSOs should be provided.
- i) Financial statements for five years, if available, for the auxiliary, if auxiliary revenues are pledged.
- j) A five-year history, if available, and five-year projection of the revenues securing payment and debt service coverage. To the extent applicable, the projections must be shown on the individual project as well as the entire system. All revenue items securing repayment must be clearly set forth as separate line items. An explanation must be provided with regard to growth assumptions, and to the amount and status of approval of any rate increases. The effect of the rate increases on the projections and expected revenues and expenses for the new facility should be clearly set forth as a separate line item. If rate increases are necessary, a commitment must be made to increase rates to the needed levels. Major categories of any operating expenses should be set forth as separate line items with an explanation of assumptions regarding increases or decreases.
- k) Evidence that the project is consistent with the university's master plan or a statement that the project is not required to be in the master plan.
- 1) For variable rate debt proposals:
 - the expected reduction in total borrowing costs based on a comparison of fixed versus variable interest rates;
 - ii) a variable rate debt management plan that addresses liquidity and interest rate risks and provides, at a minimum: a description of budgetary controls, a description of liquidity arrangements, a discussion of why the amount of variable rate debt being proposed is appropriate, and a plan for hedging interest rate exposure. If interest rate risks are to be mitigated by the use of derivatives, then evidence that the counterparty has a long term rating of at least an A/A2 and a swap management plan as set

- forth in the Board's Debt Management Guidelines must be submitted;
- iii) a pro forma showing the fiscal feasibility of the project using current market interest rates plus 200 basis points;
- iv) the total amount of variable rate debt including the proposed debt as a percentage of the total amount of university and DSO debt outstanding; and
- v) the individual or position that will be responsible for the reporting requirements for variable rate debt as set forth in these guidelines.
- m) If all or any portion of the financing is contemplated to be done on a taxable basis, then evidence demonstrating that the issuance of taxable debt is in the best interest of the university must be submitted.
- n) A statement explaining whether legislative approval is required, and if required, an explanation as to when legislative approval will be sought or evidence that legislative approval has already been obtained.
- o) A statement that the debt issuance is in accordance with the university's debt management policy or, if not, an explanation of the specific variances as well as the reasons supporting the variances.
- p) If a request is made to employ a negotiated method of sale, an analysis must be provided supporting the selection of this method that includes a discussion of the factors set forth in section IV of these Guidelines.
- q) A description of the process used to select each professional engaged in the transaction, showing compliance with the competitive selection process required by these Guidelines. Specific contact information for each selected professional, must be included, and at a minimum, should disclose the professional's name, firm name, address, email address, phone number and facsimile number.
- r) The most recent annual variable rate debt report.

Approval. The Board will consider the following factors in connection with its review and approval of university or DSO debt issuance.

a) The debt is to provide funding for needed infrastructure of the university for purposes consistent with the mission of the university.

- b) The debt is being issued in compliance with the principles and guidelines set forth herein.
- c) The project information submitted is reasonable and supportable.
- d) The five-year projection of pledged revenues available to pay debt service should provide debt service coverage of at least 1.20x for both outstanding parity debt and for the proposed new debt for all years within the five-year projection period after giving credit for any capitalized interest and other revenues available for payment.
- e) Any requirements for the issuance of additional parity debt can be reasonably expected to be met.

Purposes For Which Debt May Be Issued

Debt may be issued only to finance or refinance capital outlay projects as defined in these guidelines, including equipment and software; debt may not be approved to finance or refinance operating expenses of a university or a DSO.

Refunding bonds may be issued to achieve debt service savings. Refunding bonds may also be issued to restructure outstanding debt service or to revise provisions of Financing Documents if it can be demonstrated that the refunding is in the best interest of the university.

Committing University Resources for Debt Issued by Direct Support Organizations

There may be occasions where the university considers committing its financial resources on a long-term basis in support of debt issued by a DSO or other component unit. While the nature of the commitment may not constitute a legal debt obligation of the university, it may affect the university's debt position and its available financial resources. Therefore, the university should evaluate the long-term fiscal impact upon the university's debt position and available resources before authorizing any such financial commitment. Additionally, the debt of any DSO may not be secured by an agreement or contract with the university unless the source of payments under such agreement or contract is limited to revenues that the university is authorized to use for the payment of debt service. Any such contract or agreement shall also be subject to the requirements set forth under "Security Features – Pledged Revenues" herein.

Credit Ratings

In order to access the credit markets at the lowest possible borrowing cost, it is recognized that credit ratings are critical. Therefore, for all publicly offered debt:

- a) For existing bond programs, universities and DSOs shall strive to maintain or improve current credit ratings without adversely impacting the amount of debt which may be issued for any particular program.
- b) For all new financings, the university or DSO shall seek to structure the transaction to achieve a minimum rating of "A" from at least two nationally recognized rating agencies. Credit enhancement may be used to achieve this goal.

Tax Status

The universities have traditionally issued tax exempt debt which results in significant interest cost savings compared with the interest cost on taxable debt. Accordingly, all university and DSO debt should be issued to take advantage of the exemption from federal income taxes unless the university demonstrates that the issuance of taxable debt is in the university's best interest. With respect to debt which has a management contract with a private entity as part of the security feature, the management contract should comply, to the greatest extent practical, with tax law requirements to obtain tax exemption for the debt.

Security Features

Pledged Revenues. The debt issued by universities and their DSOs may only be secured by revenues (including fund balances and budget surpluses) authorized for such purpose. The revenues which may secure debt include the following:

- a) Activity and Service Fee, subject to the limitation that annual debt service payable from these fees does not exceed five percent of the revenues derived therefrom.
- b) Athletic Fee, subject to the limitation that annual debt service payable from these fees does not exceed five percent of the revenues derived therefrom.
- c) Health Fee.
- d) Transportation Access Fee.
- e) Hospital Revenue.

- f) Licenses and Royalties for facilities that are functionally related to the university operation or DSO reporting such royalties and licensing fees.
- g) Gifts and Donations for debt not longer than five years.
- h) Overhead and indirect costs and other monies not required for the payment of direct costs of grants.
- i) Assets of University Foundations and DSOs and earnings thereon.
- j) Auxiliary Enterprise Revenues, e.g., housing, parking, food service, athletic, retail sales, research activities.

Revenues which are not enumerated above may not be pledged to secure debt unless authorized by law for such purpose. In the case of university-issued debt, the pledge of revenues which secures debt should specifically identify the sources pledged and not use general or vague terms such as "lawfully available revenues." Specifically identifying revenues used to secure debt will provide certainty and transparency as to the revenues that are encumbered and avoid ambiguity or uncertainty as to the issuer's legal liability and universities and their DSOs should take this into consideration when determining the nature of the security it will provide in connection with a debt issuance. The guidelines for pledging revenues and securing debt shall also apply to debt structures which involve an agreement, contract or lease with a university or its DSOs, i.e., the revenues being pledged to secure debt must be specifically identified and lawfully available for such purpose. It is preferable, whenever possible, to secure debt with system pledges comprised of multiple facilities within a system, e.g., housing and parking, rather than stand-alone project finances.

