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**NOTES TO THE FINANCIAL STATEMENTS**


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**NOTE 7: LONG-TERM LIABILITIES**


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**A. Changes in Long-Term Liabilities**

**Primary Government.** Long-term liability activity for the year ended June 30, 2003, was as follows (dollars in thousands):

	<i>Balance June 30, 2002</i>	<i>Increases</i>	<i>Decreases</i>	<i>Balance June 30, 2003</i>	<i>Amounts Due in One Year</i>
<b>Governmental activities:</b>					
Bonds payable:					
General obligation bonds .....	\$ 3,467,325	\$ 1,267,950	\$ 668,285	\$ 4,066,990	\$ 235,015
Less deferred amounts:					
For issuance discounts .....	(3,081)	—	(719)	(2,362)	—
On refunding .....	—	(56,044)	(2,266)	(53,778)	—
Add issuance premium .....	13,709	24,177	3,133	34,753	—
Total bonds payable .....	<u>3,477,953</u>	<u>1,236,083</u>	<u>668,433</u>	<u>4,045,603</u>	<u>235,015</u>
Certificates of participation .....	—	17,500	—	17,500	290
Notes payable .....	11,753	—	2,124	9,629	2,218
Capital leases payable .....	216	150	44	322	119
Arbitrage rebate payable .....	1,287	—	210	1,077	126
Compensated absences .....	209,256	256,359	191,156	274,459	21,847
Net pension obligation .....	3,775	13,770	12,889	4,656	—
Workers' compensation .....	7,145	927	1,253	6,819	1,156
Deferred death benefit payable .....	170	150	215	105	90
Cost settlement payable .....	—	20,000	—	20,000	12,500
Governmental activity long-term liabilities .....	<u>\$ 3,711,555</u>	<u>\$ 1,544,939</u>	<u>\$ 876,324</u>	<u>\$ 4,380,170</u>	<u>\$ 273,361</u>
	<i>Balance June 30, 2002</i>	<i>Increases</i>	<i>Decreases</i>	<i>Balance June 30, 2003</i>	<i>Amounts Due in One Year</i>
<b>Business-type activities:</b>					
Bonds payable:					
Revenue bonds .....	\$ 9,805	\$ —	\$ 235	\$ 9,570	\$ 245
Total bonds payable .....	<u>9,805</u>	<u>—</u>	<u>235</u>	<u>9,570</u>	<u>245</u>
Compensated absences .....	578	656	534	700	70
Business-type activity long-term liabilities .....	<u>\$ 10,383</u>	<u>\$ 656</u>	<u>\$ 769</u>	<u>\$ 10,270</u>	<u>\$ 315</u>

For governmental activities, the compensated absences, net pension obligation, and workers compensation liabilities are generally liquidated by the general fund. Arbitrage rebate payable is generally liquidated by other governmental funds. A portion of compensated absences is also liquidated by the Highway Fund. Internal service funds predominantly serve the governmental funds. Accordingly, long-term liabilities for them are included as part of the above totals for governmental activities. At year-end, \$2,726,000 of internal service funds compensated absences are included in the above amounts.

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**NOTES TO THE FINANCIAL STATEMENTS**

**Component Units** (University of North Carolina System, N.C. Housing Finance Agency, and State Education Assistance Authority). Long-term liability activity for the year ended June 30, 2003, was as follows (dollars in thousands):

	<i>Balance June 30, 2002</i>	<i>Increases</i>	<i>Decreases</i>	<i>Balance June 30, 2003</i>	<i>Amounts Due in One Year</i>
<b>University of North Carolina System:</b>					
Bonds payable:					
Revenue bonds .....	\$ 1,355,880	\$ 327,710	\$ 158,283	\$ 1,525,307	\$ 158,139
Less deferred amounts:					
For issuance discounts .....	(68,744)	—	(8,670)	(60,074)	—
On refunding .....	(7,550)	(13,991)	(703)	(20,838)	—
Add issuance premium .....	6,221	5,190	1,346	10,065	—
Total bonds payable .....	<u>1,285,807</u>	<u>318,909</u>	<u>150,256</u>	<u>1,454,460</u>	<u>158,139</u>
Notes payable .....	21,852	42,916	7,841	56,927	11,278
Capital leases payable .....	2,039	913	1,009	1,943	889
Arbitrage rebate payable .....	2,309	1,017	17	3,309	93
Annuity and life income payable .....	7,774	2,755	1,128	9,401	767
Compensated absences .....	141,449	177,951	130,151	189,249	14,681
Total long-term liabilities .....	<u>\$ 1,461,230</u>	<u>\$ 544,461</u>	<u>\$ 290,402</u>	<u>\$ 1,715,289</u>	<u>\$ 185,847</u>
	<i>Balance June 30, 2002</i>	<i>Increases</i>	<i>Decreases</i>	<i>Balance June 30, 2003</i>	<i>Amounts Due in One Year</i>
<b>North Carolina Housing Finance Authority:</b>					
Bonds payable:					
Revenue bonds .....	\$ 1,348,072	\$ 58,060	\$ 100,495	\$ 1,305,637	\$ 24,245
Less deferred amounts:					
For issuance discounts .....	(19,727)	1,922	524	(18,329)	—
On refunding .....	(2,518)	182	—	(2,336)	—
Total bonds payable .....	<u>1,325,827</u>	<u>60,164</u>	<u>101,019</u>	<u>1,284,972</u>	<u>24,245</u>
Arbitrage rebate payable .....	298	345	—	643	—
Compensated absences .....	281	92	—	373	30
Total long-term liabilities .....	<u>\$ 1,326,406</u>	<u>\$ 60,601</u>	<u>\$ 101,019</u>	<u>\$ 1,285,988</u>	<u>\$ 24,275</u>
	<i>Balance June 30, 2002</i>	<i>Increases</i>	<i>Decreases</i>	<i>Balance June 30, 2003</i>	<i>Amounts Due in One Year</i>
<b>State Education Assistance Authority:</b>					
Bonds payable:					
Revenue bonds .....	\$ 1,103,406	\$ 260,000	\$ 63,600	\$ 1,299,806	\$ 1,000
Total bonds payable .....	<u>1,103,406</u>	<u>260,000</u>	<u>63,600</u>	<u>1,299,806</u>	<u>1,000</u>
Arbitrage rebate payable .....	2,650	6	168	2,488	—
Compensated absences .....	115	57	7	165	10
Total long-term liabilities .....	<u>\$ 1,106,171</u>	<u>\$ 260,063</u>	<u>\$ 63,775</u>	<u>\$ 1,302,459</u>	<u>\$ 1,010</u>

## NOTES TO THE FINANCIAL STATEMENTS

### B. Bonds, Certificates of Participation, and Notes Payable

Bonds, certificates of participation, and notes payable at June 30, 2003 were (dollars in thousands):

	Interest Rates	Final Maturity	Original Issue	Outstanding Balance
<b>Primary Government:</b>				
<b>Long-term obligations:</b>				
General obligation bonds.....	1.5 - 18%; Variable	3/1/2028	\$ 4,746,929	\$ 4,066,990
Certificates of participation.....	2.0 - 5.25%	6/1/2023	17,500	17,500
Notes payable.....	3.84 - 5.7%	9/1/2008	15,123	9,629
<b>Enterprise Funds</b>				
Revenue bonds payable.....	Variable	9/1/2025	9,905	9,570
<b>Component Units:</b>				
<b>Revenue bonds payable:</b>				
University of North Carolina System.....	0.55 - 9.25%; Variable	2/15/2031	1,641,105	1,525,307
N.C. Housing Finance Agency.....	1.5 - 8.25%; Variable	2/20/2043	2,495,706	1,305,637
State Education Assistance Authority.....	0.98 - 6.35%; Variable	7/1/2032	1,377,250	1,299,806
<b>Notes payable:</b>				
University of North Carolina System.....	1.52 - 8.13%	10/15/2023	65,277	56,927

The full faith, credit, and taxing power of the State has been pledged only for the payment of the principal of and the interest on the general obligation serial bonds and capital appreciation bonds. The certificates of participation issued by the NC Infrastructure Finance Corporation, a blended component unit of the State, are secured solely by lease payments made by the State and in the event of default, by a security interest in the leased facilities pursuant to a leasehold deed of trust. Other long-term debts of the State and its component units are payable solely from certain resources of the funds to which they relate.

