NOTE 8: LONG-TERM LIABILITIES

A. Changes in Long-Term Liabilities

Primary Government. Long-term liability activity for the year ended June 30, 2020, was as follows (dollars in thousands):

	Balance July 1, 2019 (as restated)	Increases	Decreases	Balance June 30, 2020	Due Within One Year
Governmental activities					
Bonds and similar debt payable:					
General obligation bonds	$ 2,424,075	$ 600,000	$ (418,695)	$ 2,605,380	$ 336,995
Special indebtedness:					
Limited obligation bonds	1,946,915	—	(171,970)	1,774,945	172,955
GARVEE bonds	1,046,580	—	(87,055)	959,525	83,660
Issuance premium	581,316	82,392	(110,615)	553,093	—
Total bonds and similar debt payable	5,998,886	682,392	(788,335)	5,892,943	593,610
Notes from direct borrowings	47,676	—	(3,739)	43,937	3,752
Capital leases payable	13,308	—	(2,652)	10,656	2,874
Compensated absences	529,018	392,110	(314,083)	607,045	36,026
Pension liability (Note 12)	2,550,631	108,682	(32,709)	2,626,604	17,860
Net OPEB liability (Note 14)	5,349,480	692,046	—	6,041,526	—
Workers' compensation	745,508	113,605	(141,696)	717,417	138,790
Death benefit payable	40	—	(3)	37	—
Pollution remediation payable	8,629	—	(683)	7,946	469
Claims and judgments payable	731,703	—	—	731,703	—
Governmental activity long-term liabilities	$ 15,974,879	$ 1,988,835	$ (1,283,900)	$ 16,679,814	$ 793,381
Business-type activities					
Bonds payable:					
Revenue bonds	$ 1,456,614	$ 486,954	$ (26,210)	$ 1,917,358	$ 29,860
Issuance premium	72,420	57,331	(7,186)	122,565	—
Total bonds payable	1,529,034	544,285	(33,396)	2,039,923	29,860
Notes from direct borrowings	132,087	56,126	(10,288)	177,925	683
Capital leases payable	106	13	(25)	94	31
Annuity and life income payable	78,355	8,828	(6,455)	80,728	6,656
Compensated absences	10,699	9,013	(7,407)	12,305	1,383
Net pension liability (Note 12)	31,817	1,802	—	33,619	—
Net OPEB liability (Note 14)	78,821	9,711	—	88,532	—
Workers' compensation	29	77	(18)	88	22
Business-type activity long-term liabilities	$ 1,860,948	$ 629,855	$ (57,589)	$ 2,433,214	$ 38,635

For governmental activities, the compensated absences, pension liability, net OPEB liability, and workers' compensation liabilities are generally liquidated by the General Fund. Pollution remediation payable is generally liquidated by the Highway Fund. A portion of compensated absences, the pension liability, the net OPEB liability, and workers' compensation liabilities 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, the following long-term liabilities of internal service funds were included in the above amounts: compensated absences of $17.55 million, net pension liability of $47.48 million, net OPEB liability of $124.22 million, and workers' compensation liability of $1.95 million. The claims and judgments liability of $731.7 million is paid from State appropriations as approved by the N.C. General Assembly. Funds were not appropriated in the current fiscal year nor the next fiscal year.

Governmental Activities

The Master Trust Indenture of the State's outstanding limited obligation bonds of $1.77 billion contain a provision that in an event of default, all outstanding limited obligation bond amounts may become immediately due if the State fails to pay any outstanding limited obligation bond amount by its due date, or if the State fails to budget and appropriate moneys sufficient to make payment on such bonds coming due in any fiscal year.

The outstanding notes from direct borrowings of $43.94 million contain provisions that in the event of default, (1) outstanding amounts become immediately due and payable, (2) the project can be sold and the proceeds applied to outstanding amounts due, (3) the custodian could be directed to apply all acquisition fund amounts to the outstanding amounts due, or (4) proceed by appropriate court action to enforce performance of the applicable covenants in the agreement.

Business-type Activities

The North Carolina Turnpike Authority has an unused line of credit in the amount of $499.46 million. This unused line of credit is a Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan through the United States Department of Transportation.

The outstanding notes from direct borrowings of $166.5 million contain provisions that in the event of default, the lender may terminate its obligations to disburse any remaining undisbursed loan proceeds immediately.

The occupational licensing boards have pledged buildings and land as collateral for its outstanding notes from direct borrowings of $11.4 million.