Functional Relationships. Revenues from one auxiliary enterprise (a "Supporting Auxiliary Enterprise") may not be used to secure debt of another auxiliary enterprise unless the Board, after review and analysis, determines that the facility being financed (the "Facility") is functionally related to the Supporting Auxiliary Enterprise's revenues being used to secure such debt. The Board must determine whether a functional relationship exists whenever revenues from a Supporting Auxiliary Enterprise will be used to pay or secure the debt of a Facility or when proceeds of bonds issued by a Supporting Auxiliary Enterprise will be used, directly or indirectly, to pay costs relating to a Facility. When a functional relationship is established between a Facility and a Supporting Auxiliary Enterprise, only that portion of the Supporting Auxiliary Enterprise's revenues that exceed its operating requirements and debt service, if any, may be pledged to secure such debt; provided that such pledge may be on parity with outstanding debt if permitted by the covenants and conditions of the outstanding debt.

A functional relationship exists when a nexus is established between the Facility and the Supporting Auxiliary Enterprise's revenues. Whether a Facility is functionally related to the Supporting Auxiliary Enterprise's revenues must be determined on a case by case basis, taking into consideration the unique facts and circumstances surrounding each individual situation.

Examples of functional relationships include, but are not limited to, a parking facility intended to provide parking to residents of a student housing facility and located within reasonably close proximity to a student housing facility; a food services facility intended to serve residents of a student housing facility and located within reasonably close proximity to a student housing facility; or shared infrastructure (e.g. water lines, sewer lines, utilities, plaza areas) located within reasonably close proximity to both the Facility and the Supporting Auxiliary Enterprise. While representations that a Facility will provide general benefits to or enhance the experience of the student body are desirable, this factor alone is not determinative in and of itself to establish a functional relationship between the Facility and the Supporting Auxiliary Enterprise's revenues.

Lien Status. All bonds of a particular program should be secured by a first lien on specified revenues. Additionally, bonds should generally be equally and ratably secured by the revenues pledged to the payment of any outstanding bonds of a particular bond program. However, the creation of a subordinate lien is permissible if a first lien is not available or circumstances require.

Reserve Fund. Debt service reserve requirements may be satisfied by a deposit of bond proceeds, purchase of a reserve fund credit facility, or funding from available resources over a specified period of time. In the submission of a request for debt issuance, it is preferred, though not required, that the bond size for the proposed debt include provisions for funding a reserve from bond proceeds. This will ensure that in the event the university is unable to obtain a reserve fund credit facility it will still have an authorized bond amount sufficient to fund its needs. Debt service reserve requirements may also be satisfied with cash balances.

Credit Enhancement. Credit enhancement is used primarily to achieve interest cost savings. Accordingly, the state universities and their DSOs should consider the cost effectiveness of bond insurance or other credit enhancements when evaluating a debt issuance and the overall cost thereof. Any bond insurance or credit enhancement should be chosen through a competitive selection process analyzing the cost of the insurance or credit enhancement and the expected interest cost savings to result from their use. The primary determinant in selecting insurance or other credit enhancement should be price and expected interest cost savings; however, consideration may also be given to

the terms of any arrangement with the provider of insurance or other credit enhancement.

Capitalized Interest. Capitalized interest from bond proceeds is used to pay debt service until a revenue producing project is completed or to manage cash flows for debt service in special circumstances. Because the use of capitalized interest increases the cost of the financing, it should only be used when necessary for the financial feasibility of the project.

Structural Features

Length of Maturity. In addition to any restriction on the final maturity imposed by the constitution or laws of the State, as a general guideline, the final maturity on bonds should not exceed thirty years.

Debt secured by gifts and donations shall not be considered long-term financing but may be used as a temporary or construction loan to accelerate construction of facilities. Accordingly, the maturity of debt secured by gifts and donations shall not exceed five years, including roll-overs or refinancings except refinancings to implement permanent financing. Debt issued to finance equipment and software may not be longer than five years or the useful life of the asset being financed, whichever is shorter. Lastly, the final maturity of the debt should not exceed the estimated useful life of the assets being financed.

Debt Service Structure. Generally, debt should be structured on a level debt basis, i.e., so that the annual debt service repayments will, as nearly as practicable, be the same in each year. A deviation from these preferences is permissible if it can be demonstrated to be in the university's best interest, such as restructuring debt to avoid a default and not to demonstrate feasibility of a particular project.

Redemption Prior to Maturity. A significant tool in structuring governmental bonds is the ability to make the bonds callable after a certain period of time has elapsed after issuance. This provides the advantage of enabling the issuer to achieve savings through the issuance of refunding bonds in the event interest rates decline. Although the ability to refund bonds for a savings is advantageous, there may be situations where a greater benefit of lower interest rates may be realized by issuing the bonds as non-callable. Accordingly, there is a strong preference that bonds issued by a university or DSO be structured with the least onerous call features as may be practical under then prevailing market conditions. Bonds of a particular issue may be sold as non-callable if it is shown to be in the best interest of the university or DSO.

Debt Issued With a Forward Delivery Date. Debt issued by a university or DSO may be issued with a delivery date significantly later than that which is usual

and customary. This debt typically carries an interest rate penalty associated with the delay in delivery. There are also additional risks that delivery will not occur. Debt with a forward delivery date may be issued if the advantages outweigh the interest rate penalty which will be incurred and the university and DSO are protected from adverse consequences of a failure to deliver the debt.

Interest Accrual Features

Fixed Rate, Current Interest Debt. Fixed rate debt will continue to be the primary means of financing infrastructure and other capital needs. However, there may be circumstances where variable rate debt is more appropriate, in which case, the state university or DSO shall provide documentation as noted in these guidelines for such debt.

Derivatives. Alternative financing arrangements, generally referred to as derivatives, are available in the market as an alternative to traditional bonds. Under certain market conditions, the use of alternative financing arrangements may be more cost effective than the traditional fixed income markets. However, these alternative financing instruments, such as floating to fixed swap agreements, have characteristics and carry risks peculiar to the nature of the instrument which are different from those inherent in the typical fixed rate financing. Although the universities and their DSOs should normally continue issuing conventional fixed rate bonds, alternative financing instruments may be used when the inherent risks and additional costs are identified and proper provision is made to protect the Board, the university and the DSO from such risks. In determining when to utilize alternative financing arrangements, the availability of the requisite technical expertise to properly execute the transaction and manage the associated risks should be evaluated along with any additional ongoing administrative costs of monitoring the transaction. comprehensive derivatives policy should be established by the university or their DSOs and approved by the Board prior to approving transactions using derivatives products.

Capital Appreciation Bonds. Normally capital appreciation bonds, which do not require current debt service payments, should not be used. However, when a compelling university interest is demonstrated, capital appreciation bonds may be issued.

