

RESOLUTION AUTHORIZING THE ISSUANCE OF REVENUE BONDS OF AUBURN UNIVERSITY

BE IT RESOLVED by the Board of Trustees (herein called the "Board") of AUBURN UNIVERSITY (herein called the "University") as follows:

Section 1. Findings. The Board has determined and hereby finds and declares that the following facts are true and correct:

(a) The Board adopted a resolution at its meeting on April 15, 2013 authorizing the issuance and sale of a series of revenue bonds of the University for the purpose of refunding the University's outstanding General Fee Revenue Bonds, Series 2006-A (the "Series 2006-A Bonds"); provided however that the said bonds were only authorized to be issued if the refunding resulted in a net present value savings of at least 3%. The bonds were not issued because market conditions and prevailing interest rates subsequent to the April 15, 2013 meeting of the Board did not permit the net present value savings requirement to be achieved. The officers of the University have continued to monitor the public finance markets and now advise that the refunding of the Series 2006-A Bonds and the University's General Fee Revenue Bonds, Series 2007-A (the "Series 2007-A Bonds") may be now feasible on terms advantageous to the University. This resolution is intended to replace and supersede the resolution of April 15, 2013.

(b) It is necessary, advisable, in the interest of the University and in the public interest that the University issue its revenue bonds to refund all or a portion of the Series 2006-A Bonds and the Series 2007-A Bonds, as more fully described in Section 3 below.

(c) The University will realize financial benefits in the form of favorable interest rates and debt service savings from the issuance of the bonds herein authorized and the use of the proceeds thereof to refund the Series 2006-A Bonds and the Series 2007-A Bonds authorized to be refunded herein.

Section 2. Authorization of Bonds. For the purpose of refunding all or a portion of the Series 2006-A Bonds maturing on or after June 1, 2017 and all or a portion of the Series 2007-A Bonds maturing on or after June 1, 2018 (collectively, the "Refunded Bonds"), there are hereby authorized to be issued by the University up to \$210,595,000 aggregate principal amount of revenue bonds of the University. The said bonds shall be issued under the terms, conditions and provisions set out in the General Fee Revenue Trust Indenture dated as of June 1, 1985 between the University and The Bank of New York Mellon Trust Company, N.A., as successor trustee (herein called the "Trustee"), as heretofore supplemented, and as further supplemented by the Supplemental General Fee Revenue Indentures (the "Supplemental General Fee Indentures") provided for in Section 6 of this resolution (the original General Fee Revenue Trust Indenture, as so supplemented being herein referred to as the "General Fee Revenue Indenture"). The bonds herein authorized (the "Bonds") may be issued in one or more series if and to the extent

necessary and appropriate to distinguish between bonds the interest on which is excludable from gross income for purposes of federal income taxation and bonds the interest on which is taxable for purposes of federal income taxation. The Bonds may also be issued at such time or times as may be most advantageous to the University, subject to the provisions of Section 12 of this resolution.

All the provisions of the General Fee Revenue Indenture, as applicable to the Bonds, are hereby adopted as a part of this resolution as if set out at length herein.

Section 3. Bonds to be Issued as Additional Parity Bonds; Special Findings. The Bonds shall be issued as additional parity bonds under Article VIII of the General Fee Revenue Indenture.

In accordance with the provisions of Section 8.2(b) of the General Fee Revenue Indenture, the Board hereby finds and declares as follows:

(a) The University is not now in default under the General Fee Revenue Indenture and no such default is imminent.

(b) Bonds the interest on which is excludable from gross income for purposes of federal income taxation shall be designated "General Fee Revenue Refunding Bonds, Series ____". If it is necessary and appropriate to issue a portion of the Bonds as bonds the interest on which is taxable for purposes of federal income taxation, such bonds shall be designated "General Fee Revenue Bonds, Series ____ (Taxable)". The series designation shall be completed to reflect the calendar year in which the Bonds are issued and to provide any further identification of the Bonds as is appropriate.

(c) The persons to whom the Bonds are to be delivered are set forth in Sections 7 and 9 hereof.

(d) All of the Bonds are to be issued by sale in accordance with Section 7 hereof.

(e) The sale price of the Bonds is set forth in Section 7 hereof.

