



**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Financial Statements

June 30, 2016 and 2015

(With Independent Auditors' Report Thereon)

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Table of Contents

	Page(s)
Independent Auditors' Report	1-2
Consolidated Balance Sheets	3
Consolidated Statements of Operations	4
Consolidated Statements of Changes in Net Assets	5
Consolidated Statements of Cash Flows	6-7
Notes to Consolidated Financial Statements	8-41
Supplementary Schedules	
Schedule 1 – Combining and Consolidating Balance Sheet Information, June 30, 2016	42
Schedule 2 – Combining and Consolidating Statement of Operations Information, Year ended June 30, 2016	43



KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report

Board of Directors
Duke University Health System, Inc.:

We have audited the accompanying consolidated financial statements of Duke University Health System, Inc. and Affiliates (the Health System), which comprise the consolidated balance sheets as of June 30, 2016 and 2015, and the related consolidated statements of operations, changes in net assets, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Health System's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Health System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Duke University Health System, Inc. and Affiliates as of June 30, 2016 and 2015, and the results of their operations and their cash flows for the years then ended, in accordance with U.S. generally accepted accounting principles.



Supplementary Information

Our audits were performed for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information in schedules 1 and 2 is presented for the purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

KPMG LLP

September 29, 2016

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Balance Sheets

June 30, 2016 and 2015

(In thousands)

Assets	2016	2015
Current assets:		
Cash and cash equivalents	\$ 281,143	434,336
Patient accounts receivable, net	367,459	401,561
Other receivables	28,993	28,205
Inventories of drugs and supplies	82,398	77,157
Other assets	19,334	15,912
Short-term investments	237,859	156,374
Assets limited as to use	547,481	26,469
Total current assets	1,564,667	1,140,014
Assets limited as to use	78,617	84,081
Investments	2,024,867	2,320,919
Property and equipment, net	1,458,462	1,459,817
Due from the University	708	846
Other noncurrent assets	37,604	34,099
Total assets	\$ 5,164,925	5,039,776
Liabilities and Net Assets		
Current liabilities:		
Accounts payable	\$ 130,316	119,947
Due to the University, net	523,739	4,895
Other current liabilities	41,935	45,478
Accrued salaries, wages, and vacation payable	157,834	145,181
Estimated third-party payor settlements, net	19,244	6,813
Current portion of postretirement and postemployment benefit obligations	6,087	6,052
Current portion of indebtedness	22,275	22,250
Current portion of capital lease obligations	1,764	1,416
Current portion of estimated professional liability costs	15,612	12,006
Total current liabilities	918,806	364,038
Other noncurrent liabilities	65,138	66,509
Postretirement and postemployment benefit obligations, net of current portion	465,020	137,386
Indebtedness, net of current portion	1,055,784	1,042,336
Capital lease obligations, net of current portion	121,653	123,417
Derivative instruments	117,187	89,358
Estimated professional liability costs, net of current portion	26,445	33,850
Total liabilities	2,770,033	1,856,894
Net assets:		
Unrestricted	2,337,076	3,125,303
Temporarily restricted	44,116	46,075
Permanently restricted	13,700	11,504
Total net assets	2,394,892	3,182,882
Total liabilities and net assets	\$ 5,164,925	5,039,776

See accompanying notes to consolidated financial statements.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Statements of Operations

Years ended June 30, 2016 and 2015

(In thousands)

	2016	2015
Unrestricted revenues, gains, and other support:		
Net patient service revenue (net of contractual allowances and discounts)	\$ 3,049,954	2,951,531
Provision for bad debts	(72,841)	(81,512)
Net patient service revenue less provision for bad debts	2,977,113	2,870,019
Other revenue	183,221	179,689
Total unrestricted revenues, gains, and other support	3,160,334	3,049,708
Expenses:		
Salaries, wages, and benefits	1,349,876	1,274,148
Medical supplies	712,028	656,990
Interest	41,198	41,649
Depreciation and amortization	152,460	146,975
Other operating expenses	601,618	575,019
Total expenses	2,857,180	2,694,781
Operating income	303,154	354,927
Nonoperating (loss) income:		
Investment (loss) income	(139,946)	53,063
Loss on extinguishment of debt	(25,078)	—
Other	1,629	300
Total nonoperating (loss) income	(163,395)	53,363
Excess of revenues over expenses	139,759	408,290
Change in funded status of defined benefit plans	(316,047)	(7,060)
Net assets released from restrictions for purchase of property and equipment	2,635	1,230
Transfers to the University, net	(614,574)	(230,830)
(Decrease) increase in unrestricted net assets	\$ (788,227)	171,630

See accompanying notes to consolidated financial statements.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Statements of Changes in Net Assets

Years ended June 30, 2016 and 2015

(In thousands)