Variable Rate Bonds. Variable rate debt may be issued where, considering the totality of the circumstances, such bonds can reasonably be expected to reduce the total borrowing cost to the university or the DSO over the term of the financing. The availability of the requisite technical expertise to properly manage the risks and execution of the variable rate transaction should be evaluated along with any additional ongoing administrative costs of monitoring the transaction. There should be a solid understanding of the liquidity risk and interest rate risks

associated with variable rate debt. Further, there should be a debt management plan that mitigates, to the extent possible, these risks over the life of the debt. The following guidelines should apply to the issuance of variable rate debt:

- expected reduction in total borrowing cost. In determining reasonably expected savings, a comparison should be made between a fixed rate financing at then current interest rates and a variable rate transaction, based on an appropriate floating rate index. The cost of the variable rate transaction should take into account all fees associated with the borrowing which would not typically be incurred in connection with fixed rate bonds, such as tender agent, remarketing agent, or liquidity provider fees.
- b) Limitation on variable rate debt. The amount of variable rate debt and interest derivative exposure is dependent on several factors associated with these types of debts. Included in the factors associated with these instruments are the university's/DSO's operating flexibility and tightness of budget, access to short and long term capital, the likelihood of a collateral call or termination payment, and the university's/DSO's financial expertise. The level to which universities may utilize variable rate debt obligation (VRDO) and interest derivatives (like swaps, collars, and caps) is subject to an understanding of the risks associated and a debt policy that adequately addresses the additional risks.
- c) *Budgetary controls*. To avoid a situation in which debt service on variable rate bonds exceeds the annual amount budgeted, the following guidelines should be followed in establishing a variable rate debt service budget:
 - A principal amortization schedule should be established, with provisions made for payment of amortization installments in each respective annual budget;
 - ii) Provide for payment of interest for each budget year using an assumed budgetary interest rate which allows for fluctuations in interest rates on the bonds without exceeding the amount budgeted. The budgetary interest rate may be established by: (1) using an artificially high interest rate given current market conditions; or (2) setting the rate based on the last 12 months actual rates of an appropriate index plus a 200 basis point cushion or spread to anticipate interest rate fluctuations during the budget year. The spread should be determined by considering the historical volatility of short-term interest rates, the dollar impact on the budget and current economic conditions and forecasts; or,

- (3) any other reasonable method determined by the university or DSO and approved by the Board;
- iii) The amount of debt service actually incurred in each budget year should be monitored monthly by the university or DSO to detect any significant deviations from the annual budgeted debt service. Any deviations in interest rates which might lead to a budgetary problem should be addressed immediately; and
- iv) As part of the effort to monitor actual variable rate debt service in relation to the budgeted amounts and external benchmarks, the university or DSO should establish a system to monitor the performance of any service provider whose role it is to periodically reset the interest rates on the debt, i.e., the remarketing agent or auction agent.
- d) Establish a hedge with short-term investments. In determining the appropriate amount of variable rate debt which may be issued by the universities or their DSOs, consideration should be given to mitigating the variable interest rate risk by creating a hedge with short-term investments. This "hedge" mitigates the financial impact of debt service increases due to higher interest rates because, as debt service increases, the university's or DSO's earnings on short-term investments also increases. Appropriate personnel should monitor the hedge monthly. Short-term investment as a hedge is one of several methods of mitigating interest rate risk. The ratio of such short-term investments to variable debt needs to be examined in conjunction with other interest rate risk hedging, striking an overall balance to minimize interest rate risk.
- e) *Variable interest rate ceiling*. The bond documents should include an interest rate ceiling of no greater than 12%.
- f) Mitigating interest rate risks with derivatives. Universities and DSOs are allowed to use various derivatives to mitigate the risk of rising interest rates on variable rate debt. However, the introduction of these derivatives also presents other risks for which the university must mitigate. These risks include rollover risk, basis risk, tax event risk, termination risk, counterparty credit risk and collateral posting risk. At a minimum, a university/DSO engaging in this type of interest rate risk mitigation must provide:
 - i) Evidence that the counterparty has a long term rating of at least an A/A2; and

- ii) A swap management plan that details the following:
 - a) Why the university is engaging in the swap and what the objectives of the swap are.
 - b) The swap counterparty's rating.
 - c) An understanding by the issuer of the cash flow projections that detail costs and benefits for the swap.
 - d) The plan of action addressing the aforementioned risks associated with swaps.
 - e) The events that trigger an early termination (both voluntary and involuntary) under the swap documents, the cost of this event and how such would be paid.
 - f) The method for rehedging variable rate exposure should early termination be exercised.
 - g) A list of key personnel involved in monitoring the terms of the swap and counterparty credit worthiness.
- g) Liquidity. One of the features typical of variable rate debt instruments is the bondholder's right to require the issuer to repurchase the debt at various times and under certain conditions. This, in theory, could force the issuer to repurchase large amounts of its variable rate debt on short notice, requiring access to large amounts of liquid assets. There are generally two methods for addressing this issue. With the first method, issuers that do not have large amounts of liquid assets may establish a liquidity facility with a financial institution which will provide the money needed to satisfy the The liquidity provider should have a rating of A1/P1 or higher. The liquidity agreement does not typically run for the life of longterm debt. Accordingly, there is a risk that the provider will not renew the agreement or that it could be renewed only at substantially higher cost. Similar issues may arise if the liquidity provider encounters credit problems or an event occurs which results in early termination of the liquidity arrangement; in either case the issuer must arrange for a replacement liquidity facility. With the second method, issuers with significant resources may choose to provide their own liquidity. This approach eliminates the costs that would be charged by a third party liquidity provider and could mitigate the renewal/replacement risk. If a university/DSO chose to provide its own liquidity, the institution must maintain liquid assets or facilities equal to 100% of the outstanding variable rate debt obligations ("VRDOs").

- h) *Submission of periodic reports*. The university will prepare and submit to the board of trustees and the Board an annual variable rate debt report showing the position during the previous period of the university or DSO variable rate debt with respect to the following measures:
 - the total principal amount of variable rate debt to principal amount of total debt;
 - ii) the amount of debt service accrued during the reporting period in relation to the pro-rata amount of annual budgeted debt service for the reporting period. If the amount of debt service which accrued during the reporting period exceeded the pro-rata amount of annual budgeted debt service for the period, the university shall explain what actions were taken to assure that there would be sufficient revenues and budget authority to make timely payments of debt service during the subsequent years; and
 - iii) the amount of variable rate debt in relation to the amount of the university's and/or DSO's short-term investments, and any other strategies used to hedge interest rate risk.

Other Types of Financings

Refunding Bonds. Generally, refunding bonds are issued to achieve debt service savings by redeeming high interest rate debt with lower interest rate debt. Refunding bonds may also be issued to restructure debt or modify covenants contained in the bond documents. Current tax law limits to one time the issuance of tax-exempt advance refunding bonds to refinance bonds issued after 1986. There is no similar limitation for tax-exempt current refunding bonds. The following guidelines should apply to the issuance of refunding bonds, unless circumstances warrant a deviation therefrom:

- a) Refunding bonds should be structured to achieve level annual debt service savings.
- b) The life of the refunding bonds should not exceed the remaining life of the bonds being refunded.
- c) Advance refunding bonds issued to achieve debt service savings should have a minimum target savings level measured on a present value basis equal to 5% of the par amount of the bonds being advance refunded. The 5% minimum target savings level for advance refundings should be used as a general guide to guard against prematurely using the one advance refunding opportunity for post-

1986 bond issues. However, because of the numerous considerations involved in the sale of advance refunding bonds, the 5% target should not prohibit advance refundings when the circumstances justify a deviation from the guideline.

d) Refunding bonds which do not achieve debt service savings may be issued to restructure debt or provisions of bond documents if such refunding serves a compelling university interest.