(f) The only additional parity bonds that have previously been issued by the University under the General Fee Revenue Indenture and that are currently outstanding are the General Fee Revenue Bonds, Series 2004, issued under the Tenth Supplemental General Fee Revenue Indenture dated as of August 1, 2004; the General Fee Revenue Bonds, Series 2006-A issued under the Eleventh Supplemental General Fee Indenture dated as of November 1, 2006; the General Fee Revenue Bonds, Series 2007-A and Series 2007-B, issued under the Twelfth Supplemental General Fee Revenue Indenture dated as of December 1, 2007; the General Fee Revenue Bonds, Series 2008 issued under the Thirteenth Supplemental General Fee Revenue Indenture dated as of September 1, 2008; the

General Fee Revenue Bonds, Series 2009, issued under the Fourteenth Supplemental General Fee Revenue Indenture dated as of December 1, 2009; the General Fee Revenue Bonds, Series 2011-A, issued under the Fifteenth Supplemental General Fee Revenue Indenture dated as of May 1, 2011; and the General Fee Revenue Bonds, Series 2012-A and Series 2012-B (Taxable) issued under the Sixteenth Supplemental General Fee Revenue Indenture dated as of March 1, 2012.

(g) The Refunded Bonds are to be refunded from proceeds of the Bonds, subject to the determinations and conditions set forth in Sections 11 and 12 hereof.

The Trustee is hereby requested to authenticate and deliver the Bonds to the purchasers specified in Section 7 hereof upon payment of the purchase price designated therein.

Section 4. Source of Payment of the Bonds. The principal of and the interest on the Bonds shall be payable from (i) the gross revenues from those general tuition fees levied against students at the Auburn, Alabama campus and the Montgomery, Alabama campus of the University that are more particularly described and referred to as "General Fees" in the General Fee Indenture; (ii) the gross revenues derived by the University from the operation of its housing and dining facilities located on the Auburn campus and on the Montgomery campus that are more particularly described and referred to as "Housing and Dining Revenues" in the General Fee Indenture; (iii) the gross revenues derived by the University from the operation of its athletics programs that are more particularly described and referred to as "Athletic Fee Revenues" in the General Fee Indenture; and (iv) the several student fees levied against students at the Auburn campus and the Montgomery campus that are more particularly described and referred to as the "Pledged Student Fees" in the General Fee Indenture. The said General Fees, Housing and Dining Revenues, Athletic Fee Revenues, and Pledged Student Fees are referred to herein and in the Supplemental General Fee Indenture described in Section 6 below as the "Pledged Revenues."

Nothing contained in this resolution, in the Bonds, in the General Fee Revenue Indenture, or in the supplemental indenture hereinafter authorized shall be deemed to impose any obligations on the University to pay the principal of or the interest on the Bonds except from the Pledged Revenues. Neither the Bonds, nor the pledge or any agreement contained in the General Fee Revenue Indenture, in the said supplemental indenture or in this resolution shall be or constitute an obligation of any nature whatsoever of the State of Alabama, and neither the Bonds nor any obligation arising from the aforesaid pledge or agreements shall be payable out of any moneys appropriated to the University by the State of Alabama. The agreements, covenants or representations contained in this resolution, in the Bonds, in the General Fee Revenue Indenture, and in the said supplemental indenture do not and shall never constitute or give rise to any personal or pecuniary liability or charge against the general credit of the University, and in the event of a breach of any such agreement, covenant or representation, no personal or pecuniary liability or charge payable directly or indirectly from the general revenues of the University shall arise therefrom. Nothing contained in this section shall, however, relieve the University from the

observance and performance of the several covenants and agreements on its part herein contained.

Section 5. Bonds Payable at Par. All remittances of principal of and interest on the Bonds to the holders thereof shall be made at par without any deduction for exchange or other costs, fees or expenses. The bank or banks at which the Bonds shall at any time be payable shall be considered by acceptance of their duties hereunder to have agreed that they will make or cause to be made remittances of principal of and interest on the Bonds, out of the moneys provided for that purpose, in bankable funds at par without any deduction for exchange or other cost, fees or expenses. The University will pay to such bank or banks all reasonable charges made and expenses incurred by them in making such remittances in bankable funds at par.