Component Unit (University of North Carolina System). Long-term liability activity for the year ended June 30, 2020, was as follows (dollars in thousands):

	Balance July 1, 2019 (as restated)	Increases	Decreases	Balance June 30, 2020	Due Within One Year
University of North Carolina System					
Bonds payable:					
Revenue bonds	$ 4,236,453	$ 593,658	$ (300,762)	$ 4,529,349	$ 159,417
Direct placements	158,293	30,227	(25,463)	163,057	45,062
Certificates of participation	4,181	—	(327)	3,854	336
Limited obligation bonds	224,785	14,920	(22,990)	216,715	8,175
Issuance premium	182,069	112,176	(16,393)	277,852	—
Issuance discount	(6,044)	—	1,270	(4,774)	—
Total bonds payable	4,799,737	750,981	(364,665)	5,186,053	212,990
Notes from direct borrowings	297,765	31,439	(28,383)	300,821	38,529
Capital leases payable	13,752	5,567	(5,675)	13,644	3,988
Annuity and life income payable	57,237	6,489	(9,558)	54,168	1,207
Compensated absences	487,642	498,530	(453,973)	532,199	75,283
Net pension liability (Note 12)	1,584,750	77,895	—	1,662,645	—
Net OPEB liability (Note 14)	6,924,221	1,022,365	—	7,946,586	—
Workers' compensation	65,296	8,978	(12,834)	61,440	13,316
Pollution remediation payable	4,771	—	(162)	4,609	284
Asset retirement obligation	13,728	118	—	13,846	—
Liability insurance trust fund payable	22,552	6,992	(6,130)	23,414	6,852
Total long-term liabilities	$ 14,271,451	$ 2,409,354	$ (881,380)	$ 15,799,425	$ 352,449

Long-term liabilities of nongovernmental component units of the University of North Carolina System are excluded from the above amounts. At year-end, nongovernmental component unit foundations and similarly affiliated organizations of the University of North Carolina System had total long-term liabilities of $201.118 million, of which $4.448 million was due within one year and $196.67 million was due in more than one year.

Elizabeth City State University and the University of North Carolina at Chapel Hill have unused lines of credit in the amount of $9.48 million and $5.7 million, respectively.

Revenue Bonds

Various universities within the University of North Carolina System (UNC System) have outstanding revenue bonds totaling $2 billion that contain a provision that in an event of default, the bonds may become immediately due and payable if the University fails to pay any outstanding bond debt service.

Various universities within the UNC System have outstanding revenue bonds totaling $1.66 billion that contain provisions that in an event of default, the bonds may become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 30 days after written notice. Fayetteville State University has pledged buildings, improvements, and additions as collateral for outstanding revenue bonds of $9.12 million.

The University of North Carolina Hospitals has pledged future revenues as collateral for the revenue bonds payable of $441 million, and certain funds held have been reserved as restricted equal to 7.5% of gross patient revenues as stipulated by the bond covenants. As of June 30, 2020, the amount pledged as collateral is $390.71 million. In the event of default, the bonds will become immediately due and payable. At such time, the Board of Governors may require a sum sufficient to pay all matured installments of principal and interest due, be deposited with the Hospitals' Trustee. Additionally, the bonds can be replaced with a replacement indenture. The owners of the outstanding bonds may be required to accept the replacement bonds in lieu of the bonds held by them. Any such replacement may result in a reduction or material alteration in the covenants and other provisions provided to secure payment of the outstanding bonds.

Rex Healthcare has outstanding revenue bonds of $150 million secured by a lien on substantially all of Rex's real and personal property and by a security interest in Rex's unrestricted revenues. Rex Healthcare also has outstanding revenue bonds of $77 million secured by a pledge of and a lien on the accounts receivable and the proceeds derived from the ownership and operation of the Obligated Group.

Direct Placement Bonds

Various universities within the UNC System have outstanding direct placement bonds totaling $96.67 million that contain a provision that in an event of default, the bonds may become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 30 days after written notice.

Various universities within the UNC System have outstanding direct placement bonds totaling $66.38 million that contain a provision that in an event of default, the bonds may become immediately due and payable if the University fails to pay any outstanding bond debt service.

Special Indebtedness

The University of North Carolina at Wilmington has outstanding limited obligation bonds (LOBs) of $110.21 million secured by revenues which include rentals payable by the University under leases and use agreements on the facilities financed and refinanced with the LOBs. The LOBs are further secured by a deed of trust on the property financed and refinanced with the LOBs. The LOBs contain provisions that in the event of default, the bonds become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 30 days after written notice. Additionally, the bonds become immediately due and payable if an event of default occurs under the leases or use agreements or under the deed of trust. The Trustee may also take property secured under the deed of trust held as security, including foreclosure on the property held as security.

Western Carolina University has outstanding limited obligation bonds of $48.94 million. These bonds are secured by revenues which include rentals payable by the University under leases and use agreements on the funded project. The LOBs are further secured by a deed of trust on the property. The LOBs contain provisions that in the event of default, the bonds become immediately due and payable.

Various universities within the UNC System have outstanding limited obligation bonds totaling $29.26 million and outstanding certificates of participation totaling $3.85 million that contain a provision that in an event of default, the bonds may become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 30 days after written notice. The University of North Carolina at Charlotte has pledged a student housing complex that contains 14 buildings and related parking facilities as collateral for its outstanding limited obligation bonds of $11.03 million. The University of North Carolina School of the Arts has pledged an apartment complex as collateral for its outstanding certificates of participation of $3.85 million.

The University of North Carolina at Pembroke has outstanding limited obligation bonds of $28.3 million. These bonds are secured by revenues which include rentals payable by the University under leases and use agreements on the funded project. The LOBs are further secured by a deed of trust on the property. The LOBs contain provisions that in the event of default, the bonds become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 30 days after written notice.