### C. Bonds Authorized but Unissued

The amount of authorized but unissued bonds at June 30, 2003, totaled \$3.053 billion as follows: Higher Education \$1.985 billion; Highway Construction \$700 million; Clean Water \$316 million; and Natural Gas \$52 million.

### D. Demand Bonds

#### University of North Carolina System

#### General Revenue Bonds, Series 2001B and 2001C – The University of North Carolina at Chapel Hill

On February 7, 2001 the University of North Carolina at Chapel Hill issued two series of variable rate demand bonds in the amount of \$54,970,000 (2001B) and \$54,970,000 (2001C) that each have a final maturity date of December 1, 2025. The bonds are subject to mandatory sinking fund redemption on the interest payment date which began on December 1, 2001. The proceeds of these issuances were used to provide funds to refund in advance of their maturity the following issues: Ambulatory Care Clinic, Series 1990; Athletic Facilities, Series 1998; Carolina Inn, Series 1994; School of Dentistry, Series 1995; Housing System, Series 2000; Kenan Stadium, Series 1996; and Parking System, Series 1997C. While bearing interest at a weekly rate, the bonds are subject to purchase on demand with seven days notice and delivery to the University's remarketing agents, Lehman Brothers, Inc (2001B) and UBS Financial Services, Inc (2001C).

Under an irrevocable line of credit issued by The Toronto-Dominion Bank and JP Morgan Chase Bank, the University is

entitled to draw up to \$54,970,000 from each bank or a maximum aggregate of \$109,940,000 which the University would apply to meet its obligation to pay the principal, and, while the bonds are bearing interest at the daily or weekly rate, accrued interest on bonds delivered for purchase. The University is required to pay a quarterly commitment fee for the line of credit of .08% per annum of the amount of bonds then currently outstanding.

Under the letter of credit agreement, the University has promised to repay loans that represent purchase drawings in equal semi-annual payments after termination of the letter of credit. Interest at the rate of prime plus 1.0% (prime plus 2.0% after 60 days) is payable quarterly and upon draw repayment. At June 30, 2003, no purchase drawings had been made under the letter of credit. The letter of credit terminates on February 4, 2004.

#### Revenue Bonds, Series 1999A – North Carolina State University

On September 22, 1999, North Carolina State University issued tax-exempt variable rate revenue demand bonds in the amount of \$13,500,000 that have a final maturity date of December 15, 2019. The bonds are subject to mandatory sinking fund redemption that began on December 1, 2000. The proceeds of this issuance were used to (i) discharge a portion of a loan from Wachovia Bank, N.A., the proceeds from which were used for the construction and equipping of a building known as the Partners II Building located on the University's Centennial Campus, (ii) paying the cost of relocating utility easements on the Centennial Campus, and (iii) paying the costs incurred in connection with the issuance of the 1999A Bonds.

**NOTES TO THE FINANCIAL STATEMENTS**

While bearing interest at a weekly rate, the bonds are subject to purchase on demand with seven days' notice and delivery to the University's bond paying agent, The Bank of New York. Upon notice from the bond paying agent, the remarketing agent, Lehman Brothers, Inc. has agreed to exercise its best efforts to remarket the bonds for which a notice of purchase has been received.

Under a standby bond purchase agreement between the Board of Governors of the University of North Carolina and Wachovia Bank, N.A., a liquidity facility has been established for the Trustee (The Bank of New York) to draw amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase when remarketing proceeds or other funds are not available. This agreement requires a commitment fee equal to 0.20% of the available commitment, payable quarterly in arrears, beginning on October 1, 1999 and on each January 1, April 1, July 1, and October 1 thereafter until the expiration date or the termination date of the agreement.

Under the agreement, any bonds purchased through the liquidity facility become liquidity provider bonds and shall, from the date of such purchase and while they are liquidity provider bonds, bear interest at the liquidity provider rate (the greater of the bank prime commercial lending rate and federal funds rate plus 0.5%). Upon remarketing of liquidity provider bonds and the receipt of the sales price by the liquidity provider, such bonds are no longer considered liquidity provider bonds. Payment of the interest on the liquidity provider bonds is due the first business day of each month in which liquidity provider bonds are outstanding. At June 30, 2003 there were no liquidity provider bonds held by the liquidity facility. The original liquidity facility is scheduled to expire on September 15, 2008 unless otherwise extended based on the terms of the agreement.

Upon expiration or termination of the agreement, the University is required to redeem (purchase) the liquidity provider bonds held by the liquidity facility in twenty quarterly installments, beginning the first business day that is at least 180 days following such expiration date or termination date along with accrued interest at the liquidity provider rate.

Effective October 1, 1999, the University entered into an interest rate swap contractual agreement with Lehman Brothers, Inc. on \$9,000,000 of these demand bonds. Under this agreement the University will pay interest at a fixed rate of 4.574%. On a monthly basis the difference between 67% of the weighted average of the weekly London Interbank Offered Rates (LIBOR) rate and the fixed rate will be calculated. If the fixed rate is greater than the LIBOR calculated rate, the University will pay the difference to Lehman Brothers, Inc. If the LIBOR rate is greater, Lehman Brothers will refund the difference to the University. During fiscal year 2002-2003, the University paid Lehman Brothers \$321,000 under this agreement.

**Variable Rate General Revenue Bonds, Series 2003B – North Carolina State University**

On June 20, 2003 North Carolina State University issued tax-exempt variable rate revenue demand bonds in the amount of \$45,660,000 that have a final maturity date of October 1, 2027. The bonds are subject to mandatory sinking fund redemption that begins on October 1, 2004. The proceeds of this issuance were used to pay a portion of the costs of certain improvements on the campus of the University, to refund certain debt previously incurred for that purpose, and to pay the costs incurred in connection with the issuance of the 2003B bonds. While bearing interest at a weekly rate, the bonds are subject to purchase on demand with seven days' notice and delivery to the University's bond paying agent, The Bank of New York. Upon notice from the bond paying agent, the remarketing agent, UBS Financial Services Inc., has agreed to exercise its best efforts to remarket the bonds for which a notice of purchase has been received.

Under a standby bond purchase agreement between the Board of Governors of the University of North Carolina and Bayerische Landesbank, a liquidity facility has been established for the Trustee (The Bank of New York) to draw amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase when remarketing proceeds or other funds are not available. This agreement requires a commitment fee equal to 0.20% of the available commitment, payable quarterly in arrears, beginning on July 1, 2003 and on each October 1, January 1, April 1 and July 1 thereafter until the expiration date or the termination date of the agreement.

Under the agreement, any bonds purchased through the liquidity facility become liquidity provider bonds and shall, from the date of such purchase and while they are liquidity provider bonds, bear interest at the liquidity provider rate (the greater of the bank prime commercial lending rate and federal funds rate plus 0.5%). Upon remarketing of liquidity provider bonds and the receipt of the sales price by the liquidity provider, such bonds are no longer considered liquidity provider bonds. Payment of the interest on the liquidity provider bonds is due the first business day of each month in which liquidity provider bonds are outstanding. At June 30, 2003, there were no liquidity provider bonds held by the liquidity facility. The original liquidity facility is scheduled to expire on June 19, 2008, unless otherwise extended based on the terms of the agreement.

Upon expiration or termination of the agreement, the University is required to redeem (purchase) the liquidity provider bonds held by the liquidity facility in twenty quarterly installments, beginning the first business day of the January, April, July or October, whichever first occurs on or following the purchase date along with accrued interest at the liquidity provider rate.