Section 6. Authorization of Supplemental Indentures. The Board does hereby authorize and direct the President of the University to execute and deliver, for and in the name and behalf of the University, to the Trustee, a Seventeenth Supplemental General Fee Revenue Indenture (herein called the "Seventeenth Supplemental General Fee Indenture") in substantially the form presented to the meeting at which this resolution is adopted and to be attached as Exhibit I to the minutes of said meeting (which form is hereby adopted in all respects as if set out in full in this resolution), with such changes, deletions and additions as may be approved as provided in Section 12 of this resolution, and does hereby authorize and direct the Secretary of the Board to affix to the Seventeenth Supplemental General Fee Indenture the official seal of the University and to attest the same. If the Bonds are issued in more than one series delivered at different times, the Board does hereby authorize and direct the President of the University to execute and deliver, for and in the name and behalf of the University one or more additional Supplemental General Fee Indentures in substantially the same form as the Seventeenth Supplemental General Fee Indenture, with such changes thereto as shall be appropriate to reflect the terms of the Bonds issued under such additional Supplemental General Fee Indenture(s), and does hereby authorize and direct the Secretary of the Board to affix to the such Supplemental General Fee Indentures the official seal of the University and to attest the same. The Seventeenth Supplemental General Fee Indenture and any additional Supplemental General Fee Indentures executed and delivered with respect to the Bonds are herein referred to as the "Supplemental General Fee Indentures".

Section 7. Sale of the Bonds. Subject to the conditions, approvals and adjustments contained or described in Section 12 of this resolution, the Bonds shall be sold and awarded to Merchant Capital, L.L.C. (herein called the "Underwriter"). The Bonds shall be sold to the Underwriter at and for a purchase price at least equal to 99% of the principal amount thereof, plus any original issue premium and less any original issue discount as may be approved under Section 12 hereof, plus accrued interest on such Bonds from their date to the date of delivery thereof. The first series of Bonds issued under this resolution shall be sold to the Underwriter pursuant to the terms of a Bond Purchase Contract (the "Bond Purchase Contract") to be entered into between the Underwriter and the University in substantially the form presented to the meeting at which this resolution is adopted and to be attached as Exhibit II to the minutes of said meeting (which form is hereby adopted in all respects as if set out in full in this resolution). The Board does hereby authorize and direct the President and the Executive Vice President of the University, or either of them, to execute and deliver the Bond Purchase Contract, for and on

behalf of the University, to the Underwriter, with such changes, deletions or additions thereto as may be approved as provided in Section 12 of this resolution. If the Bonds are issued in more than one series delivered at different times, the President of the University is also hereby authorized to execute and deliver, for and in the name and behalf of the University one or more additional Bond Purchase Contracts in substantially the same form as the Bond Purchase Contract attached as Exhibit II, with such changes thereto as shall be appropriate to reflect the sale of subsequent series of Bonds sold to the Underwriter under such additional Bond Purchase Contract(s).

Section 8. Authorization of Official Statements. The Board does hereby authorize and direct the Underwriter to prepare and distribute, for and in the name and on behalf of the University, a Preliminary Official Statement with respect to the first series of Bonds issued under this resolution, in substantially the form presented to the meeting at which this resolution is adopted and to be attached as Exhibit III to the minutes of said meeting (which form is hereby adopted in all respects as if set out in full in this resolution). The Board does hereby further authorize and direct the President or the Executive Vice President of the University to execute and deliver, for and on behalf of the University, a final Official Statement for the first series of Bonds issued under this resolution, substantially in the form of the Preliminary Official Statement but with such changes, additions and completions as may be necessary or appropriate to reflect the final terms of such Bonds and as may be approved as provided in Section 12 of this resolution, and does hereby declare that the Official Statement so executed by the President or the Executive Vice President of the University shall be the Official Statement of the University with respect to the Bonds covered by such Official Statement.

If the Bonds are issued in more than one series delivered at different times, the Board does hereby authorize and direct the Underwriter to prepare and distribute, for and in the name and on behalf of the University, a Preliminary Official Statement with respect to each additional series of Bonds in substantially the form of the Preliminary Official Statement attached as Exhibit III, with such changes, additions and completions as may be appropriate to reflect the series of Bonds covered by such Preliminary Official Statement. The Board does hereby further authorize and direct the President or the Executive Vice President of the University to execute and deliver, for and on behalf of the University, a final Official Statement for each additional series of Bonds in substantially the form of the Preliminary Official Statement but with such changes, additions and completions as may be necessary or appropriate to reflect the final terms of the Bonds covered by such Official Statement and as may be approved as provided in Section 12 of this resolution, and does hereby declare that the Official Statement so executed by the President or the Executive Vice President of the University shall be the Official Statement of the University with respect to the Bonds covered thereby.