Certificates of Participation and Lease-Type Financing. The universities or their DSOs may utilize these financing structures for all purposes, but it shall be considered as debt for the purposes of these guidelines and the universities shall always budget and make available monies necessary to pay debt service, notwithstanding the right to cancel the lease. Additionally, for lease purchase financings of equipment, universities and DSOs should consider using the State's consolidated equipment financing program if it will reduce costs and ensure a market interest rate on the financing.

Conversions of existing variable rate debt. A conversion between interest rate modes pursuant to the provisions of variable rate financing documents does not require Board approval. However, ten days prior to the conversion, the universities or their DSOs must notify the Board Office of a conversion and provide a summary of the terms of (i.e. interest rate, debt service schedule, etc.) and reasons for the conversion. The universities and DSOs should answer all questions and provide any additional information that the Board deems necessary to fully understand the conversion.

D. METHOD OF SALE AND USE OF PROFESSIONALS

Analysis of Method of Sale

It is in the best interests of the universities and their DSOs to use the method of sale for their debt that is expected to achieve the best sale results. Based upon the facts and circumstances with regard to each individual financing, it may be more appropriate to sell debt through either a competitive sale or through negotiation. Accordingly, the universities and their DSOs may utilize either a competitive or negotiated sale. If, however, a request is made for a DSO to sell debt using a negotiated sale, the university must provide the Board with an analysis showing that a negotiated sale is desirable. The analysis should include, but not necessarily be limited to, a consideration of the following factors:

a) Debt Structure

i) pledged revenues – strong revenue stream vs. limited revenue base;

- ii) security structure conventional resolution, cash flow, rate and coverage covenants vs. unusual or weak covenants;
- iii) debt instrument traditional serial and term bonds vs. innovative, complex issues requiring special marketing; and
- iv) size a smaller transaction of a size which can be comfortably managed by the market vs. a large size which the market cannot readily handle.

b) Credit Quality

- i) ratings "A" or better vs. below single "A"; and
- ii) outlook stable vs. uncertain.

c) Issuer

- i) type of organization well-known, general purpose vs. special purpose, independent authority;
- ii) frequency of issuance regular borrower vs. new or infrequent borrower; and
- iii) market awareness active secondary market vs. little or no institutional awareness.

d) Market

- i) interest rates stable; predicable vs. volatile;
- ii) supply and demand strong investor demand, good liquidity vs. oversold, heavy supply; and
- iii) changes in law none vs. recent or anticipated

Bonds may also be sold through a private or limited placement, but only if it is determined that a public offering through either a competitive or negotiated sale is not in the best interests of the university or DSO.

Allocation of Bonds

In the event a negotiated sale by a DSO is determined by the university to be in the university's best interest, syndicate rules shall be established which foster competition among the syndicate members and ensure that all members of the syndicate have an opportunity to receive a fair and proper allocation of bonds based upon their ability to sell the bonds.

Report on Sale of Bonds

The university or DSO shall prepare a report on the sale of bonds or anytime it incurs debt. The report shall be prepared and provided to the Board as soon as practicable but in no event later than one month after closing the transaction, in the format and manner provided by the Board, which at a minimum shall include the following:

- a) The amount of the debt.
- b) The interest rate on the debt.
- c) A final debt service schedule or estimated debt service schedule if a variable rate debt or the interest rate is subject to adjustment.
- d) Any aspect of the transaction that was different from the transaction submitted for approval.
- e) Itemized list of all fees and expenses incurred on the transaction, including legal fees.
- f) For negotiated sale of bonds:
 - i) the underwriters' spread detailing the management fee;
 - ii) takedown by maturity and aggregate takedown;
 - iii) any risk component and an itemized list of the expense component;
 - iv) orders placed by each underwriter and final bond allocation;
 - v) total compensation received by each underwriter; and
 - vi) any report or opinion of the financial advisor.
- g) Final official statement for publicly offered bonds.
- h) Bond insurance or any other form of credit enhancement and the terms thereof.

i) Credit rating reports.

Selection of Financing Professionals

The use of underwriters for negotiated financings and the use of financial advisors for negotiated and competitive offerings is necessary to assist in the proper structuring and sale of debt. To assure fairness and objectivity in the selection of professionals and to help select the most qualified professional, the selection of underwriters and financial advisors should be accomplished through a competitive selection process. A competitive selection process allows the universities and their DSOs to compare more professionals and obtain the best price and level of service.

E. DISCLOSURE

Primary Disclosure

Universities and DSOs shall use best practices in preparing disclosure documents in connection with the public offer and sale of debt so that accurate and complete financial and operating information needed by the markets to assess the credit quality and risks of each particular debt issue is provided.

The disclosure recommendations of the Government Finance Officers Association's "Disclosure for State and Local Governments Securities," and the National Federation of Municipal Analysts' "Recommended Best Practices in Disclosure for Private Colleges and Universities" should be followed to the extent practicable, specifically including the recommendation that financial statements be prepared and presented according to generally accepted accounting principles.

Continuing Disclosure

DSOs shall fulfill all continuing disclosure requirements set forth in the transaction documents and as required under Rule 15c2-12 of the Securities and Exchange Commission.

F. POST-ISSUANCE CONSIDERATIONS

Investment of Proceeds of Debt Issued by DSOs

Construction Funds. Funds held for payment of debt service and all other funds held as required by the documents of any financing shall be invested consistent with the terms of the Financing Documents.

Arbitrage Compliance

The university will comply with federal arbitrage regulations. Any arbitrage rebate liabilities should be calculated and funded annually.

G. EFFECT

The foregoing guidelines shall be effective immediately and may be modified from time to time by the Board as circumstances warrant. The guidelines are intended to apply prospectively to all university and DSO debt, and not to adversely affect any university or DSO debt currently outstanding or projects approved by the Board or board of trustees prior to, or existing, as of January 26, 2006.

Authority: Section 7(d), Art. IX, Fla. Const., History: New 4-27-06, Amended November 10, 2010.

II. VARIABLE RATE DEBT GUIDELINES

A. INTRODUCTION

The variable rate debt and interest rate swap guidelines outlined herein are only intended to provide general procedural direction regarding the future use, procurement and execution of variable rate debt and interest rate swaps and options by the Chief Financial Officer (CFO). These guidelines will be used by the CFO until such time as the CFO, in conjunction with other State Universities and Agencies, adopt common guidelines for broader use by all. These guidelines are intended to relate to 1.) The use of variable rate debt as a component of the Florida Atlantic University, and its Direct Support Organizations, as a whole referred to as (the University) overall debt management, and 2.) The use of various interest rate hedging techniques, including the contractual exchange of different fixed and variable rate payment streams through interest rate swap agreements. These guidelines are not intended to relate to other derivative products that the University may consider. The University maintains the right to modify these guidelines and may make exceptions to any of them at any time in its sole discretion. Failure to comply in any manner with these guidelines shall not result in any liability on the part of the University as a whole to any party.