Effective June 20, 2003, the University entered into an interest rate swap contractual agreement with Bank of America, N.A., on \$24,655,000 of these demand bonds. Under this agreement the University will pay interest at a fixed rate of

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**NOTES TO THE FINANCIAL STATEMENTS**

3.54%. On a monthly basis the difference between the weighted average of the weekly Bond Market Association Municipal Swap Index (BMA) rate and the fixed rate will be calculated. If the fixed rate is greater than the BMA calculated rate, the University will pay the difference to Bank of America, N.A. If the BMA rate is greater, Bank of America, N.A. will refund the difference to the University. During the fiscal year the University paid Bank of America, N.A. \$19,000 under this agreement.

Effective June 20, 2003, the University entered into an interest rate swap contractual agreement with Bank of America, N.A., on \$21,005,000 of these demand bonds. Under this agreement the University will pay interest at a fixed rate of 1.19%. On a monthly basis the difference between the weighted average of the weekly BMA rate and the fixed rate will be calculated. If the fixed rate is greater than the BMA calculated rate, the University will pay the difference to Bank of America, N.A. If the BMA rate is greater, Bank of America, N.A. will refund the difference to the University. During the fiscal year the University paid Bank of America, N.A. \$1,000 under this agreement.

**The University of North Carolina System Variable Rate Demand Pool Revenue Bonds, Series 1998A – East Carolina University**

In 1998, the Board of Governors of the University of North Carolina issued variable rate demand bonds in a system wide financing agreement for the benefit of its constituent universities. Through this system-wide financing, the University issued debt in the amount of \$3,645,000 with a final maturity date of October 1, 2008. These bonds are subject to mandatory sinking fund redemption that began on October 1, 1999. The proceeds of this issuance were used to refinance notes payable which were issued to pay the costs of repairs to Dowdy-Ficklen Stadium, construction of the Blount Intramural Field, and construction of the Reade Street Parking Lot. While bearing interest at a weekly rate, the bonds are subject to purchase on demand with seven days' notice and delivery to the University's bond-paying agent, The Bank of New York. Upon notice from the bond-paying agent, the remarketing agent, Salomon Smith Barney, Inc., has agreed to exercise its best efforts to remarket the bonds for which a notice of purchase has been received.

Under a standby bond purchase agreement between the Board of Governors of the University of North Carolina and Bank of America N.A., a liquidity facility has been established for the trustee to draw amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase when remarketing proceeds or other funds are not available. This agreement requires a standby fee equal to .13% of the available commitment, payable semiannually in advance, beginning on November 3, 1998, and on each May 1 and November 1 thereafter until the expiration date or the termination date of the agreement.

Under the agreement, any bonds purchased through the liquidity facility become liquidity provider bonds and shall,

from the date of such purchase and while they are liquidity provider bonds, bear interest at the liquidity provider rate (LIBOR plus one percent). Upon remarketing of liquidity provider bonds and the receipt of the sales price by the liquidity provider, such bonds are no longer considered liquidity provider bonds. Payment of the interest on the liquidity provider bonds is due the first business day of each month in which liquidity provider bonds are outstanding. At June 30, 2003, there were no liquidity provider bonds held by the liquidity facility.

Upon expiration or termination of the agreement, the University is required to redeem (purchase) the liquidity provider bonds held by the liquidity facility in sixty equal monthly installments, beginning the first business day that is at least 180 days following such expiration date or termination date along with accrued interest at the liquidity provider rate. The expiration date of the agreement is November 3, 2004 and may be extended for an additional period of up to three years at the discretion of the liquidity provider and acceptance by the Board of Governors of the University of North Carolina.

Amounts due under this standby bond purchase agreement are allocated by the trustee directly to and paid by the constituent universities participating in the system wide bond issuance.

**Athletic Department, Series 1996 – East Carolina University**

On December 1, 1996, East Carolina University issued tax-exempt adjustable mode demand bonds in the amount of \$7,000,000 that have a final maturity date of May 1, 2017. The bonds are subject to mandatory sinking fund redemption that began on May 1, 1998. The proceeds of this issuance were used to pay the cost of renovating and expanding Dowdy-Ficklen Stadium on the campus of East Carolina University and to pay the costs incurred in connection with the issuance of the 1996 bonds. The bonds are subject to purchase on demand with seven days' notice and delivery to the University's remarketing agent, Alex. Brown & Sons, Inc.

Under an irrevocable direct-pay letter of credit issued by Wachovia Bank, N.A., the trustee is entitled to draw amounts sufficient to pay principal and interest on the bonds and amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase. The University is required to pay an annual commitment fee of .30% of the amount of the bonds then currently outstanding plus an amount for accrued interest.

The University has entered into a reimbursement agreement with Wachovia Bank, N.A. in which it has agreed upon termination of the letter of credit to repay all amounts that are drawn under the letter of credit. Interest is charged at the rate of prime. At June 30, 2003, no drawings had been made under the letter of credit.

The letter of credit automatically extends every month so that termination will not occur until 13 months after notice is received from Wachovia Bank, N.A. that the letter of credit will

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**NOTES TO THE FINANCIAL STATEMENTS**

not be extended. As of June 30, 2003, the earliest such termination date is July 31, 2004.

**The University of North Carolina System Variable Rate Demand Pool Revenue Bonds, Series 1998A – The University of North Carolina at Asheville**

In 1998, the Board of Governors of the University of North Carolina issued variable rate demand bonds in a system-wide financing arrangement for the benefit of its constituent universities. Through this system-wide financing, the University of North Carolina at Asheville issued debt in the amount of \$2,580,000 with a final maturity date of October 1, 2008. The bonds are subject to mandatory sinking fund redemption that began on October 1, 1999. The proceeds of this issuance were used to construct a 200-car parking structure. While bearing interest at a weekly rate, the bonds are subject to purchase on demand with seven days' notice and delivery to the University's bond paying agent, The Bank of New York. Upon notice from the bond-paying agent, the remarketing agent, Salomon Smith Barney, Inc., has agreed to exercise its best efforts to remarket the bonds for which a notice of purchase has been received. The University currently pays a remarketing fee of \$173 per month determined by the outstanding principal balance.

Under a standby bond purchase agreement between the Board of Governors of the University of North Carolina and Bank of America, N.A., a liquidity facility has been established for the trustee to draw amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase when remarketing proceeds or other funds are not available. This agreement requires a standby fee equal to .13% of the available commitment, payable semiannually in advance, beginning on November 3, 1998, and on each May 1 and November 1 therefore until the expiration date or the termination date of the agreement.

Under the agreement, any bonds purchased through the liquidity facility become liquidity provider bonds and shall, from the date of such purchase and while they are liquidity provider bonds, bear interest at the liquidity provider rate (LIBOR plus one percent). Upon remarketing of liquidity provider bonds and the receipt of the sales price by the liquidity provider, such bonds are no longer considered liquidity provider bonds. Payment of the interest on the liquidity provider bonds is due the first business day of each month in which liquidity provider bonds are outstanding. At June 30, 2003, there were no liquidity provider bonds held by the liquidity facility.

Upon expiration or termination of the agreement, the University is required to redeem (purchase) the liquidity provider bonds held by the liquidity facility in sixty equal monthly installments, beginning the first business day that is at least 180 days following such expiration date or termination date along with accrued interest at the liquidity provider rate. The expiration date of the agreement is November 3, 2004 and may be further extended for an additional period at the

discretion of the liquidity provider and acceptance by the Board of Governors of the University of North Carolina.

Amounts due under this standby bond purchase agreement are allocated by the trustee directly to and paid by the constituent universities participating in the system wide bond issuance. The debt service requirements that would result from the take out agreement, if exercised, would be approximately \$1,660,000.