Section 9. Execution and Delivery of Bonds. The Board does hereby authorize and direct the President of the University to execute the Bonds, in the name and on behalf of the University, by causing his signature or a facsimile thereof to be placed or imprinted on the Bonds, and does hereby authorize and direct the Secretary of the Board to cause a facsimile of the official seal of the University to be imprinted on the Bonds and to attest the same by causing his signature or a facsimile thereof to be placed or imprinted on the Bonds, all in the manner

provided in the General Fee Revenue Indenture. The President of the University is hereby further authorized and directed to deliver the Bonds, subsequent to their execution as provided herein to the Trustee, and to direct the Trustee to authenticate all the Bonds and to deliver them to the Underwriter, upon payment to the University of the purchase price therefor in accordance with the provisions of Sections 7 and 11 hereof.

Section 10. Application of Proceeds. The entire proceeds derived by the University from the sale of the Bonds shall be paid to the Trustee under the General Fee Revenue Indenture. The Trustee is thereupon authorized and directed to apply and disburse such moneys for the purposes and in the order specified in the Supplemental General Fee Indentures.

Section 11. Redemption of Refunded Bonds; Authorization of Escrow Trust Agreement. Any Series 2006-A Bonds to be refunded by the Bonds or any series of the Bonds shall be called for redemption on June 1, 2016, or the earliest practicable date thereafter, at and for a redemption price equal to 100% of the principal amount of each bond so redeemed, plus accrued interest. Any Series 2007-A Bonds to be refunded by the Bonds or any series of the Bonds shall be called for redemption on June 1, 2017, or the earliest practicable date thereafter, at and for a redemption price equal to 100% of the principal amount of each bond so redeemed, plus accrued interest. The President and the Executive Vice President of the University are separately authorized to direct the Trustee to mail and/or publish notice of such redemption as required under the terms of the General Fee Revenue Indenture. Any such redemption notice mailed or published prior to the date of issuance of the Bonds shall provide that the call of the affected Refunded Bonds for redemption is contingent upon the issuance and sale of the Bonds.

Pursuant to Section 6.1(a) of the General Fee Revenue Indenture, the Board hereby confirms that the University is not in default under said indenture.

In connection with the refunding and defeasance of the Refunded Bonds as provided in Section 14.1 of the General Fee Revenue Indenture, the Board hereby authorizes and directs the President of the University to execute in the name and on behalf of the University an Escrow Trust Agreement or Agreements, between the University and the Trustee, in substantially the form presented to the meeting at which this resolution is adopted and to be attached as Exhibit IV to the minutes of said meeting (which form is hereby adopted in all respects as if set out in full in this resolution), with such changes, deletions and additions as may be approved as provided in Section 12 of this resolution, and does hereby authorize and direct the Secretary of the Board to affix the official seal of the University thereon and to attest the same.

Section 12. Authorization to Approve Certain Matters. The Board has determined that in view of the favorable interest rates currently available in the market for bonds such as the Bonds, it is in the best interest of the University to authorize the issuance of the Bonds at this meeting, there being no other meeting of the Board scheduled prior to September 5, 2014. The Board acknowledges however, that as of the date of this meeting, the Bonds have not yet been marketed or priced and that the documents approved by the Board in this resolution have not yet been finalized. The Board also recognizes that it may be most advantageous to the University to issue the Bonds in two or more series at different times. Therefore, in order to permit the Bonds to be issued, sold and delivered promptly, efficiently, and on a schedule most advantageous to

the University without the need for a subsequent meeting of the Board, and to permit the University to achieve the benefit of the favorable interest rates currently prevailing in the market, the Board does hereby authorize Dr. Donald Large, the Executive Vice President of the University and the Chairman of the Finance Committee of the Board:

(a) to determine whether the Bonds shall be issued in one or more than one series, and to approve the schedule of issuance for each such series of Bonds; provided that no Bonds shall be issued under the authority of this resolution after June 1, 2016;