Notes from Direct Borrowings

The UNC System has pledged the energy savings improvements installed in its buildings and other structures as collateral for Guaranteed Energy Savings Installment Financing Agreements in relation to the outstanding notes from direct borrowings of $124.28 million. These agreements contain provisions related to events of default and remedies. Significant to these provisions, an event of default occurs when: (1) the University fails to pay an installment payment when due, (2) an event of nonappropriation from the State occurs, (3) insurance coverage on the asset is not maintained, or (4) the University fails to perform any warranty, covenant, condition, or agreement within 30 days of receiving written notice by the lender or fails to diligently pursue corrective action for matters that cannot be reasonably corrected within 30 days. Upon the occurrence of any event of default, the lender may declare the outstanding amount due and payable immediately. The lender may also exercise all remedies available by law or in the equity provided under the agreement, including sale of the secured assets, and apply the proceeds of any such sale to the amounts due after deducting all costs and expenses related to the recovery, repair, storage, and sale of the secured assets, including court costs and reasonable attorneys' fees incurred.

Various universities within the UNC System have outstanding notes from direct borrowings totaling $62.24 million that contain a provision that in an event of default, the notes may become immediately due and payable if the University fails to pay any outstanding debt service. Elizabeth City State University has outstanding notes from direct borrowings of $10.27 million secured by student housing facilities.

Various universities within the UNC System have outstanding notes from direct borrowings totaling $18.54 million that contain a provision that in an event of default, the notes may become immediately due and payable if the University fails to make any payment when due or fails to perform any covenant, condition, agreement, or provision for a period of 15 days after written notice ($15.48 million) or a period of 30 days after written notice ($3.06 million). Appalachian State University has pledged land for its outstanding notes from direct borrowings of $15.48 million.

Gateway Research Park has outstanding notes from direct borrowings of $19.29 million secured with collateral of real estate and a vehicle.

Rex Healthcare has outstanding notes from direct borrowings of $17.53 million collateralized by certain property of Rex Wakefield Enterprises.

B. Bonds, Special Indebtedness, Direct Placements, and Notes from Direct Borrowings

Bonds, special indebtedness, direct placements and notes from direct borrowings at June 30, 2020 were as follows (dollars in thousands):

	Interest Rates	Maturing Through Fiscal Year	Original Borrowing	Outstanding Balance
Primary Government				
Governmental activities				
General obligation bonds	2.00% - 5.00%	2039	$3,663,138	$2,605,380
Special indebtedness:				
Limited obligation bonds	2.25% - 5.00%	2034	2,934,355	1,774,945
GARVEE bonds	4.00% - 5.00%	2034	1,089,570	959,525
Notes from direct borrowings	2.10% - 2.53%	2033	54,808	43,937
Business-type activities				
Revenue bonds**	1.50% - 7.10%	2055	$2,373,833	$1,917,358
Notes from direct borrowings	2.95% - 4.50%	2054	180,650	177,925
Component Units				
University of North Carolina System				
Revenue bonds**	0.10% - 7.51%*	2050	$5,389,289	$4,529,349
Direct Placements	1.40% - 3.91%*	2042	190,418	163,057
Certificates of participation	2.99% - 2.99%	2030	5,400	3,854
Limited obligation bonds	2.00% - 6.23%	2043	237,435	216,715
Notes from direct borrowings**	0.00% - 5.00%*	2041	409,873	300,821

* For variable rate debt, interest rates in effect at June 30, 2020 are included. For variable rate debt with interest rate swaps, the synthetic fixed rates are included.

** The issuer has elected to treat a portion of these obligations as federally taxable "Build America Bonds" for purposes of the American Recovery and Reinvestment Act and to receive a cash subsidy from the U.S. Treasury for a specified percentage of the interest payable on these obligations. The outstanding balance of "Build America Bonds" was $244.2 million for the primary government and $258.8 million for component units. For these bonds, the interest rate included is the taxable rate, which does not factor in the cash subsidy from the U.S. Treasury.

General obligation bonds are secured by the full faith, credit, and taxing power of the State. The payments on special indebtedness, which include certificates of participation (COPs) and limited obligation bonds, are subject to appropriation by the N.C. General Assembly. Special indebtedness may also be secured by a lien on equipment or facilities, or by lease payments made by the State. 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. Debt Authorized but Unissued

At June 30, 2020, the State had $800 million in authorized but unissued general obligation bonds. At June 30, 2020, the State had no authorized but unissued special indebtedness supported by the General Fund. At June 30, 2020, the State had $2.7 billion in authorized but unissued special indebtedness supported by the Highway Trust Fund.

In 2005, the N.C. General Assembly enacted General Statute 136-18(12b) providing for the issuance of Grant Anticipation Revenue Vehicle Bonds (GARVEEs), which are payable from revenues consisting primarily of federal transportation funds, with the proceeds to finance federal-aid highway projects. The GARVEEs are limited obligations of the State payable solely from these funding sources. The total amount of GARVEEs that may be issued is subject to limitations contained in the authorizing legislation tied to the historic and future level of federal transportation funds the State has or is expected to receive.

General Statute 143-64.17 as amended allows state agencies and universities to utilize Guaranteed Energy Savings Contracts to implement and finance major facility upgrades which save energy and reduce utility expenditures. The State and universities currently are authorized to finance up to $500 million for such projects that provide energy cost savings that are sufficient to pay the debt service on the projects' financing. At June 30, 2020, a total of $271.3 million of such contracts have been entered into by the State and universities.