B. SCOPE AND AUTHORITY

These Variable Rate Debt Guidelines shall govern the University's use and management of all variable rate transactions. While adherence to this guideline is required in applicable circumstances, the University recognizes that changes in the capital markets, agency programs, and other unforeseen circumstances may from time to time produce situations that are not covered by the guideline and will require modifications or exceptions to achieve its intended goals. In these cases, management flexibility is appropriate provided specific authorization from the University's Board of Trustees (the "Board") is obtained.

The CFO and the University's Controller are designated administrators of the University's Variable Rate Debt Guidelines. The CFO shall have the day-today responsibility and authority for structuring, implementing, and managing variable rate debt.

Authority to allow for the use of variable rate instruments has been granted by Florida Statues 1010.62, furthermore the State of Florida Board of Governor's Debt Management Guidelines established on April 27, 2006.

C. GUIDELINES FOR THE USE OF VARIABLE RATE DEBT

Variable rate debt can be a valuable tool for the University to use in the

management of its assets and liabilities. However, the use of variable rate debt, though historically allowing lower borrowing costs, presents some risks that the University must consider. The following guidelines shall be used in determining if variable rate debt is appropriate, and under what circumstances it is appropriate for the CFO of the University to utilize variable rate debt as a financing alternative.

Due to the historical spread between long-term rates and short-term rates, and in order to integrate asset/liability management as a component of its overall financial management, the University should consider maintaining a portion of its portfolio in variable rate debt. In doing so, the University shall attempt to manage and constrain its unhedged variable rate exposure within a range of no less than 5% and no more than 30% of the University's outstanding indebtedness. For purposes of this limitation, unhedged variable rate exposure shall include both the principal amount of direct issue variable rate debt and the notional amount of synthetic variable rate debt, less:

- 1. The amount of direct variable rate debt for which variable interest rate exposure has been eliminated or reduced by interest rate exchange agreements (swaps).
- 2. The amount of short-term assets within the University's Operating Fund Account for purposes of these Guidelines defined as: a.) cash and cash equivalent investments, and b.) the market value of other investments with maturities of 30 days or less.

As reflected above, in considering the use of variable rate debt, the University shall assess the amount of short-term investments and cash reserves since the earnings from these funds can serve as a natural hedge offsetting the impact of higher variable rate debt costs. In addition, the University should also consider other strategies to allow assets and liabilities to move in tandem, such as entering into interest rate swaps under appropriate hedging instruments, and in accordance with these guidelines. As also reflected above, any synthetic fixed rate debt, achieved through a swap transaction whereby the University swaps underlying variable rate for fixed rate should not be counted toward this variable rate ceiling.

In general, and as guidance to the appropriate level of unhedged variable rate interest rate exposure as specified within these Guidelines, the University should maintain its flexibility and continuously review new products and opportunities to allow it to take advantage of changing interest rate environments and new products or approaches as they become available. In low interest rate environments, the University should consider ways to lock in low fixed rates, through conversions, fixed rate debt issuance, and either traditional

or synthetic refunding. In high interest rate environments, the University should consider ways to increase variable rate debt exposure and evaluate other alternatives that will allow the University to reduce its overall cost of capital.

D. VARIABLE RATE DEBT ALTERNATIVES

The University may consider the use of alternative structures for the issuance and use of variable rate debt. Each mode of variable rate exposure has its unique advantages and disadvantages. Decisions about which mode the University should utilize at any point in time should be based on a number of factors including the relative costs, benefits, and risks to the University. Variable Rate Demand Obligations (VRDOs) are the traditional means of achieving variable rate exposure and provide governmental issuers with access to a large, well-established liquid market. Under appropriate market conditions, synthetic variable rate debt offers issuers access to the well established swap market, along with structuring flexibility and potentially lower borrowing costs.

The University may determine allocations to each class of variable rate debt within caps and floors and manage the precise allocation based on market constraints in advance of issuing bonds. Factors impacting decisions should include:

- 1. The capacity of insurers to insure University bonds,
- 2. The cost of bond insurance,
- 3. Swap market levels,
- 4. The cost and availability of letters of credit,
- 5. The ability of the University to provide self-liquidity in accordance with the limitations of these Guidelines and without adversely impacting investment returns to the University's invested funds,
- 6. Any other related considerations.

E. THE USE OF LIQUIDITY FACILITIES (SELF-LIQUIDITY)

For variable rate debt requiring liquidity facilities to protect against remarketing risk, the University should consider the factors listed in the previous section, and should look to provide required liquidity facilities itself via self-liquidity as a means of reducing the cost and increasing the benefits of variable rate debt. The provision of liquidity facilities by the University shall consider the following factors and limitations:

- 1. The total amount of self-liquidity obligations assumed by the University shall not exceed 1.25 times the average for the previous 12 months of the lowest aggregate value within each of such months within the University's General Revenue Account of a.) Cash, b.) The market value of cash equivalent investments and c.) The market value of investments maturing in 30 days or less.
- 2. The effect of providing self-liquidity on any applicable ratings of the University's investment accounts.
- 3. Any other applicable considerations. The ability of the University to provide self-liquidity for variable rate debt shall be determined by the CFO.

F. DEFINITIONS

Advance Refunding - A bond is treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded bond.

Amortization Risk - the potential cost to the issuer resulting from a mismatch between the outstanding underlying bond amortization and the outstanding notional amount of the swap.

Basis Risk – movement in the underlying variable rate indices may not be perfectly in tandem, creating a cost differential that could result in a net cash outflow from the issuer. A mismatch risk can occur in a swap with both sides using floating, but different, rates such as LIBOR versus Fed Treasuries or SIFMA.

SIFMA Index – The Securities and Industry Financial Markets Association Municipal Swap Index, the principal benchmark for the floating rate payments for tax-exempt issuers. The index is a national rate based on a market basket of high-grade, seven-day tax-exempt variable rate bond issues.

Capacity Expansion - Capital expansion projects are those projects designed to accommodate new customers, acquisitions, and expansion of existing system capacity.

Commercial Paper Note - shall mean any debt obligation which has a maturity date which is not more than 270 days after the date of issuance thereof.

Competitive Bid - a method of submitting proposals for the purchase of new issue of securities by which the securities are awarded to the underwriting

syndicate presenting the best bid according to stipulated criteria set forth in the notice of sale.

Construction Loan Credit Facility - means obligations of a particular credit facility for construction advance purposes which shall be similar to Bond Anticipation Notes.

Counterparty risk – the risk that the other party in the derivative transaction fails to meet its obligations under the contract.

Credit Enhancement - shall mean, with respect to the bonds of a Series, a maturity within a Series or an interest rate within a maturity, the issuance of an insurance policy, letter of credit, surety bond or any other similar obligation, whereby the issuer thereof becomes unconditionally obligated to pay when due, to the extent not paid by the University or otherwise, the principal of and interest on such Bonds.