(b) to approve the principal amount of the Bonds to be issued in each series, and the designation of the Bonds as tax-exempt or taxable Bonds; provided that the aggregate principal amount of Bonds shall not exceed the amount authorized in Section 2 above;

(c) to determine which of the Refunded Bonds are to be refunded and redeemed by the Bonds; provided that any such refunding shall result in a minimum net present value savings of at least 3%;

(d) to approve the final forms of the Supplemental General Fee Indenture(s), the Bond Purchase Contract(s), the Preliminary Official Statement(s), the Official Statement(s) and the Escrow Agreement(s), such documents to be substantially in the forms approved by the Board in Sections 6, 7, 8 and 11 of this resolution, but with such changes, deletions and additions as he may deem appropriate;

(e) to approve the final form and pricing details of each series of Bonds, including the interest rates to be borne by such Bonds, the principal maturities thereof and any original issue discount or premium with respect to the Bonds; provided that the net interest cost of any series of Bonds shall not exceed 5%;

(f) to approve the compensation of the Underwriter, such compensation not to exceed 1% of the principal amount of the Bonds;

(g) to approve the expenses of issuing the Bonds; and

(h) to take such other steps and to execute and approve such other documents as may be necessary or appropriate to cause the Bonds to be issued, sold and delivered consistent with the provisions of this resolution and the Supplemental General Fee Indentures.

The final approval by the Executive Vice President of the University and the Chairman of the Finance Committee of the Board of the items listed above may be conclusively evidenced by a certificate signed by each of them and delivered at the time of issuance of the Bonds.

Section 13. Resolution Constitutes Contract. The provisions of this resolution shall constitute a contract between the University and each holder of the Bonds.

Section 14. Severability. The various provisions of this resolution are hereby declared to be severable. If any provision hereof shall be held invalid by a court of competent jurisdiction, such invalidity shall not affect any other portion of this resolution.

Section 15. Designation of Professionals. The Board hereby approves and confirms the retention of Balch & Bingham LLP as bond counsel to the University for the issuance of the Bonds, and the firm of Maynard, Cooper Gale, P.C., as counsel to the Underwriter for the issuance of the Bonds.

Section 16. General Authorization. The President of the University, the Executive Vice President of the University and the Secretary of the Board are hereby authorized to execute such further certifications or other documents and to take such other action as any of them may deem appropriate or necessary for the consummation of the matters covered by this resolution, to the end that the Bonds may be executed and delivered as promptly as practicable and on terms most advantageous to the University.

Exhibit I
Supplemental General Fee Indenture

Exhibit II
Bond Purchase Contract

Exhibit III
Preliminary Official Statement


Exhibit IV
Escrow Trust Agreement



AUBURN UNIVERSITY
OFFICE OF THE PRESIDENT

June 6, 2014

Memorandum To: President Jay Gogue

From: Donald L. Large, Jr. 

Subject: Board of Trustees Agenda Item

- Proposed Advance Refunding of Bonds

Proposal:

It is proposed that the Board of Trustees approve the administration pursuing the advance refunding of portions of the Series 2006 and 2007 General Fee Bonds. It would be our intent to pursue an advance refunding as long as the market holds to allow a minimum of 4% present value savings. It is also proposed that we would continue to use Merchant Capital as the bond underwriter for the university.

Review and Consultation:

The administration believes the market is favorable for pursuing the actions noted above and this has been confirmed by Merchant Capital. Attachment 1 provides more background on the refunding considerations.

Rationale for Recommendation:

This is simply an opportunity to take advantage of the current interest rate market that is historically low. The bond issues noted above are the only ones at this time that we could potentially achieve an adequate savings by pursuing a refunding or advance refunding.

MERCHANT CAPITAL

L.L.C.

MEMORANDUM

DATE: June 6, 2014

TO: Don Large
Auburn University

FROM: Thomas Harris
Michael P. Dunn
Merchant Capital

RE: Refunding Update

As we have been discussing, given the recent decline in interest rates, we believe the savings that could potentially be achieved by a partial refinancing of the University's 2006 General Fund Bonds has again risen to a level that merits consideration. The Series 2006 issue was approved for a refunding by the Trustees in 2013, but due to a very rapid and substantial rise in interest rates the refunding was placed on hold.