D. Demand Bonds

Included in bonds payable are several variable rate demand bond issues. Demand bonds are securities that contain a “put” feature that allows bondholders to demand payment before the maturity of the debt upon proper notice to the issuer’s remarketing or paying agents.

Component Unit

University of North Carolina System

The University of North Carolina at Chapel Hill

With regard to the following direct placement demand bonds, the issuer has not entered into take out agreements, which would convert the demand bonds not successfully remarketed into another form of long-term debt.

General Revenue Bonds, Series 2012D

On December 14, 2012, the University issued a direct placement bond to be designated "The University of North Carolina at Chapel Hill General Revenue Bond (Kenan Stadium Improvements Phase II), Series 2012D" (the "2012D Bond") to The Educational Foundation, Inc. (the "Owner") in exchange for certain improvements to Kenan Stadium on the University's campus known as "Kenan Stadium Improvements, Phase 2 - Carolina Student Athlete Center for Excellence".

Interest will be payable on the 2012D Bond on the maturity date or, if sooner, the prepayment date of the 2012D Bond as permitted under the tender option or the prepayment options as referenced below. The unpaid principal balance of the 2012D Bond, together with all accrued and unpaid interest thereon will be due and payable in full on the maturity date in the event that the tender option or prepayment option is not exercised in advance of the maturity date.

The University shall be responsible for calculating the interest due on the 2012D Bond and reporting such amount to the Owner and The Bank of New York Mellon Trust Company, N.A. (the “Trustee”). Payments of principal and interest on the 2012D Bond shall be made directly by the University to the Owner under the terms of the bond documents and the Trustee shall have no responsibility for making such payments. The University shall promptly notify the Trustee in writing of any such payments. Any payments of principal and interest on the 2012D Bond made directly by the University to the Owner of the 2012D Bond will be credited against The Board of Governors of the University of North Carolina’s (the “Board”) obligation to cause payments to be made with respect to the 2012D Bond to the Debt Service Fund under the General Indenture.

The 2012D Bond may be tendered by the Owner of the 2012D Bond for payment by the University, on behalf of the Board, in whole or in part without premium or penalty on any business day on or after 90 days prior written notice to the University and the Trustee. The 2012D Bond may be prepaid by the University, on behalf of the Board, in whole or in part without premium or penalty on any business day on or after 90 days prior written notice to the Owner and the Trustee. When payment is due at maturity or upon exercise of the tender or prepayment options, the University may use proceeds from a long-term bond issue or proceeds from the issuance of Commercial Paper at the time of the payment to fund the obligation under the bond.

The unpaid principal balance of the 2012D Bond outstanding from time to time will bear interest at the Adjusted London Interbank Offered Rate (LIBOR) Rate. “Adjusted LIBOR Rate" means a rate of interest per annum equal to the sum obtained (rounded upwards, if necessary, to the next higher 1/16 of 1%) by adding (1) the one month LIBOR plus (2) 1% per annum, which shall be adjusted monthly on the first day of each LIBOR interest period; provided, however, for any particular LIBOR interest period, the Adjusted LIBOR Rate will not be less than 1.4% per annum. As of June 30, 2020, no accrued interest payable remained for the 2012D direct placement bond.

With respect to other terms and conditions, this bond is not supported by any other letters of credit or standby liquidity agreements and does not contain any take out agreements. On June 1, 2015, the terms of the 2012D Bond were modified, changing the principal amount to $30 million and extending the maturity to June 1, 2042. All other terms remained the same.

The University of North Carolina Hospitals

With regard to the following demand bonds, the Hospitals has entered into take out agreements, which would convert the demand bonds not successfully remarketed into another form of long-term debt.

Revenue Bonds, Series 2001A and Series 2001B

On January 31, 2001, the Hospitals issued two series of tax-exempt variable rate demand bonds in the amount of $55 million (2001A) and $55 million (2001B) that have a final maturity date of February 15, 2031. The bonds are subject to mandatory sinking fund redemption that began on February 15, 2002. A portion of the proceeds was used to reimburse the Hospitals for $75 million spent allowing the UNC Health Care System to acquire controlling interest in Rex Healthcare, Inc. The remaining proceeds were used for the renovation of space vacated after the opening of the North Carolina Women's Hospital, North Carolina Children's Hospital, and associated support services. 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.

While in daily mode, the bonds are subject to purchase on any business day upon demand by telephonic notice of tender to the Remarketing Agent on the purchase date and delivery to the bond Tender Agent, U.S. Bank, N.A. The Hospitals' Remarketing Agent, Wells Fargo Bank, N.A., has agreed to exercise its best efforts to remarket the bonds for which a notice of purchase has been received. The quarterly remarketing fee is payable in arrears, on the first business day of each March, June, September, and December, commencing December 1, 2015 and is equal to 0.05% of the outstanding principal amount of the bonds assigned to each agent.