Credit Support Annex - is a standard supporting document that is made part of the ISDA Master Swap Agreement that governs the use of posting collateral when required.

Current Refunding - A bond is treated as issued to current refund another bond if the refunding issue is issued not more than 90 days before the redemption of the refunded bond.

Hedge – a transaction entered into to reduce exposure to market fluctuations.

Interest rate swap – a transaction in which two parties agree to exchange future net cash flows based on predetermined interest rate indices calculated on an agreed notional amount. The swap is not a debt instrument between the issuer and the counterparty, and there is no exchange of principal.

ISDA – International Swap Dealers Association, the global trade association with over 550 members that include dealers in the derivatives industry.

ISDA Master Agreement – the standardized master agreement for all swaps between the Issuer and the dealer that identifies the definitions and terms governing the swap transaction.

LIBOR – the principal benchmark for floating rate payments for taxable issuers. The London Inter Bank Offer Rate (LIBOR) is calculated as the average interest rate on Eurodollars traded between banks in London and can vary depending upon the maturity (e.g. one month or six months).

Long-dated swap - a swap with a term of more than ten years. Often used in the

municipal market, as issuers often prefer to use a hedge that matches the maturity of the underlying debt or investment.

Mark-to-market – calculation of the value of a financial instrument (like an interest rate swap) based on the current market rates or prices of the underlying instrument (i.e. the variable on which the derivative is based).

Medium Term Note - any obligation which has a maturity date which is more than 365 days, but not more than 15 years, after the date of issuance and is designated as a medium term note in the supplemental ordinance authorizing such bond.

Negotiated Sale - the sale of a new issue of municipal securities by an issuer through an exclusive agreement with an underwriter or underwriting syndicate selected by the issuer.

Tax Event Risk - the risk that tax laws will change, resulting in a change in the marginal tax rates on swaps and their underlying assets or, in a more extreme situation, remove the tax-exempt status of the issue and, therefore, its contractual obligations priced as tax-exempt facilities.

Termination risk – the risk that a swap will be terminated by the counterparty before maturity that could require the issuer to make a cash termination payment to the counterparty.

True Interest Cost - is the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment date to the purchase price received for the bonds.

Variable Rate Bond - shall mean any debt obligation not bearing interest throughout its term at a specified rate or specified rates determined at the time of initial issuance.

Variable Rate Demand Obligations (VRDO) - A long term maturity security which is subject to a frequently available put option or tender option feature under which the holder may put the security back to the issuer or its agent at a predetermined price (generally par) after giving specified notice or as a result of a mandatory tender. Optional tenders are typically available to investors on a daily basis while in the daily or weekly mode and mandatory tenders are required upon a change in the interest rate while in the flexible or term mode. The frequency of a change in the interest rate of a variable rate demand obligation is based upon the particular mode the security is in at the time.

III. INTEREST RATE SWAP GUIDELINES

A. INTRODUCTION

The prudent use of hedging instruments, including interest rate swaps, swaptions, caps, options, and collars, can be an effective tool in meeting funding needs and structuring a balance sheet while managing risk associated with the movement of interest rates. Utilizing hedging products can provide Florida Atlantic University, and its Direct Support Organizations, as a whole referred to as (the University) with cost effective alternatives to traditional debt financing choices.

Utilizing interest rate swaps to achieve substantially lower interest cost is a main component in building the desired capital structure to allow the University to finance efficiently. The use of swaps must be tied directly to the University's current or future debt instruments. The University shall not enter into swap transactions for speculative purposes. There are three types of interest rate swaps the University is authorized to enter into:

- Floating to fixed rate swaps,
 - Hedge interest rate risk on variable rate debt,
 - Lock in fixed rates on refunding bonds or capital projects that will be issued in the future or
 - Take advantage of opportunities to obtain fixed swap rates that are lower than comparable fixed rate bonds.
- Fixed rate to floating rate swaps
 - Increase the amount of variable rate exposure without incurring the remarketing and liquidity costs.
 - Eliminate the put risk associated with variable rate debt.
- Basis swaps manage the risk associated with
 - The mismatch between two benchmarks.
 - Methodologies used to set interest rates.

B. SCOPE AND AUTHORITY

This Interest Rate Swap Guideline shall govern the University's use and management of all interest rate swaps. While adherence to this Guideline is required in applicable circumstances, the University recognizes that changes in the capital markets, university programs, and other unforeseen circumstances may from time to time produce situations that are not covered by the Interest Rate Swap Guidelines and will require modifications or exceptions to achieve

Guideline goals. In these cases, management flexibility is appropriate provided specific authorization from the Board is obtained.

The University Chief Financial Officer and Controller are designated administrators of the University's Interest Rate Swap Guidelines. The CFO shall have the day-to-day responsibility and authority for structuring, implementing, and managing interest rate swaps.

The University shall be authorized to enter into interest rate swap transactions only with qualified swap counterparties. The CFO and the University's Counsel, shall have the authority to select the counterparties, so long as the criteria set forth in the Interest Rate Swap Guidelines are met.

C. RISKS

Interest rate swaps and related hedging instruments may introduce additional risks to the University's credit profile. These risks include, but are not necessarily limited to, termination risk, counterparty risk, rollover risk, amortization risk, basis risk, and tax event risk. Prior to entering into each interest rate swap transaction, these risks are evaluated to ensure adequate provisions are in place to minimize the downside and provide the maximum benefit the transaction originally intended. (Refer to Section XVIII for a definition of these risks.)

D. FIXED TO FLOATING RATE SWAP MANAGEMENT

The CFO shall have the overall responsibility for the execution and management of fixed to floating interest rate swaps.

The CFO shall determine the size of the total interest rate swap program and the maturity date for the swaps within the parameters of the Guideline which has been approved by the University.

Interest rate caps and related hedging instruments may be utilized to help manage interest rate risk in the Debt Management Program.

From time to time, the CFO will evaluate the use of swaptions, collars (cap and floor instrument) and similar transactions as a hedging tool to minimize cost and risk and will utilize such instruments where financially prudent.

Forecasts of interest rate volatility over the intermediate term (4 to 7 years) and expected performance of the swaps, caps, collars, and related hedging instruments under various interest rate scenarios shall be updated on not less than a semi-annual basis. Short and long term interest rates will be monitored

over varying time periods. If current interest rates are either above or below the moving averages as measured by varying time periods, the CFO or designee may elect to alter the timing of adding additional fixed to variable swaps to either increase or decrease the amount of variable exposure. Furthermore, the CFO may elect to enter into "reversing" swaps to take advantage of market opportunities. In the event a fixed to floating swap is "reversed", any associated floor will be simultaneously "reversed". Any associated cap will be evaluated and "reversed" if approved by the University.

E. FLOATING TO FIXED RATE SWAP MANAGEMENT

The CFO shall have the overall responsibility regarding the execution and management of floating to fixed interest rate swaps. An additional component of the debt management strategy is to use floating to fixed rate swaps to lock in the lowest possible borrowing costs over a long period of time.