**The University of North Carolina Hospitals' Variable Rate Demand Pool Revenue Bonds, Series 2001A and 2001B**

On January 31, 2001, the Board of Governors of the University of North Carolina issued Series 2001A and Series 2001B Revenue Bonds on behalf of the Hospitals. These tax-exempt variable rate demand bonds with an initial interest rate mode of daily were issued in the amount of \$110,000,000 and have a final maturity date of February 15, 2031. The bonds are subject to mandatory sinking fund redemption that began on February 15, 2002. The proceeds of this issuance are for certain amounts paid by the Hospitals that allowed the UNC Health Care System to acquire controlling interest in Rex Healthcare Inc. (\$75,000,000) and for the renovation of space vacated when the construction of the North Carolina Children's Hospital, North Carolina Women's Hospital, and support services is completed (\$35,000,000). While initially bearing interest in a daily mode, the mode on these bonds may change to a weekly rate, a unit pricing rate, a term rate or a fixed rate.

The bonds are subject to purchase on demand with seven days' notice and delivery to the bond tender agent, Wachovia Bank, N.A. The Hospitals' remarketing agents, Merrill Lynch, Pierce, Fenner & Smith Incorporated (Series 2001A) or Banc of America Securities LLC (Series 2001B) have agreed to exercise their best efforts to remarket bonds for which a notice of purchase has been received.

Under separate standby bond purchase agreements for the Series 2001A and Series 2001B between the Hospitals and *Landesbank Hessen-Thüringen Girozentrale*, a liquidity facility has been established for the tender agent to draw amounts sufficient to pay the purchase price and accrued interest on bonds delivered for purchase when remarketing proceeds or other funds are not available. These agreements require a facility fee equal to .22% of the available commitment, payable quarterly in arrears, beginning on April 2, 2001, and on each July, October, January and April thereafter until the expiration date or the termination date of the agreements.

Under the agreements, any bonds purchased through the liquidity facility become bank bonds and shall, from the date of such purchase and while they are bank bonds, bear interest at the formula rate (base rate equal to the higher of the prime rate for such day or the sum of .50% plus the federal funds rate) subject to a maximum rate as permitted by law. Upon remarketing of bank bonds and the receipt of the sales price by the liquidity provider, such bonds are no longer considered bank bonds. Payment of the interest on the bank bonds is due

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quarterly (the first business day of January, April, July and October) for each period in which bank bonds are outstanding. At June 30, 2003, there were no bank bonds held by the liquidity facility.

The Hospitals is required to redeem (purchase) the bank bonds held by the liquidity facility in equal quarterly installments on the first business day of January, April, July and October. The payments will commence with the first business day of any such month that is at least 90 days following the applicable purchase date of the bank bond and end no later than the fifth anniversary of such purchase date.

The current expiration date of the agreements is July 27, 2004. The Hospitals may request additional extensions of up to 364 days. Extensions are at the discretion of the liquidity provider.

**The University of North Carolina Hospitals' Revenue Refunding Bonds, Series 2003A and 2003B**

On February 13, 2003, the Board of Governors of The University of North Carolina issued Series 2003A and Series 2003B Revenue Refunding Bonds on behalf of the Hospitals. These tax-exempt variable rate demand bonds with an initial interest rate mode of weekly were issued in the amount of \$98,015,000 and have a final maturity date of February 1, 2029. The bonds are subject to mandatory sinking fund redemption that begins on February 1, 2004. The proceeds were used to advance refund \$88,325,000 of the Series 1996 Bonds. While initially bearing interest in a weekly mode, the mode on these bonds may change to a daily rate, a unit pricing rate, a term rate or a fixed rate.

The bonds are subject to purchase on demand with seven days notice and delivery to the bond Tender Agent, Wachovia Bank, N.A. The Hospitals' remarketing agents, Banc of America Securities LLC (Series 2003A) or Wachovia Bank, N.A. (Series 2003B) have agreed to exercise their best efforts to remarket bonds for which a notice of purchase has been received.

Under separate Standby Bond Purchase Agreements for the Series 2003A and Series 2003B (Agreements) between the Hospitals and Bank of America, N.A. (Series 2003A) or Wachovia Bank, N.A. (Series 2003B) a Liquidity Facility has been established for the Tender Agent to draw amounts sufficient to pay the purchase price on bonds delivered for purchase when remarketing proceeds or other funds are not available. These Agreements require a facility fee equal to .20% for Series 2003A and .22% for Series 2003B of the available commitment, payable quarterly in advance, beginning on February 13, 2003, and on each February 1, May 1, August 1, and November 1 thereafter until the expiration date or the termination date of the Agreements.

Under the Agreements, any bonds purchased through the Liquidity Facility become Bank Bonds and shall, from the date of such purchase and while they are Bank Bonds, bear interest

at the Bank Bond Interest Rate (for Series 2003A, the rate equals LIBOR plus 2.50% for the first 90 days and then equals LIBOR plus 2.50%; for Series 2003B, the rate equals Prime Rate) subject to a maximum rate as permitted by law. Upon remarketing of Bank Bonds and the receipt of the sales price by the Liquidity Provider, such bonds are no longer considered Bank Bonds. Payment of the interest on the Bank Bonds is on the first business day of each month for each period in which Bank Bonds are outstanding. At June 30, 2003, there were no Bank Bonds held by the Liquidity Facility.

The Hospitals is required to redeem (purchase) the Bank Bonds held by the Liquidity Facility for the Series 2003A on the first February 1, May 1, August 1 and November 1 that occurs at least 90 days after it originally becomes a bank bond. Alternatively, the purchase may be paid in twelve equal quarterly installments. For the Series 2003B, the purchase must occur on the date 90 days after the bond became a bank bond. Alternatively, the Bank can establish a loan to the Hospitals for the bank bonds with a repayment schedule of 36 monthly payments and an interest rate of Prime plus 1%.

The current expiration date of the Series 2003A Agreement is February 12, 2004 and February 13, 2005 for the Series 2003B Agreement. The Hospitals have requested and received an extension through June 30, 2005 on the Series 2003A Agreement. The Hospitals may request additional extensions which are approved at the discretion of the Liquidity Provider.

## **E. Interest Rate Swaps**

### **Primary Government**

#### **Governmental activities**

**Objective of the interest rate swap.** As a means to lower its borrowing costs and increase its savings, when compared against fixed-rate refunding bonds at the time of issuance in December 2002, the State entered into two interest rate swaps in connection with its \$499,870,000 Variable Rate General Obligation Refunding Bonds, Series 2002B-F. The intention of the swap agreements was to effectively change the State's interest rate on the bonds to a synthetic fixed rate of 3.283% and 3.089%. For comparison, the State sold fixed rate bonds on the same day as the swap, with the same maturity, at an interest rate of 4.4516%.

**Terms.** The bonds and the related swap agreements mature on June 1, 2019 (Swap 1) and June 1, 2017 (Swap 2) and the combined swaps' notional amount of \$499,870,000 matches the \$499,870,000 million variable-rate bonds. The swaps were entered into at the same time the bonds were issued, (December 2002.) Starting in fiscal year 2012 the combined notional value of the swaps and the combined principal amount of the associated debt decline. Under the swaps the State pays the counterparties a fixed payment of 3.283% (Swap 1) and 3.089% (Swap 2) and receives a variable payment computed at 64

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## NOTES TO THE FINANCIAL STATEMENTS

percent of the London Interbank Offered Rate (LIBOR). Conversely, the bonds' variable-rate coupons are closely associated with the Bond Market Association Municipal Swap Index (BMA).

**Fair value.** Because interest rates have declined since execution of the swaps, the swaps have negative fair values of \$13,009,529 (Swap 1) and \$13,572,228 (Swap 2) as of June 30, 2003. The swap's negative fair value may be countered by a reduction in total interest payments required under the variable rate bonds, creating a lower synthetic interest rate. Because the coupons on the State's variable-rate bonds are adjusted every seven days to changing interest rates, the bonds do not have a corresponding fair value increase. The mark-to-market valuations were established by market quotations from the counterparties representing estimates of the amounts that would be paid for replacement transactions.