Under separate Standby Bond Purchase Agreements for the Series 2001A and Series 2001B (Agreements) between the Hospitals and Landesbank Hessen-Thuringen 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 an adjustable facility fee based on the long-term rating of the bonds, which is calculated as a percentage of the available commitment. Payments are made quarterly in arrears, on the first business day of each April, July, October and January thereafter until the expiration date or the termination date of the Agreements. On September 1, 2015, UNC Hospitals entered into a new multiple year agreement with Landesbank Hessen-Thuringen Girozentrale to provide liquidity service at a fee of 0.28%. The applicable percentage will be determined based upon the long-term ratings of the Bonds (without regard to any credit enhancement) as follows:

S&P	Moody's	Commitment Rate
AA- or better	Aa3	0.28%
A+	A1	0.38%
A	A2	0.48%
A-	A3	0.73%
BBB+ or lower	Baa1	1.78%

In the event that there is a disparity between Moody's and S&P's ratings on the bonds, the lower rating will prevail for the purpose of calculating the commitment fee. In addition, should any Event of Default occur or the long-term unenhanced ratings on the Bonds or any parity debt be withdrawn or suspended by one or more of the rating agencies for credit-related reasons, the fee rate shall automatically increase to 1.78% per annum.

Under the Agreements, any bonds purchased through the Liquidity Facility become Bank Bonds and shall, from the date of such purchase to and including the 60th day thereafter and while they are Bank Bonds, bear interest at the Formula Rate (base rate equal to the higher of the Prime Rate plus 1% for such day or the sum of 1% plus the Federal Funds Rate) and from and including the 61st day following the purchase date and thereafter bear interest at the higher of the Formula Rate or 7%, subject to a maximum rate as permitted by law; provided however, that at no time shall the base rate be less than the applicable rate of interest on the bonds which are not Bank Bonds. 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 quarterly (the first business day of January, April, July, and October) for each period in which Bank Bonds are outstanding. At June 30, 2020, there were no Bank Bonds held by the Liquidity Facility.

Included in the Agreements is a take out provision, in case the Remarketing Agent is unable to resell any bonds that are "put" within 90 days of the "put" date. In this situation, the Hospitals is required to redeem the Bank Bonds held by the Liquidity Facility. The Agreements allow the Hospitals to redeem Bank Bonds 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. If the take out agreement were to be exercised because the entire outstanding $82.4 million of demand bonds was "put" and not resold, the Hospitals would be required to pay $21.44 million, $20.66 million, $19.51 million, $18.35 million, and $17.2 million in years one, two, three, four, and five respectively under the installment loan agreement assuming a base rate of 4.25% (Prime Rate plus 1%) for the first 60 days and a maximum rate of 7% thereafter. The current expiration date of the Agreements is September 20, 2020. The Hospitals may request additional extensions of at least one year from the previous termination date. Extensions are at the discretion of the Liquidity Provider. The Hospital has negotiated with TD Bank, N.A. to replace Landesbank Hessen-Thuringen Girozentrale effective September 11, 2020.

Revenue Refunding Bonds, Series 2003A and Series 2003B

On February 13, 2003, the Hospitals issued two series of tax-exempt variable rate demand bonds in the amount of $63.77 million (2003A) and $34.25 million (2003B) that have a final maturity date of February 1, 2029. The bonds are subject to mandatory sinking fund redemption that began on February 1, 2004. The proceeds were used to advance refund $88.33 million 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.

While in the weekly mode, the bonds are subject to purchase on demand with seven days' notice to the Remarketing Agent and delivery to the bond Tender Agent, U.S. Bank, N.A. The Hospitals' Remarketing Agents, Banc of America Securities, LLC (Series 2003A) and Wells Fargo Bank, N.A. (Series 2003B), have agreed to exercise their best efforts to remarket bonds for which a notice of purchase has been received. The quarterly remarketing fee is payable in arrears and is equal to 0.08% of the outstanding principal amount of the bonds assigned to the Remarketing Agent for Series 2003A and is equal to 0.07% of the outstanding principal amount of the bonds assigned to the Remarketing Agent for Series 2003B.

Under separate Standby Bond Purchase Agreements for the Series 2003A and Series 2003B (Agreements) between the Hospitals, Bank of America, N.A. (Series 2003A) and Wells Fargo Bank, N.A. (Series 2003B), Liquidity Facilities have 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.

The 2003A Agreement with Bank of America, N.A. required a commitment fee of 0.31% for fiscal year 2020. Payments are made quarterly in arrears, on the first business day of each November, February, May, and August thereafter through July 2, 2021. The commitment rate remains in effect over the life of the Agreement so long as the rating assigned to Parity Debt by Moody's and S&P is A1/A+ or higher. If the rating assigned to Parity Debt by either Moody's or S&P is downgraded below A1 or A+, respectively, the commitment rate assigned to such lower rating as set forth below shall apply, effective as of the public announcement of the rating:

S&P	Moody's	Commitment Rate
A	A2	0.51%
A- or lower	A3 or lower	0.71%

However, the commitment rate shall be increased (A) by 150 basis points (1.5%) upon the occurrence and during the continuance of an Event of Default, and (B) by 150 basis points (1.5%) if either Moody's or S&P withdraws or suspends its rating for any reason (other than for the payment in full or defeasance of the Bonds). Any such increase in the commitment rate shall take effect as of the date of any such event described in the preceding sentence. All such increases in the commitment rate contemplated above shall be cumulative.