Floating to fixed rate swaps can be used in conjunction with issuing variable rate debt to obtain the lowest fixed rate when compared to traditional forms of fixed rate financings. In addition, floating to fixed swaps may be desirable when the cycle of long-term rates moves down to or near historical lows and "fixing" a portion of the outstanding variable rate debt appears advantageous. Swaps will be evaluated as alternatives to traditional financing instruments considering their comparable costs, ease of entry and exit provisions, and the amount of potential risk exposure.

Interest rate swaps will be executed for notional amounts, maturities and other related terms and conditions as determined by the CFO. Re-execution risk, amortization risk, tax event risk and basis risk will be evaluated in order to minimize any potential negative results.

Forecasts of interest rate volatility over the term of the swaps and expected performance of the swaps under various interest rate scenarios shall be analyzed prior to the execution of the swaps. Short and long term interest rates will be monitored over varying time periods. The CFO may elect to enter into "reversing" swaps to take advantage of market opportunities.

F. COMPLIANCE/REPORTING REQUIREMENTS

The CFO shall perform a review at least annually relating to interest rate swap management. The review shall include the following:

- Highlights of all material changes to swap agreements or new swap agreements entered into by the University since the last report.
- Market value of each of the University's interest rate swap agreements.

- For each counterparty, the University shall provide the total notional amount position, the average life of each swap agreement, the available capacity to enter into a swap transaction, and the remaining term of each swap agreement.
- The credit rating of each swap counterparty and credit enhancer insuring swap payments, if any.
- Actual collateral posting by swap counterparty, if any, per swap agreement and in total by swap counterparty.
- A summary of each swap agreement, including but not limited to the type of swap, the rates paid by the University and received by the University, and other terms.
- Information concerning any default by a swap counterparty to the University and the results of the default, including but not limited to the financial impact to the University, if any.
- A summary of any planned swap transactions and the impact of such swap transactions on the University.
- A summary of any swap agreements that were terminated.

Collateral reports will be updated on a monthly basis providing information relating to specific swap transactions that may require collateral posted based on mark to market valuations.

All outstanding debt will be reported annually in the Comprehensive Annual Financial Report as required by GASB rule.

G. MONITORING

The University may use an independent Swap Advisor to assist internal professional staff in monitoring its existing or proposed swap(s) if it is in the best interest of the University to do so. The University is solely authorized to enter into contract(s) to accomplish these monitoring efforts.

H. OPTIONAL TERMINATION

The University shall consider including a provision that permits the University optionally to terminate the agreement at the market value of the agreement at any time. Exercising the right to optionally terminate an agreement should produce a benefit to the University, either through receipt of a payment from a termination, or if a termination payment is made by the University, a conversion to a more beneficial debt instrument or credit relationship. In general, the counterparty shall not have the right to optionally terminate an agreement unless the University is in default. As practical as possible, the University shall have the right to assign its obligation to other counterparties.

I. EVENTS OF DEFAULT

Events of default of a counterparty shall include the following:

- 1. Failure to make payments or transfer collateral when due
- 2. Breach of representations and warranties
- 3. Illegality
- 4. Failure to comply with downgrade provisions
- 5. Failure to comply with any other provisions of the agreement after a specified notice period
- 6. Bankruptcy
- 7. Other events as defined by insurance companies, rating agencies or liquidity providers.

Each interest rate swap agreement shall provide that an event of default by the counterparty shall lead to termination of the agreement with the University being the affected party for purposes of calculating the termination payment owed.

J. ASPECTS OF RISK EXPOSURE ASSOCIATED WITH SUCH CONTRACTS

Before entering into a derivative, the University shall evaluate all the risks inherent in the transaction. These risks to be evaluated should include the counterparty risk, termination risk, rollover risk, basis risk, tax event risk and amortization risk. The University shall endeavor to diversify its exposure to counterparties. To that end, before entering into a transaction, it should determine its exposure to the relevant counterparty or counterparties and determine how the proposed transaction would affect the exposure. The exposure should not be measured solely in terms of notional amount, but rather how changes in interest rates would affect the University's exposure ("Value at Risk"). The Value at Risk should be based on all outstanding derivative transactions by the University. The University may also elect to take into account the exposure of the University and any related entities to a particular counterparty.

K. PROVISIONS FOR COLLATERIALIZATION

If the rating (a) of the counterparty, if its payment obligations are not unconditionally guaranteed by another entity, or (b) of the entity unconditionally guaranteeing its payment obligations, if so secured, does not meet or falls below the rating required by "Providers" below, then the obligations of such counterparty shall be fully and continuously collateralized by 100% cash, direct obligations of, or obligations the principal and interest on which are guaranteed by the United States of America or any agency thereof with a net market value of at least 102% of the net market value of the contract (subject to minimum threshold amounts specified by the University) to the authorized issuer and such collateral shall be deposited with the University or an agent thereof. (Collateral is also posted by a Counterparty over some "threshold amount" due to the market value of the swap. The same is usually true for the University. The University should try to be exempt from posting collateral.)

L. APPROVALS

The CFO must sign all interest rate swaps, swaptions, caps, options, or collar confirmations.

The CFO must approve the interest rate swap term sheet prior to execution. In addition, the purpose of the transaction, (asset matched, debt management, etc.) will be included as part of the swap paperwork file kept for each executed swap transaction.

M. FORM OF SWAP AGREEMENTS

Financial institutions and dealers executing interest rate swaps, caps, options, and other hedging instruments for the University shall be selected pursuant to a competitive process. The University shall require that all institutions and dealers entering into interest rate swap, cap, option, and other hedging instrument agreements execute a Master Swap Agreement, that shall contain terms and conditions as set forth in the International Swaps and Derivatives Association, Inc. (ISDA) Master Agreement that is signed by both parties. All transactions entered into shall adhere to the requirements of the Master Swap Agreement. The hedging agreements between the University and each qualified counterparty shall include payment, term, security, credit rating, collateral, default, remedy, termination, and other terms, conditions, and provisions as deemed necessary by the University CFO.

N. PROVIDERS

The University shall enter into hedging transactions only with qualified counterparties. All providers will either, (1) be rated AA-/Aa3 or better by at least 2 of the rating agencies (Fitch, Moody's, or Standard & Poor's) at the time of execution and enter into a collateral agreement to provide collateral as determined by the Credit Support Annex in the event that the credit rating falls

below the AA-/Aa3 level or (2) be rated A/A2 or better by at least 2 of the rating agencies at the time the Agreement is entered into, and enter into a collateral agreement.

To limit and diversify the University's counterparty risk and to monitor credit exposure to each counterparty, the University may not enter into a swap transaction with an otherwise qualified counterparty unless the cumulative mark-to-market value owed by the counterparty (and its unconditional guarantor, if applicable) to the University shall be less than or equal to the amounts in the following chart.