**Credit risk.** As of June 30, 2003 the State was not exposed to credit risk because the swaps had a negative fair value. However, should interest rates change and the fair value of the swaps become positive, the State would be exposed to credit risk in the amount of the derivatives' fair values. Swap 1's counterparty was rated Aa1 by Moody's Investors Service (Moody's), AA- by Standard and Poor's (S&P) and AA by Fitch Ratings (Fitch). To mitigate the potential for credit risk if that counterparty's credit quality falls to A1 by Moody's or A+ by either S&P or Fitch and their exposure exceeds \$5,000,000 the fair value of Swap 1 will be fully collateralized by the counterparty with U.S. government securities. Swap 2's counterparty was rated Aaa by Moody's and AA+ by S&P. If that counterparty's credit quality falls below Aaa by Moody's, or AAA by S&P and their exposure exceeds \$10,000,000, the fair value of the swap will be fully collateralized with U.S.

**Swap payments and associated debt.** Using rates of June 30, 2003, debt service requirements of the variable-rate debt and net swap payments of governmental activities assuming current interest rates remain the same for their term, were as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary. As indicated in a preceding paragraph, the initial synthetic fixed interest rate lowers the State's interest cost by over 26% compared with the issuance of fixed-rate debt.

Fiscal Year Ending June 30	Variable-Rate Bonds		Interest Rate	Total
	Principal	Interest	Swaps, Net	
2004	—	\$ 4,599	\$ 12,305	\$ 16,904
2005	—	4,599	12,305	16,904
2006	—	4,599	12,305	16,904
2007	—	4,599	12,305	16,904
2008	—	4,599	12,305	16,904
2009-2013	77,175	22,786	60,991	160,952
2014-2018	331,910	14,585	39,845	386,340
2019-2023	90,785	835	2,330	93,950
<b>Total</b>	<b>\$ 499,870</b>	<b>\$ 61,201</b>	<b>\$ 164,691</b>	<b>\$ 725,762</b>

government securities. Collateral would be posted with a third party custodian. An additional termination event occurs if the counterparty ratings fall below Baa1 (Moody's) or BBB+ (S&P and Fitch) by at least two ratings agencies for Swap 1. For Swap 2, an additional termination event occurs if the counterparty fails to maintain at least one rating of at least Baa3 (Moody's) or BBB- (S & P).

**Basis risk and termination risk.** The swaps expose the State to basis risk should the relationship between LIBOR and BMA converge, changing the synthetic rate on the bonds. The effect of this difference in basis is indicated by the difference between the intended synthetic rates of 3.283% and 3.089% and the synthetic rates as of June 30, 2003 of 3.4862% (Swap 1) and 3.2922% (Swap 2). As of June 30, 2003, the rate on the State's Bonds was 0.92%, whereas 64 percent of LIBOR was 0.7168%. The swaps may be terminated by the State with 15 days notice and the counterparties can only terminate the swaps if the State falls below Baa1 with Moody's, or BBB+ with either S&P or Fitch for Swap 1, and on Swap 2, below Baa3 with Moody's or BBB- with either S&P or Fitch, or an Event of Default occurs.

**Market-access risk/Rollover-risk.** The State's swaps are for the term (maturity) of the Bonds and therefore there is no market-access risk or rollover risk.

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**NOTES TO THE FINANCIAL STATEMENTS**
**Business-type Activities**

**Objective of the interest rate swap.** In order to protect against the potential of rising interest rates, the State entered into an interest rate swap in connection with its \$9,905,000 Butner Water and Sewer System Revenue Bond Series 2001. The intention of the swap agreements was to effectively change the State's interest rate on the bonds to a fixed rate of 4.21% (plus remarketing and liquidity fees and any difference between the variable rate received by the State (65% of LIBOR) and the rate paid by the State on the Variable Rate Bonds).

**Terms.** The swap agreement was with Bank of America, N.A. based on a notional amount of \$9,905,000 to mature on September 1, 2025. The swap's notional amount of \$9,905,000 matches the \$9,905,000 variable-rate bonds. Under the swap, the State pays a fixed payment of 4.21% to Bank of America, N.A. and receives a variable payment of 65% of the LIBOR (LIBOR was 1.12% at 6/30/2003). On the other hand, the bond's variable-rate coupons (1.00 % at 6/30/2003) are closely associated with the variable BMA, which was .98% as of June 30, 2003.

**Fair Value.** Because interest rates have declined since execution of the swap, the swap has a negative fair value (the State would have to pay the counterparty if the State terminated the swap) of \$ 1,401,046 (Bank of America) as of June 30, 2003. The swap's negative fair value if terminated may be countered by a reduction in total interest payments required under a new swap creating a lower synthetic fixed rate. Because the coupons on the State's variable-rate bonds adjust to changing interest rates, the bonds do not have a corresponding

**Swap payments and associated debt.** Using rates of June 30, 2003, debt service requirements of the variable-rate debt and net swap payments of business-type activities assuming current interest rates remain the same for their term, were as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary.

Fiscal Year Ending June 30	Variable-Rate Bonds		Interest Rate Swaps, Net	Total
	Principal	Interest		
2004	\$ 245	\$ 94	\$ 301	\$ 640
2005	255	91	293	639
2006	270	89	285	644
2007	280	86	276	642
2008	295	83	266	644
2009-2013	1,675	367	1,177	3,219
2014-2018	2,085	272	873	3,230
2019-2023	2,600	154	495	3,249
2024-2028	1,865	24	77	1,966
<b>Total</b>	<b>\$ 9,570</b>	<b>\$ 1,260</b>	<b>\$ 4,043</b>	<b>\$ 14,873</b>

fair value increase. The mark-to-market valuations were established by market quotations from the counterparty representing mid-market or average estimates/quotes of the amounts that would be paid for replacement transactions (having the effect of preserving the economic benefit to the party).

**Credit risk.** As of June 30, 2003 the State was not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair value of the swap becomes positive, the State would be exposed to credit risk in the amount of the derivative's fair value.

**Basis risk and termination risk.** The Swap exposes the State to basis risk (including effects of any reduction in marginal tax rates) should the relationship between LIBOR and BMA converge, changing the synthetic rate to the State on the bonds. The effect of this difference in basis is indicated by the difference between the intended synthetic rate of 4.21 % and the actual synthetic rate as of June 30, 2003 of (3.482 % + 1.00 %) 4.482 % reflecting a Bond Rate/LIBOR relationship of 89.29% compared to 65% of LIBOR the state is receiving (as of June 30). The swap may be terminated by either party if the other party fails to perform under the terms of the contract. If the swap is terminated, the associated variable-rate bonds would no longer carry synthetic interest rates. Also, if at the time of termination the swap has a negative fair value, the State would be liable to the counterparty for that amount.

**NOTES TO THE FINANCIAL STATEMENTS****Component Units****University of North Carolina System****University of North Carolina at Chapel Hill**

**Objective.** In order to protect against the risk of interest rate changes, effective October 3, 2000, the University entered into an interest rate swap contract agreement with Lehman Brothers Special Financing, Inc. (Lehman Brothers) related to \$22,000,000 of The University of North Carolina at Chapel Hill Variable Rate Housing System Revenue Bonds, Series 2000. This series of bonds was refunded in its entirety by the issuance of The University's Variable Rate General Revenue Bonds, Series 2001B, and the interest swap agreement was amended to reflect the refunding.

**Terms, fair value and credit risk.** Under this amended agreement, Lehman Brothers pays the University interest on the notional amount based on the BMA on a quarterly basis. For the fiscal year ended June 30, 2003, Lehman Brothers paid the University \$285,962 under this agreement. On a semiannual basis, the University pays Lehman Brothers interest at the fixed rate of 5.24%. For the fiscal year ended June 30, 2003, the University paid Lehman Brothers \$1,147,167 under this agreement. The notional amount of the swap reduces annually; the reductions began in November 2002 and end in November 2025. The swap agreement matures November 1, 2025. As of June 30, 2003, rates were as follows:

	<u>Terms</u>	<u>Rate</u>
Fixed payment to Lehman	Fixed	5.24
Variable payment from Lehman	BMA	1.13
Net interest rate swap payments		4.11
Variable rate bond coupon payments		1.00
Synthetic interest rate on bonds		5.11
Fixed payment to Lehman		5.24

As of June 30, 2003, the swap had a negative fair value of \$5,505,094. The fair value was developed by Lehman Brothers.