Here are the highlights associated with a possible refunding of the 2006 Bonds:

- Refunding the 2006 bonds with maturities ranging from 2018 to 2035 (but, excluding the 2027 maturity) which is a total of \$38,735,000, would produce present value savings of about \$2,600,000 which is 6.7% (PV \$ savings / Amount of bonds refunded). Our industry generally has a 3% guideline which we view as a minimum threshold amount.
- The estimated "negative arbitrage" associated with the refunding is \$1,965,543. Please see following discussion for an explanation.
- The interest rate on the refunding bonds would be about 3.45%, versus 4.99% on the refunded bonds. So, the University would be locking in a rate through 2035 that is 1.54% lower.
- If the refunding were delayed two years, when the bonds would be currently callable, the "breakeven" rise in interest rates is about .80%. In other words, if rates increased by more than 80 basis points, the savings would be less. (This is an estimate based on various assumptions we believe are reasonable, but obviously subject to market factors at the time of sale).

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In addition to the Series 2006 bonds, we are now also monitoring the possible savings opportunities available by refunding the Series 2007 Bonds. There are currently \$146,670,000 Series 2007 bonds outstanding. As with the 2006 issue, a partial refunding, if any, would be the most likely alternative. One option we are tracking is summarized below:

- Refunding \$38,860,000 of bonds with maturities of 2021 – 2027. The estimated PV savings is \$1,900,000 (4.9%).
- The Negative Arbitrage is about \$2,100,000.
- The interest rate on the refunding bonds would be about 2.80%, versus 4.74% on the refunded bonds – thus locking in a rate through 2027 which is 1.94% lower.
- If the refunding were delayed three years until the bonds are optionally callable, the break-even rise in interest rate is about 1.10%, to produce a similar amount of savings.

Market Considerations

Obviously, it is very difficult to predict what interest rates might do over the next several years. We have enjoyed a very long run of extraordinarily low interest rates, including at times the lowest levels seen in over 40 years. While interest rates today are higher than a year ago when refunding the Series 2006 bonds was approved, the municipal bond market has an impressive run in the first five months of this year (i.e. declining rates) – out performing treasuries, corporate bonds and even the S&P 500. The supply of municipal bonds has been low, about 30% less than same period last year, while demand continues to increase. It is a very favorable time for issuers to sell bonds.

Some noteworthy observations of the bond market:

- The 10 year Municipal Market Index Rate (“MMD”) and 20 year MMD rate have declined by 50 basis points and 73 basis points, respectively, since the beginning of this year. The average life of the prospective 2006 bonds to be refunded is about 14 years, and the 2007 bonds about 10 years.
- Since late 2008 while the Fed has been maintaining its short term rate at near zero, the difference in the 10 year treasury lowest rate (1.39% on 7/24/12) and highest rate (3.99% on 4/5/10) is 260 basis points. So, even while the Fed elects to keep short term rates low, there can be quite a lot of movement in longer term fixed rates.

- Bottom line, if you think it is likely that interest rates will be higher by any significant amount in 1 to 3 years, locking in savings today is worthy of serious consideration.
- In addition to the normal economic factors that affect general market interest rates, Congress has considered limiting the exemption of tax-exempt interest on municipal bonds to high income investors (exemption up to 28% tax bracket) which has been estimated could alone raise municipal borrowing cost by about 50 basis points.

Background and Overview

The Series 2006 bonds cannot be optionally prepaid until 6/1/2016. Likewise, the Series 2007 bonds are callable on 6/1/2017 and thereafter. Longer term municipal issues typically have call protection for 10 years. However, borrowers can issue advance refunding bonds prior to a call date, locking in savings. Under the tax exempt bond regulations, you are allowed only one advance refunding per each series of bonds. Thus you want to utilize your one opportunity in the best way possible.

In an advance refunding the bond proceeds are invested in securities guaranteed by the U.S. Government and deposited into a refunding escrow account. The escrow is structured to cover interest payments on the refunded bonds until the call date. On the call date the escrow securities mature and are used to retire the refunded bonds. From an accounting perspective, given the fact that the refunded bonds are secured by U.S. Treasury obligations, the debt is considered “defeased” and is no longer an obligation of the borrower.