Under the 2003A Agreement, 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 equal to the greater of the Prime Rate plus 1.5% or the Federal Funds Rate plus 3%, the base rate, for the first 90 days and then the base rate plus 0.5% from the 91st day to the 367th day following the date of purchase and the base rate plus 1% from the 368th day following such date of purchase and thereafter 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 calendar month following the date on which such Bank Bond became a Bank Bond. At June 30, 2020, there were no Bank Bonds held by the 2003A Liquidity Facility. The current expiration date of the agreement is July 2, 2021.

Included in the 2003A Agreement is a take out provision, in case the Remarketing Agent is unable to resell any bonds that are "put" within the earlier of the termination date and 367 days of the "put" date. In this situation, the Hospitals is required to redeem the Bank Bonds held by the Liquidity Facility. The Series 2003A Agreement allows the Hospitals to redeem Bank Bonds in six consecutive, equal semi-annual installments of principal beginning on the first business day of the month that occurs at least five and not more than six months following the termination date, until fully paid. In any event, all principal and accrued and unpaid interest shall be due and payable on the date the sixth installment is due. If the take out agreement were to be exercised because the entire outstanding $41.77 million of demand bonds was "put" and not resold, the Hospitals would be required to pay $15.88 million, $15.32 million, and $14.52 million in years one, two and three respectively, following the termination date under the installment loan agreement assuming a base rate of 4.75% (Prime plus 1.5%).

The 2003B Agreement with Wells Fargo Bank, N.A. required a commitment fee of 0.35% for fiscal year 2020. Payments are made quarterly in arrears, on the first business day of each February, May, August, and November thereafter until July 31, 2020. The commitment fee remains in effect over the life of the Agreement, however, the commitment rate shall be increased to the per annum percentage described in the table below if (i) the debt rating assigned by Moody's or S&P to the long-term debt of UNC Hospitals, without regard to third-party credit enhancement, falls to the corresponding levels specified in such table, (ii) such rating is withdrawn or suspended or (iii) an Event of Default occurs and is continuing hereunder. After any such increases are made, the commitment rate shall be decreased to the per annum percentage described in the table below if the debt rating assigned by Moody's or S&P to the long-term debt of UNC Hospitals, without regard to third-party credit enhancement, rises to the corresponding levels specified in such table. Any such increases (or decreases, as the case may be) in the commitment rate shall be effective as of the date of such downgrade, upgrade, withdrawal, suspension or Event of Default, as applicable. The commitment rate shall be the fee listed below which corresponds to the lowest debt rating assigned to UNC Hospitals specified in the table below:

S&P	Moody's	Commitment Rate
A	A2	0.65%
A-	A3	0.80%
BBB+	Baa1	1.00%
BBB	Baa2	1.25%
BBB-	Baa3	1.55%
Below Investment Grade	Below Investment Grade	2.55%

Under the 2003B Agreement, 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 equal to the Base Rate plus 2%, 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. At June 30, 2020, there were no Bank Bonds held by the 2003B Liquidity Facility.

Included in the 2003B Agreement is a take out provision, in case the Remarketing Agent is unable to resell any bonds that are "put" by the termination date. In this situation, the Hospitals is required to redeem the Bank Bonds held by the Liquidity Facility. The Series 2003B Agreement allows the Hospitals to redeem Bank Bonds in 11 equal monthly installments of principal, on the first business day of the second month after the purchase date of such Bank Bonds. The Hospitals shall pay interest of the base rate plus 2% in arrears on each date that would be an Interest Payment Date for the Series 2003B Bonds, beginning on the first Interest Payment Date that occurs after the Loan Date. If the take out agreement were to be exercised because the entire outstanding $22.46 million of demand bonds was "put" and not resold, the Hospitals would be required to pay $23.47 million within 364 days of the purchase date of the Bank Bonds assuming a maximum rate of 9%. The Hospital has negotiated with TD Bank, N.A. to replace Wells Fargo Bank, N.A. effective July 24, 2020.

E. Debt Service Requirements

The following schedules show the debt service requirements for the primary government (governmental activities and business-type activities) and component unit (University of North Carolina System). The debt service requirements of variable rate debt and net swap payments are based on rates as of June 30, 2020 and assume that current interest rates remain the same for their term. As rates vary, variable-rate bond interest payments and net swap payments will vary.

Annual debt service requirements to maturity for general obligation bonds, special indebtedness, GARVEE bonds, revenue bonds, direct placements and notes from direct borrowings are as follows (dollars in thousands).