Their method calculates the future net settlement payments required by the swap assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for LIBOR due on the date of each future net settlement on the swap.

As of June 30, 2003, the University was not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair value of the swap becomes positive, the University would be exposed to credit risk in the amount of the derivative's positive fair value. Should the swap have a positive fair value of more than \$1,000,000, at that point Lehman would be required to collateralize 103% of their exposure. Lehman Brothers Holdings, guarantor of Lehman Brothers Special Financing, Inc., was rated A2 by Moody's Investor's Service, A by Standard and Poor's Corporation, and A+ by Fitch Ratings.

**Basis risk.** The University receives the BMA Index from Lehman Brothers and pays a floating rate to its bondholders set by the remarketing agent. The University incurs basis risk when its bonds begin to trade at a yield above the BMA. Basis risk also exists since swap payments are made quarterly while bond payments are made monthly. With the alternative tax structure of the swap, a change in tax law would trigger the swap being converted from a BMA swap to a percentage of LIBOR swap. This would introduce basis risk. If the relationship of the University's bonds trade to a percentage of LIBOR greater than 65%, the University will experience an increase in debt service above the fixed rate on the swap.

**Termination risk.** The derivative contract uses the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. Termination could result in the University being required to make an unanticipated termination payment. The swap terminates if the University or Lehman Brothers fails to perform under terms of the contract.

## NOTES TO THE FINANCIAL STATEMENTS

### North Carolina State University

**Objective.** In order to protect against the potential of rising interest rates, the University entered into three separate pay-fixed, receive-variable interest rate swaps at a cost anticipated to be less than what the University would have paid to issue fixed-rate debt.

**Terms, fair values, and credit risk.** The University's swap agreements contain scheduled reductions to outstanding notional amounts that are expected to approximately follow scheduled or anticipated reductions in the associated "bonds payable" category. The terms, fair values, and credit ratings of the outstanding swaps as of June 30, 2003 were as follows: (*in thousands*)

Associated Bond Issue	Notional Amounts	Effective Date	Fixed Rate Paid	Variable Rate Received	Fair Values	Swap Termination Date	Counterparty Credit Rating
Centennial Campus 1999A	\$9,000	10/1/1999	4.574%	67% of LIBOR <sup>1</sup>	\$(1,529)	12/1/2019	A2 / A / A+
General Revenue 2003B	24,655	6/20/2003	3.54%	BMA <sup>2,3</sup>	(21)	10/1/2027	Aa1 / AA- / AA
General Revenue 2003B	21,005	6/20/2003	1.19%	BMA	38	7/1/2005 <sup>4</sup>	Aa1 / AA- / AA
Total	<u>\$54,660</u>				<u>\$(1,512)</u>		

<sup>1</sup> London Interbank Offered Rate

<sup>2</sup> The Bond Market Association Municipal Swap Index™

<sup>3</sup> Variable rate received is BMA Municipal Swap Index from 6/20/03 to 7/1/06, thereafter, the variable rate received will be 75% of LIBOR

<sup>4</sup> Counterparty has the option to extend the swap to July 1, 2007

Because rates have declined, two of the three swaps have negative fair value as of June 30, 2003. The negative fair values may be countered by reductions in total interest payments required under the variable-rate bonds, creating lower synthetic interest rates. Because the coupons on the University's variable-rate bonds adjust to changing interest rates, the bonds do not have corresponding fair value increases. The fair values are the market values as of June 30, 2003.

As of June 30, 2003, the University was exposed to credit risk in the amount of the positive fair value on the short-term General Revenue 2003B derivative's fair value. The swap agreements do not contain a requirement for collateral, although the General Revenue 2003B swaps require termination should the University's or the counterparty's credit rating fall below either Baa2 as issued by Moody's Investors Services or BBB as issued by Standard & Poors or Fitch Ratings. Also, under the terms of the swap agreements, should one party become insolvent or otherwise default on its obligations, provisions permit the nondefaulting party to accelerate and terminate all outstanding transactions. Of the three agreements entered into by the University, two swaps, approximating 83% of the notional amount of the swaps outstanding, are held with one counterparty. All the counterparties are rated Aa1 or better.

**Basis risk.** The University is exposed to basis risk on the swaps when the variable payment received is based on an index other than BMA. Should the relationship between LIBOR and BMA move to convergence, the expected cost savings may not be realized. As of June 30, 2003, the BMA rate was 1.01 percent, whereas 67% of LIBOR was 1.18 percent.

**Termination risk.** The University or the counterparty may terminate any of the swaps if the other party fails to perform

under the terms of the contract. If any of the swaps are terminated, the associated variable-rate bonds would no longer carry synthetic interest rates. Also, if at the time of termination the swap has a negative fair value, the University would be liable to the counterparty for that amount.

### University of North Carolina Hospitals

**Objective.** In order to protect against the risk of interest rate changes, the Hospitals entered into an interest rate swap contract agreement with Bank of America, N.A. (BOA) on February 13, 2003. The agreement covers the \$63,770,000 of The University of North Carolina Hospitals at Chapel Hill Variable Rate Revenue Refunding Bonds, Series 2003 A and \$34,245,000 of The University of North Carolina Hospitals at Chapel Hill Variable Rate Revenue Refunding Bonds, Series 2003 B. The 2003 series of bonds partially refunded The Hospitals' Fixed Rate General Revenue Bonds, Series 1996.

**Terms, fair values, and credit risk.** Under this agreement, BOA pays the Hospitals interest on the notional amount based on 67% of the arithmetic mean of the USD-LIBOR-BBA (with a designated maturity of one month) on a monthly basis. Also on a monthly basis, the Hospitals pays BOA interest at the fixed rate of 3.48%. No cash was paid or received by the Hospital upon initiation of the agreement. The notional amount of the swap reduces annually; the reductions begin in February 2004 and end in February 2029. The swap agreement terminates February 1, 2029. As of June 30, 2003, rates were as follows:

**NOTES TO THE FINANCIAL STATEMENTS**

	<u>Terms</u>	<u>Rates</u>
Fixed payment to BOA	Fixed	3.48
Variable payment from BOA	LIBOR <sup>(1)</sup>	
	BBA <sup>(2)</sup>	0.80
Net interest rate swap payments		2.68
Variable rate bond coupon payments		0.95
Synthetic interest rate on bonds		3.63

<sup>(1)</sup> London Inter-Bank Offered Rate

<sup>(2)</sup> British Bankers Association

Because rates have declined, the swap had a negative fair value of \$5,972,285 as of June 30, 2003. BOA developed the fair value. Their method calculates the present value of the future net settlement payments required by the swap assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for LIBOR due on the date of each future net settlement on the swap.

As of June 30, 2003, the Hospitals was not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair value of the swap becomes positive, the Hospitals would be exposed to credit risk in the amount of the derivative's positive fair value. BOA is currently rated AA by Moody's Investor's Service, Aa1 by Standard and Poor's Corporation, and AA- by Fitch Ratings. At

such time that their ratings fall below A3 for Moody's or below A- for S&P, BOA will be required to collateralize a portion of their exposure (up to 100%).

**Basis Risk:** The Hospitals receives 67% of 1-month LIBOR-BBA Index from BOA and pays a floating rate to its bondholders set by the remarketing agent. The Hospitals incurs basis risk when its bonds trade at a yield above 67% of 1-month LIBOR-BBA Index. If the relationship of the Hospitals' bonds trade to a percentage of LIBOR greater than 67%, the Hospitals will experience an increase in debt service above the fixed rate on the swap.

**Termination Risk.** The derivative contract uses the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. The Hospitals or the counterparty may terminate the swap if the other party fails to perform under the terms of the contract. If the swap is terminated, the associated variable-rate bonds would no longer carry synthetic interest rates. Also, if at the time of termination the swap has a negative fair value, the Hospitals would be liable to the counterparty for that amount. Termination could result in the Hospitals being required to make an unanticipated termination payment.