When an issuer does an advance refunding, there are TWO interest rates that drive the amount of savings. Obviously, the interest rate on the new “refunding” bonds as compared to the outstanding “refunded” bonds is the MAJOR determinant of savings. However, also important is the interest rate earned on, and the term of, the refunding escrow. The ideal situation occurs when the yield on the escrow securities is equal to the interest rate on the refunding debt.

Under the tax-exempt bond regulations you are allowed to earn up to the “arbitrage yield” of your bonds in the refunding escrow. Basically, the federal government does not allow you to borrow at low tax-exempt rates, and invest the funds at higher treasury rates. In today’s market, with the Fed holding taxable short term interest rates near zero, refunding escrows do not earn interest at rates comparable to their borrowing costs. The “negative arbitrage” is simply the loss of *potential interest earnings* in the escrow if short term treasury yields were high enough to maximize your interest earnings.

The negative arbitrage amount basically represents the cost of not only issuing enough “refunding” bonds to retire the outstanding “refunded” bonds, but also to pay the interest cost of the refunded bonds until they can actually be retired. In the case of your 2006 issue an escrow account would be funded to cover interest expense until 6/1/2016, and for 2007 bonds until 6/1/2017. The longer the term of the escrow and the lower the yield, the more difficult it becomes to execute an advance refunding. If treasury bonds yields were high enough that we could earn an escrow yield equivalent to the University’s borrowing cost on the refunding issues, the term of the escrow basically becomes irrelevant. But at today’s treasury rates the escrow yield is about 2.0% to 2.50% less than what would be allowed.

The negative arbitrage cost will diminish over time and approach zero as you reach the actual call date of the refunded bonds. So, if you elect to delay an advance refunding, your hope is as you wait for negative arbitrage to decline, interest rates stay low or at least do not rise so much as to negate the gains made by reducing the negative arbitrage cost.

Refunding Considerations

As we monitor advance refundings for our clients we look at several factors such as:

- ✓ The \$ amount of PV savings
- ✓ The % amount of PV savings (generally 3% minimum threshold)
- ✓ The \$ amount of PV savings as compared to the negative arbitrage
- ✓ The relationship of waiting to reduce negative arb, versus risk of higher rates in future
- ✓ Reasons to refund debt other than financial savings (cash flow relief, restrictive covenants, release reserve funds no longer necessary, etc.)

If the PV percentage savings is 5%, 6% and higher, even with a fairly large amount of negative arbitrage it may be advisable to capture the savings. It really greatly depends on each individual client's needs, financial condition, overall debt structure, view of the future, etc.

Summary

At this point in time, based on current market conditions, we are suggesting a partial refunding of \$38,735,000 the Series 2006 bonds, which leaves \$10,810,000 callable 2006 bonds outstanding. The actual sizing of the refunding would be adjusted up or down, on the day of sale, to provide the best overall refunds. Any bonds that are not refunded would remain available for future refunding opportunities.

The University could lock in an interest cost of less than 3.50% through 2035, versus a rate of about 4.99% on the refunded 2006 bonds. The refunding would not extend the term of the debt and would provide savings of about \$2.6 million. This savings amount is after all expenses and consideration of negative arbitrage, representing true dollars to the University. The percentage savings of 6.70% is well above the 3% minimum threshold, and the \$2.6 million savings exceeds the \$1.965 million negative arbitrage.

On the Series 2007 bonds, if market conditions hold or improve slightly, there is a possibility that refunding somewhere between \$15,000,000 and \$40,000,000 of the bonds could come into play. As noted above, currently the PV savings is slightly under 5% and the negative arbitrage larger than the savings. We would like to see the PV savings exceeding 5%, and about the same or larger than the negative arbitrage, before the University proceeded. Keep in mind you are not losing an opportunity to refund, but are postponing in hopes of achieving better results.

By proceeding with a partial refunding of the Series 2006 bonds, the University would lock in very attractive rates on some of its debt, while taking some money and risk off the table as it relates to future interest rates. However, between the unrefunded 2006 and 2007 bonds, there remain over \$125 to \$150 million (depending on final size of refunding) of debt that we will continue to monitor for future refunding opportunities. As we approach or reach the call dates of each issue, if rates do not rise too much, there could be other opportunities to refund the bonds in the next few years, as well as over the longer term given the Series 2006 unrefunded bonds extend all the way out to 2037, and the Series 2007 bonds to 2038.