The limitations shall be the sum of all mark-to-market values between the subject counterparty and the University regardless of the type of swap transaction, net of collateral posted by the counterparty. Collateral will consist of cash, U.S. Treasury securities, and Federal Agency securities guaranteed unconditionally by the full faith and credit of the U.S. Government. Collateral shall be deposited with a third party trustee acceptable to the University, or as mutually agreed upon between the University and each counterparty.

Specific limits by counterparty are based on the cumulative mark-to-market value of the swap(s) and the credit rating of the counterparty. The limits are as follows:

Counterparty Long- Term Debt Rating (lowest prevailing rating from Standard & Poor's/ Moody's)	Maximum Cumulative Mark-to- Market Value of Swaps Owed to the University by Counterparty (net of collateral posted)
AAA / Aaa	[\$30 million] ¹
AA+ / Aa1	[\$25 million] ¹
AA / Aa2	[\$20 million] ¹
AA- / Aa3	$[$15 million]^1$
A+ / A1	$[$10 \text{ million}]^1$
A / A2	[\$5 million] ¹

If counterparty's credit rating is downgraded such that the cumulative mark-to-market value of all swaps between the counterparty and the University exceeds the maximum permitted by this Guideline, the counterparty must either, terminate a portion of the swap, post additional collateral, or provide other credit enhancement that is satisfactory to the University and ensures compliance with this Guideline

O. DIVERSIFICATION

Diversification of hedging vehicles must be examined by the CFO at least

annually with intent to minimize termination risk. The CFO must make every effort to diversify its hedging activities across multiple providers. This assessment will assist in interest rate risk and liquidity management for the University.

P. BID

All "initial" interest rate swap and cap transactions shall be competitively bid by at least (3) three providers or shadow pricing providers obtained that have executed interest rate swap agreements or wire services that provide mid-market pricing such as Bloomberg. Upon approval by the University, 1) a "reversing transaction" resulting in an upfront payment to the University may be negotiated with the original swap, cap, option, or collar counterparty, or 2) a negotiated swap with a counterparty may be executed as part of a debt financing in the following situations:

- A determination is made by the CFO that due to the complexity of a particular transaction, a negotiated bid would result in the most favorable pricing.
- ii) The CFO makes a determination that, in light of the facts and circumstances, doing so will promote the University's interests by encouraging and rewarding innovation. When the University enters into an agreement for financing through the competitive bid process, this will satisfy any bid requirements for sub-contractors.

Q. EFFECTIVE DATE

This Guideline will become effective upon adoption by the University This Guideline shall be reviewed and amended from time to time as necessary with the approval of the University.

R. DEFINITIONS

Advance Refunding - A bond is treated as issued to advance refund another bond if it is issued more than 90 days before the redemption of the refunded bond.

Amortization Risk – the potential cost to the issuer resulting from a mismatch between the outstanding underlying bond amortization and the outstanding notional amount of the swap.

Basis Risk – movement in the underlying variable rate indices may not be perfectly in tandem, creating a cost differential that could result in a net cash outflow from the issuer. A mismatch can occur in a swap with both sides using

floating, but different, rate basis such as LIBOR versus Fed Treasuries or SIFMA.

SIFMA Index – The Securities and Industry Financial Markets Association Municipal Swap Index, the principal benchmark for the floating rate payments for tax-exempt issuers. The index is a national rate based on a market basket of high-grade, seven-day tax-exempt variable rate bond issues.

Capacity Expansion - Capital expansion projects are those projects designed to accommodate new customers, acquisitions, and expansion of existing system capacity.

Commercial Paper Note - shall mean any debt obligation which has a maturity date which is not more than 270 days after the date of issuance thereof.

Competitive Bid - a method of submitting proposals for the purchase of new issue of municipal securities by which the securities are awarded to the underwriting syndicate presenting the best bid according to stipulated criteria set forth in the notice of sale.

Construction Loan Credit Facility - means obligations of a particular credit facility for construction advance purposes which shall be similar to Bond Anticipation Notes.

Counterparty risk – the risk that the other party in the derivative transaction fails to meet its obligations under the contract.

Credit Enhancement - shall mean, with respect to the bonds of a Series, a maturity within a Series or an interest rate within a maturity, the issuance of an insurance policy, letter of credit, surety bond or any other similar obligation, whereby the issuer thereof becomes unconditionally obligated to pay when due, to the extent not paid by the University or otherwise, the principal of and interest on such Bonds.

Credit Support Annex - is a standard supporting document that is made part of the ISDA Master Swap Agreement that governs the use of posting collateral when required.

Current Refunding - A bond is treated as issued to current refund another bond if the refunding issue is issued not more than 90 days before the redemption of the refunded bond.

Hedge – a transaction entered into to reduce exposure to market fluctuations.

Interest rate swap – a transaction in which two parties agree to exchange future net cash flows based on predetermined interest rate indices calculated on an

agreed notional amount. The swap is not a debt instrument between the issuer and the counterparty, and there is no exchange of principal.

ISDA – International Swap Dealers Association, the global trade association with over 550 members that include dealers in the derivatives industry.

ISDA Master Agreement – the standardized master agreement for all swaps between the Issuer and the dealer that identifies the definitions and terms governing the swap transaction.

LIBOR – the principal benchmark for floating rate payments for taxable issuers. The London Inter Bank Offer Rate (LIBOR) is calculated as the average interest rate on Eurodollars traded between banks in London and can vary depending upon the maturity (e.g. one month or six months).

Long-dated swap - a swap with a term of more than ten years. Often used in the municipal market, as issuers often prefer to use a hedge that matches the maturity of the underlying debt or investment.

Mark-to-market – calculation of the value of a financial instrument (like an interest rate swap) based on the current market rates or prices of the underlying instrument (i.e. the variable on which the derivative is based).

Medium Term Note - any bond which has a maturity date which is more than 365 days, but not more than 15 years, after the date of issuance and is designated as a medium term note in the supplemental ordinance authorizing such bond.

Negotiated Sale - the sale of a new issue of municipal securities by an issuer through an exclusive agreement with an underwriter or underwriting syndicate selected by the issuer.

Tax Event Risk - the risk that tax laws will change, resulting in a change in the marginal tax rates on swaps and their underlying assets or, in a more extreme situation, remove the tax-exempt status of the issue and, therefore, its contractual obligations priced as tax-exempt facilities.

Termination risk – the risk that a swap will be terminated by the counterparty before maturity that could require the issuer to make a cash termination payment to the counterparty.

True Interest Cost - is the rate, compounded semi-annually, necessary to discount the amounts payable on the respective principal and interest payment date to the purchase price received for the bonds.

Variable Rate Bond - shall mean any debt obligation not bearing interest throughout its term at a specified rate or specified rates determined at the time of initial issuance.

Variable Rate Demand Obligations (VRDO) - A long term maturity security which is subject to a frequently available put option or tender option feature under which the holder may put the security back to the issuer or its agent at a predetermined price (generally par) after giving specified notice or as a result of a mandatory tender. Optional tenders are typically available to investors on a daily basis while in the daily or weekly mode and mandatory tenders are required upon a change in the interest rate while in the flexible or term mode. The frequency of a change in the interest rate of a variable rate demand obligation is based upon the particular mode the security is in at the time.