**University of North Carolina System**

**Swap payments and associated debt.** Using rates as of June 30, 2003, debt service requirements of the variable rate debt and net swap payments of the University of North Carolina System (which includes the University of North Carolina at Chapel Hill, North Carolina State University and the University of North Carolina Hospitals), assuming current interest rates remain the same for their term, were as follows. As rates vary, variable rate bond interest payments and net swap payments will vary.

<u>Fiscal Year</u> <u>Ending June 30</u>	<u>Variable-Rate Bonds</u>		<u>Interest Rate</u>	<u>Total</u>
	<u>Principal</u>	<u>Interest</u>	<u>Swaps, Net</u>	
2004	\$ 2,390	\$ 1,976	\$ 4,355	\$ 8,721
2005	3,055	1,935	4,290	9,280
2006	2,915	1,711	4,223	8,849
2007	3,010	1,682	4,187	8,879
2008	3,165	1,653	4,152	8,970
2009-2013	18,115	7,740	20,075	45,930
2014-2018	32,330	6,627	17,973	56,930
2019-2023	42,275	4,691	12,980	59,946
2024-2028	68,430	2,148	5,192	75,770
2029-2033	8,235	46	123	8,404
<b>Total</b>	<u>\$ 183,920</u>	<u>\$ 30,209</u>	<u>\$ 77,550</u>	<u>\$ 291,679</u>

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**NOTES TO THE FINANCIAL STATEMENTS**
**N.C. Housing Finance Agency**

**Objective of the interest rate swap.** The Agency entered into an interest rate swap in connection with its \$20 million variable-rate revenue bonds associated with Single Family Resolution 1998, Series 15, as a means to lower its borrowing costs when compared against fixed-rate bonds at the time of issuance in May 2003. The intention of the swap was to effectively lower the Agency's interest rate on the long term bonds to a fixed rate of 3.51%.

**Terms.** The bonds and the related swap agreement mature on July 1, 2032, and the swap's notional amount of \$20 million matches the \$20 million variable-rate bonds. Under the swap, the Agency pays the counterparty UBS AG a fixed payment of 3.51% and receives a variable payment computed as 63% on the LIBOR, plus 30 basis points. The bond's variable-rate coupons are based on the variable BMA, which was .80% as of June 30, 2003. After 10 years, \$10 million of the swap is cancelable at the option of the agency.

**Fair value.** Because interest rates declined after execution of the swap, the swap had a negative fair value of \$895,000 as of June 30, 2003. Because the coupons on the Agency's variable-

**Swap payments and associated debt.** As rates vary, variable-rate bond interest payments and net swap payments will differ between the fixed payments paid to the counterparty and the variable rate paid to the Agency. Using rates as of June 30, 2003, debt service requirements of the variable-rate debt and net swap payments of the N.C. Housing Finance Agency are as follows. The amounts below are in thousands:

Fiscal Year Ending June 30	Variable-Rate Bonds		Interest Rate	Total
	Principal	Interest	Swaps, Net	
2004	—	\$ 160	\$ 501	\$ 661
2005	470	159	489	1,118
2006	720	155	471	1,346
2007	835	149	450	1,434
2008	805	142	430	1,377
2009-2013	3,590	620	1,871	6,081
2014-2018	3,845	483	1,438	5,766
2019-2023	4,490	306	873	5,669
2024-2028	3,515	143	381	4,039
2029-2033	1,730	25	53	1,808
<b>Total</b>	<b>\$ 20,000</b>	<b>\$ 2,342</b>	<b>\$ 6,957</b>	<b>\$ 29,299</b>

rate bonds adjust to changing interest rates, the bonds do not have a corresponding fair value increase. The fair value was estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swap.

**Basis risk and termination risk.** The swap exposes the Agency to basis risk should the relationship between LIBOR and BMA converge, changing the synthetic rate on the bonds. The effect of this difference in basis is indicated by the difference between the intended synthetic rate (3.51%) and the synthetic rate as of June 30, 2003, (3.30%). The swap may be terminated if the counterparty's credit quality rating falls below A3 as issued by Moody's Investors Service or A- as issued by Fitch Ratings or Standards & Poor's.

**F. Debt Service Requirements****Bonds, Certificates of Participation and Notes Payable**

The following schedule shows the annual debt service requirements to pay principal and interest on general obligation bonds, certificates of participation, and revenue bonds, as well as on notes payable, outstanding at June 30, 2003 (dollars in thousands). This schedule also includes the debt service requirements for debt associated with interest rate swaps. More detailed information about interest rate swaps is presented in Note 7(E). Debt service requirements are disclosed for the primary government and component units (University of North Carolina System, N.C. Housing Finance Agency and the State Education Assistance Authority).

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**NOTES TO THE FINANCIAL STATEMENTS**

<i>Fiscal Year</i>	<b>Bonds Payable</b>			
	<i>Primary Government</i>			
	<i>General Obligation Bonds</i>		<i>Town of Butner Revenue Bonds</i>	
	<i>Principal</i>	<i>Interest</i>	<i>Principal</i>	<i>Interest</i>
2004	\$ 235,015	\$ 171,666	\$ 245	\$ 395
2005	238,925	161,459	255	385
2006	238,970	150,722	270	373
2007	239,025	139,788	280	362
2008	239,320	128,749	295	349
2009-2013	1,191,820	470,818	1,675	1,544
2014-2018	1,106,995	215,854	2,085	1,145
2019-2023	494,420	53,875	2,600	649
2024-2028	82,500	8,910	1,865	100
2029-2033	—	—	—	—
2034-2038	—	—	—	—
2039-2043	—	—	—	—
<b>Total</b>	<b>\$ 4,066,990</b>	<b>\$ 1,501,841</b>	<b>\$ 9,570</b>	<b>\$ 5,302</b>

<i>Fiscal Year</i>	<b>Bonds Payable</b>					
	<i>Component Units</i>					
	<i>University of North Carolina System</i>		<i>N.C Housing Finance Agency</i>		<i>State Education Assistance Authority</i>	
	<i>Principal</i>	<i>Interest</i>	<i>Principal</i>	<i>Interest</i>	<i>Principal</i>	<i>Interest</i>
2004	\$ 58,018	\$ 54,309	\$ 24,245	\$ 70,283	\$ 1,000	\$ 17,736
2005	60,027	52,811	28,407	69,099	1,000	17,682
2006	62,360	50,460	30,090	67,780	1,000	17,627
2007	64,824	48,030	30,850	66,279	—	17,627
2008	66,225	45,457	33,510	64,654	—	17,627
2009-2013	344,090	189,781	175,875	278,893	352,906	75,253
2014-2018	343,020	124,223	231,630	230,668	353,900	41,999
2019-2023	292,774	64,309	204,429	171,928	—	32,469
2024-2028	181,935	17,968	307,900	105,390	30,000	32,169
2029-2033	52,034	982	216,037	32,202	560,000	13,296
2034-2038	—	—	19,551	12,885	—	—
2039-2043	—	—	3,113	536	—	—
<b>Total</b>	<b>\$ 1,525,307</b>	<b>\$ 648,330</b>	<b>\$ 1,305,637</b>	<b>\$ 1,170,597</b>	<b>\$ 1,299,806</b>	<b>\$ 283,485</b>

At year end the primary government's general obligation bonds included \$355 million of variable rate Public Improvement Bonds, Series 2002D, E, F and G. These bonds bore interest at a rate determined weekly by the remarketing agent to be the minimum interest rate at which the bonds could be sold at par. The State may elect at any time to change the method of determining the interest rate. The interest rate may be changed to a daily interest rate, bond interest term rates or a long-term interest rate, as applicable, and no bond (other than the escrow bonds) shall bear interest at a rate in excess of twelve percent (12%) per annum. In the case of the bonds that are escrow bonds, the interest rate per annum is determined pursuant to the liquidity facility, initially the bank bond interest rate, and shall not exceed eighteen percent (18%) per annum.