Primary Government

	Governmental Activities			
Fiscal Year	General Obligation Bonds		Limited Obligation Bonds	
Ending June 30	Principal	Interest	Principal	Interest
2021	$ 336,995	$ 114,680	$ 172,955	$ 82,617
2022	318,595	98,971	174,120	73,969
2023	313,850	84,165	179,085	65,263
2024	290,880	69,517	183,345	56,790
2025	212,420	54,973	153,545	48,354
2026-2030	584,815	156,435	666,755	135,730
2031-2035	357,825	60,555	245,140	18,740
2036-2040	190,000	12,888	—	—
Total	$ 2,605,380	$ 652,184	$ 1,774,945	$ 481,463

	Governmental Activities			
Fiscal Year	GARVEE Bonds		Notes from Direct Borrowings	
Ending June 30	Principal	Interest	Principal	Interest
2021	$ 83,660	$ 47,976	$ 3,752	$ 950
2022	87,840	43,793	3,879	863
2023	92,235	39,401	4,011	774
2024	60,590	34,790	4,141	681
2025	63,620	31,760	4,276	585
2026-2030	369,130	107,781	17,742	1,528
2031-2035	202,450	25,923	6,136	186
Total	$ 959,525	$ 331,424	$ 43,937	$ 5,567

	Business-type Activities			
Fiscal Year	Revenue Bonds		Notes from Direct Borrowings	
Ending June 30	Principal	Interest	Principal	Interest
2021	$ 29,860	$ 80,482	$ 683	$ 1,521
2022	42,122	78,310	705	2,576
2023	37,679	76,749	723	3,337
2024	42,697	75,187	969	5,061
2025	45,071	73,391	1,494	5,893
2026-2030	275,233	339,611	10,725	28,928
2031-2035	331,788	358,653	18,312	27,255
2036-2040	439,308	296,735	33,396	24,488
2041-2045	269,329	181,005	45,743	18,600
2046-2050	255,456	120,469	36,275	11,419
2051-2055	148,815	19,022	28,900	4,485
Total	$ 1,917,358	$ 1,699,614	$ 177,925	$ 133,563

Component Unit

University of North Carolina System

Fiscal Year Ending June 30	Revenue Bonds Principal	Revenue Bonds Interest	Revenue Bonds Interest Rate Swaps, Net	Direct Placements Principal	Direct Placements Interest	Certificates of Participation Principal	Certificates of Participation Interest
2021	$ 136,937	$ 165,478	$ 12,634	$ 15,062	$ 3,377	$ 336	$ 115
2022	139,619	161,369	12,224	16,037	3,135	346	105
2023	142,904	156,602	11,793	16,976	2,771	357	95
2024	147,599	151,542	11,340	15,950	2,388	368	84
2025	153,417	146,044	10,932	12,883	2,067	378	73
2026-2030	852,969	638,167	79,339	41,035	6,712	2,069	189
2031-2035	1,112,219	452,569	46,767	15,114	3,233	—	—
2036-2040	772,485	258,712	32,665	—	2,100	—	—
2041-2045	728,840	128,207	9,066	30,000	805	—	—
2046-2050	342,360	34,366	—	—	—	—	—
Total	$ 4,529,349	$ 2,293,056	$ 226,760	$ 163,057	$ 26,588	$ 3,854	$ 661

Fiscal Year Ending June 30	Limited Obligation Bonds Principal	Limited Obligation Bonds Interest	Notes from Direct Borrowings Principal	Notes from Direct Borrowings Interest
2021	$ 8,175	$ 8,871	$ 38,529	$ 8,721
2022	8,895	8,540	27,113	7,973
2023	9,585	8,155	26,754	7,235
2024	9,895	7,827	35,772	6,172
2025	10,345	7,372	21,844	5,408
2026-2030	58,705	29,895	104,098	14,943
2031-2035	67,520	16,723	20,783	6,578
2036-2040	38,955	4,518	24,853	2,275
2041-2045	4,640	403	1,075	—
Total	$ 216,715	$ 92,304	$ 300,821	$ 59,305

For revenue bonds and direct placements of the University of North Carolina System, the fiscal year 2021 principal requirements exclude demand bonds classified as current liabilities (see Note 8D).

F. Bond Defeasances

The State and its component units have defeased certain bonds through current and/or advance refundings. New debt proceeds from current refundings may be used to repay the old debt immediately while new debt proceeds from advance refundings are placed into an irrevocable trust with an escrow agent to provide for all future debt service payments on the defeased bonds. Since these bonds are considered to be defeased, the liabilities for these bonds have been removed from the government-wide statement of net position.

Component Unit

University of North Carolina System

Significant bond defeasances of the University of North Carolina System are as follows:

The University of North Carolina at Asheville

On October 31, 2019, the University of North Carolina at Asheville issued $20.88 million in Series 2019 General Revenue Refunding Bonds with an average interest rate of 2.71%. The bonds were issued to advance refund $23.42 million of outstanding Series 2010 Build America Bonds with an average interest rate of 4.26%. The net proceeds of the refunding bonds, less delivery date expenses, were used to purchase U.S. government securities. The U.S. government securities were deposited in an irrevocable trust to provide for all future debt service on the refunded bonds. As a result, the refunded bonds are considered to be defeased and the liability has been removed from the statement of net position. This advance refunding was undertaken to reduce total debt service payments by $11.06 million over the next

20 years and resulted in an economic gain of $3.8 million. At June 30, 2020, there was no outstanding balance for the defeased Series 2010 Build America Bonds.