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**NOTES TO THE FINANCIAL STATEMENTS**


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**Notes Payable**

Fiscal Year	Primary Government		Component Unit University of North Carolina System	
	Principal	Interest	Principal	Interest
	2004	\$ 2,218	\$ 399	\$ 10,349
2005	2,319	298	38,931	827
2006	2,423	194	1,563	283
2007	1,204	107	1,339	222
2008	1,465	47	1,339	167
2009-2013	—	—	3,406	161
2014-2018	—	—	—	—
2019-2023	—	—	—	—
<b>Total</b>	<b>\$ 9,629</b>	<b>\$ 1,045</b>	<b>\$ 56,927</b>	<b>\$ 2,840</b>

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**Certificates of Participation**

Fiscal Year	Primary Government	
	Principal	Interest
2004	\$ 290	\$ 929
2005	435	791
2006	650	780
2007	665	764
2008	690	738
2009-2013	3,845	3,301
2014-2018	4,770	2,383
2019-2023	6,155	995
<b>Total</b>	<b>\$ 17,500</b>	<b>\$ 10,681</b>

**G. Bond Defeasances**
**Primary Government**

On December 1, 2002, the State issued \$556,350,000 in 2002 Series A Refunding and Series B, C, D, E, and F Variable Rate Refunding Bonds with a combined average interest rate of 3.24%. The State entered into two interest rate swap agreements that effectively converted the variable rate refunding bonds to fixed rates. The refunding component of this bond issue was used to advance refund (defease) \$502,400,000 of outstanding 1995 Series A Clean Water, 1997 Capital Improvement, 1997 Series A Public School Building, 1998 Series A Public School Building, 1999 Series A Public Improvement, 2000 Series A Public Improvement, and 2001 Series A Public Improvement Bonds, with a combined average interest rate of 5.12%. Net proceeds of \$558,970,140 resulted from the bond sale. Of the net proceeds amount, \$558,443,831 was used to purchase U.S. Government securities. The purchased securities were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. For financial reporting purposes, the trust account assets and the liability for the defeased bonds are not included in the balance sheet. The State reduced its debt service requirements by \$39,046,866 over the next 16 years and obtained an economic gain of \$35,604,198. For the variable rate refunding bonds, the change in debt service requirements and economic gain is based on the fixed rate under the swap agreements. At June 30, 2003, the outstanding balance was

\$459,900,000 for the defeased 1995A Clean Water, 1997 Capital Improvement, 1997A Public School Building, 1998A Public School Building, 1999A Public Improvement, 2000A Public Improvement, and 2001A Public Improvement Bonds.

**Component Units**
**University of North Carolina System**
**East Carolina University**

On June 19, 2003, the University issued \$4,630,000 in General Revenue Bonds, Series 2003A, with an average interest rate of 3.27%. The refunding component of this bond issue was used to advance refund (defease) \$4,490,000 of outstanding Athletic Facilities Revenue System Bonds, Series 1994 with a combined average interest rate of 5.37%. Net proceeds of \$4,760,416 resulted from the bond sale. Of the net proceeds amount, \$4,760,416 was used to purchase U.S. Government securities. The purchased securities were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. For financial reporting purposes, the trust account assets and the liability for the defeased bonds are not included in the balance sheet. The University reduced its debt service requirements by \$220,489 over the next 6 years and obtained an economic gain of \$208,518. At June 30, 2003, the outstanding balance was \$4,630,000 for the defeased Athletic Facilities Revenue System Bonds, Series 1994.

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**NOTES TO THE FINANCIAL STATEMENTS****University of North Carolina at Greensboro**

On November 14, 2002, the University issued \$8,835,000 in *General Revenue Bonds, Series 2002A* with an average interest rate of 5.18%. The refunding component of this bond issue was used to advance refund (defease) \$3,395,000 of outstanding *Housing and Dining Revenue Bonds, Series 1993C*, with a combined average interest rate of 5.6%. Net proceeds of \$3,194,310 resulted from the bond sale. Of the net proceeds amount, \$3,393,266 was used to purchase U. S. Government securities. The purchased securities were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. For financial reporting purposes, the trust account assets and the liability for the defeased bonds are not included in the balance sheet. The University reduced its debt service requirements by \$184,249 over the next 16 years and obtained an economic gain of \$132,089. At June 30, 2003 there were no outstanding bonds for the defeased *Housing and Dining Revenue Bonds, Series 1993C*.

**University of North Carolina at Asheville**

On September 24, 2002, the University issued \$18,900,000 in *General Revenue and Refunding Revenue Bonds, Series 2002A* of the Board of Governors of the University of North Carolina with an average interest rate of 4.13%. The refunding component of this bond issue was used to advance refund (defease) \$7,245,000 of outstanding *Dorm and Dining Hall System Revenue Bonds, Series B*, with a combined average interest rate of 5.44%. Net proceeds of \$19,621,020 resulted from the bond sale. Of the net proceeds amount, \$7,692,775 was used to purchase State and Local Government Series securities. The purchased securities were placed in an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. For financial reporting purposes, the trust account assets and the liability for the defeased bonds are not included in the balance sheet. The University reduced its debt service requirements by \$1,132,895 over the next 15 years and obtained an economic gain of \$1,132,895. At June 30, 2003 there were no outstanding bonds for the defeased *Dorm and Dining Hall System Revenue Bonds, Series B*.

**Fayetteville State University**

On November 14, 2002, the University issued \$3,980,000 in *Pool General Revenue Bonds, Series 2002B* with an average interest rate of 4.46%. The refunding component of this bond issue was used to advance refund \$1,252,708 of outstanding United State Department of Education Notes Payable, with a combined average interest rate of 5.5%. Net proceeds of \$1,275,115 resulted from the bond sale. The University reduced its debt service requirements by \$81,486 over the next 20 years and obtained an economic gain of \$64,044. At June 30, 2003, there was no outstanding balance for the advanced refunded United States Department of Education Note Payable.

**University of North Carolina Hospitals**

On February 13, 2003 the Hospitals defeased \$88,325,000 of outstanding Board of Governors of the University of North Carolina for the University of North Carolina Hospitals at Chapel Hill Revenue Bonds Series 1996 (original issue amount \$133,870,000 of which \$38,790,000 remain outstanding at June 30, 2003). Securities were deposited into an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. The trust assets and the liability for the defeased bonds are not included in the Hospitals Statement of Net Assets. As a result, the Hospitals reduced its debt service requirements by an estimated \$11,644,568 over the next 26 years and obtained an economic gain of \$6,992,108. Since this is a synthetic fixed rate swap agreement, savings are estimated and will fluctuate dependent upon the basis risk associated with the bond issue. At June 30, 2003 the outstanding balance of the defeased Board of Governors of the University of North Carolina for the University of North Carolina Hospitals at Chapel Hill Revenue Bonds Series 1996 bonds was \$88,325,000.

**Prior Year Defeasances**

During prior years, the State and certain component units defeased certain general obligation and other bonds. For those defeasances involving advance refundings, the proceeds and any securities purchased with the proceeds were placed in an irrevocable trust with an escrow agent in an amount sufficient to provide for all future debt service payments on the refunded bonds. Since adequate funds have been placed with a trustee to pay fully the principal and interest on these bonds, the liabilities are not recorded in these financial statements. At June 30, 2003, the outstanding balance of current and prior year defeased bonds was \$580.35 million for the primary government and \$288.83 million for the component units.

**H. Bond Redemptions**

Provisions of bond series resolutions for the North Carolina Housing Finance Agency provide for various methods of redemption. Bonds are redeemed at par from prepayments of mortgage loans securing the issues or from unexpended bond proceeds of the issues along with the related decreases in the respective debt service reserve requirements. In addition, various bond issues are redeemable at the option of the Agency at premiums ranging up to 2% for up to 12 years after the date of issuance.