The University of North Carolina at Wilmington

On October 31, 2019, the University of North Carolina at Wilmington issued $17.73 million in General Revenue Refunding Bonds, Series 2019B with an average interest rate of 4.21%. The bonds were issued for a current refunding of $20.66 million of outstanding University of North Carolina System Taxable Pool Revenue Bonds (UNC Wilmington Build America Bonds), Series 2010D with an average interest rate of 6.71%. The refunding was undertaken to reduce total debt service payments by $5.58 million over the next 21 years and resulted in an economic gain of $4.45 million.

The University of North Carolina at Pembroke

On December 5, 2019, the University of North Carolina at Pembroke issued $14.92 million in Series 2019 Limited Obligation Refunding Bonds with an average interest rate of 3.18%. The bonds were issued for a current refunding of $17.51 million of outstanding 2010B Limited Obligation Bonds with an average interest rate of 6.54%. The refunding was undertaken to reduce total debt service payments by $2.79 million over the next 21 years and resulted in an economic gain of $2.1 million.

The University of North Carolina at Charlotte

On January 28, 2020, the University of North Carolina at Charlotte issued $71.43 million in The University of North Carolina at Charlotte Tax-Exempt General Revenue Bonds, Series 2020A with an average interest rate of 4.32%. A portion of the bonds were issued for a current refunding of $47.8 million of outstanding revenue bonds (The University of North Carolina at Charlotte Series 2005A Pool Revenue Bonds, $1.81 million; Series 2009B Pool Revenue Bonds, $900 thousand; Series 2009B General Revenue Build America Bonds, $45.09 million), with an average interest rate of 6.19%. The remaining portion of the 2020A bonds were issued for construction of Phase XVI of the University's housing plan. The refunding was undertaken to reduce total debt service payments by $9.05 million over the next 19 years and resulted in an economic gain of $7.47 million.

On January 28, 2020, the University of North Carolina at Charlotte issued $23.28 million in The University of North Carolina at Charlotte Taxable General Revenue Refunding Bonds, Series 2020B with an average interest rate of 2.96%. The bonds were issued to advance refund $21.64 million of outstanding Taxable General Revenue Bonds, Series 2012B with an average interest rate of 4.3%. The net proceeds of the advance refunding bonds were used to purchase U.S. government securities. The substitution of these securities with monetary assets that are not essentially risk-free is not prohibited. The U.S. government securities were deposited in an irrevocable trust to provide for all future debt service on the refunded bonds. As a result, the refunded bonds are considered to be defeased and the liability has been removed from the statement of net position. This advance refunding was undertaken to reduce total debt service payments by $2.01 million over the next 21 years and resulted in an economic gain of $1.51 million. At June 30, 2020, the outstanding balance was $21.64 million for the defeased University of North Carolina at Charlotte Taxable General Revenue Bonds, Series 2012B.

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. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the government-wide statement of net position. At June 30, 2020, the outstanding balance of prior year defeased bonds was $200.77 million for the primary government and $208.97 million for the University of North Carolina System (component unit). The substitution of essentially risk-free securities with securities that are not essentially risk-free is not prohibited for $160.64 million of the prior year defeased bonds for the University of North Carolina System (component unit).

G. Pollution Remediation Payable

Primary Government

Governmental Activities

The N.C. Department of Transportation (DOT) has several equipment yards across the state with old underground fuel storage tanks. State law requires leaks from tanks to be assessed for remediation. The Department of Environmental Quality (DEQ) assigns a health risk based score to each incident. Incidents with a site score over a set criteria are identified as high priority sites and are required to be remediated. At year-end, DOT had 32 high priority sites. For sites under the set criteria, cleanup is optional. Currently, DOT is not working on low priority sites.

At year-end, the State recognized a pollution remediation liability of $7.95 million for leaking underground fuel tanks at DOT. The liability was measured using the expected cash flow technique. The liability could change over time due to changes in cost of goods and services, changes in remediation technology, or changes in laws and regulations governing the remediation effort.

Component Unit

University of North Carolina System

N.C. State University recognized a pollution remediation liability of $4.4 million for remediation of a lot the University used as a burial site for hazardous chemical and low level radioactive waste generated in its laboratories. The amount of the liability was measured using the expected cash flow technique. The liability could change over time due to changes in cost of goods and services, changes in remediation technology, or changes in laws and regulations governing the remediation effort.

Fayetteville State University recognized a pollution remediation liability of $210 thousand for underground storage tank and asbestos removal at campus buildings. The amount of the liability was calculated from the estimated costs of the removal.

H. Asset Retirement Obligation

Component Unit

University of North Carolina System

N.C. State University has asset retirement obligations arising from federal regulations to perform certain decommissioning activities at the time of disposal of its PULSTAR reactor facility. These activities include removal of all activated reactor components, demolition of the reactor biological shield, and disposal costs for radioactive materials. The liability was estimated by analyzing the actual decommissioning costs of a representative university reactor facility and adjusting the costs to be consistent with the N.C. State PULSTAR facility. Costs were also adjusted for the effects of inflation. At year-end, the estimated remaining useful life of the PULSTAR reactor facility was 43 years. In accordance with 10 CFR 50.75(e)(1)(iv), the University has provided the following Statement of Intent regarding decommissioning funding. The decommissioning funding obligations are fully backed by the State of North Carolina. Decommissioning funds will be appropriated when necessary following the provisions of General Statute 116-11(9)(a).