	2016	2015
Unrestricted net assets:		
Excess of revenues over expenses	\$ 139,759	408,290
Change in funded status of defined benefit plans	(316,047)	(7,060)
Net assets released from restrictions for purchase of property and equipment	2,635	1,230
Transfers to the University, net	(614,574)	(230,830)
(Decrease) increase in unrestricted net assets	(788,227)	171,630
Temporarily restricted net assets:		
Contributions for restricted purposes	5,188	4,788
Transfers from (to) the University, net	102	(149)
Net assets released from restrictions used for operations	(2,916)	(5,189)
Net assets released from restrictions for purchase of property and equipment	(2,635)	(1,230)
Net realized and unrealized (losses) gains	(1,698)	29
Decrease in temporarily restricted net assets	(1,959)	(1,751)
Permanently restricted net assets:		
Contributions for endowment funds	2,089	61
Transfers from the University, net	—	245
Net realized and unrealized gains (losses)	107	(59)
Increase in permanently restricted net assets	2,196	247
(Decrease) increase in net assets	(787,990)	170,126
Net assets, beginning of year	3,182,882	3,012,756
Net assets, end of year	\$ 2,394,892	3,182,882

See accompanying notes to consolidated financial statements.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Statements of Cash Flows

Years ended June 30, 2016 and 2015

(In thousands)

	2016	2015
Cash flows from operating activities:		
(Decrease) increase in net assets	\$ (787,990)	170,126
Adjustments to reconcile (decrease) increase in net assets to net cash provided by operating activities:		
Depreciation and amortization	152,460	146,975
Investment loss (income)	141,644	(53,092)
Loss on the extinguishment of debt	25,078	—
Net gains on other investments and disposals of property and equipment	(421)	(679)
Transfers to the University, net	614,472	230,734
Provision for bad debts	72,841	81,512
Restricted contributions received for long-term capital projects	(795)	(834)
Permanently restricted contributions and associated realized and unrealized gains	(2,196)	(2)
(Increase) decrease in:		
Patient accounts receivable	(38,739)	(113,119)
Other receivables	(58)	10,547
Inventories of drugs and supplies	(5,241)	(3,899)
Other assets	(4,173)	(1,380)
Increase (decrease) in:		
Accounts payable	(8,166)	22,111
Due to the University, net	8,697	(6,597)
Other current liabilities	(1,867)	(636)
Accrued salaries, wages, and vacation payable	12,653	2,747
Estimated third-party payor settlements, net	12,431	(12,811)
Postretirement and postemployment benefit obligations	327,669	23,229
Other noncurrent liabilities	(1,370)	14,437
Estimated professional liability costs	(3,799)	(15,482)
Net cash provided by operating activities	513,130	493,887
Cash flows from investing activities:		
Capital expenditures	(141,060)	(106,670)
Increase in assets limited as to use	(10,649)	(3,065)
Sales of investments	1,601,666	1,520,795
Purchases of investments	(1,987,621)	(1,518,723)
Investment and endowment loss	(21,240)	(10,986)
Proceeds from sale of fixed assets	388	1,481
Increase in other assets	(1,363)	(17,133)
Net cash used in investing activities	(559,879)	(134,301)

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Consolidated Statements of Cash Flows, continued

Years ended June 30, 2016 and 2015

(In thousands)

	2016	2015
Cash flows from financing activities:		
Payments on indebtedness and bank borrowings	\$ (392,789)	(15,045)
Proceeds from issuance of indebtedness	383,990	—
Bond issuance costs	(1,459)	—
Proceeds from restricted contributions and associated realized gains	4,873	2,475
Payments on capital lease obligations	(1,416)	(1,154)
Transfers to the University, net	(99,643)	(78,716)
Net cash used in financing activities	(106,444)	(92,440)
Net (decrease) increase in cash and cash equivalents	(153,193)	267,146
Cash and cash equivalents, beginning of year	434,336	167,190
Cash and cash equivalents, end of year	\$ 281,143	434,336
Supplemental disclosure of cash flow information:		
Cash paid for interest, net of amount capitalized	\$ 41,999	41,775
Supplemental disclosures of noncash investing/financing activities:		
Change in fixed asset payables as of June 30	\$ (18,525)	1,908
Net transfers to the University of property and equipment	4,681	4,799
Net transfers payable between the Health System and University	511,443	1,294
Support transfer of investments to the University	—	150,000

See accompanying notes to consolidated financial statements.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(1) Description of Organization, Related Parties, and the Private Diagnostic Clinic

(a) *Duke University Health System, Inc. (the Health System)*

The Health System is a North Carolina nonprofit corporation organized and controlled by Duke University (the University or the Parent). The Health System includes three hospitals operated as divisions and several subsidiaries and controlled affiliates, the most significant of which follow:

- ***Duke University Hospital (DUH)*** – a quaternary care teaching hospital located on the campus of the University in Durham, North Carolina, licensed for 957 acute care and specialty beds, leased from the University, operated by the Health System and providing patient care and serving as a site for medical education provided by the Duke University School of Medicine (School of Medicine or SOM) and clinical research conducted by the School of Medicine.
- ***Duke Regional Hospital (DRH)*** – a full service community hospital located in Durham, North Carolina, licensed for 369 acute care beds, leased from Durham County and operated by the Health System under agreements with concurrent terms of forty years and providing patient care.
- ***Duke Raleigh Hospital (DRaH)*** – a community hospital located in Raleigh, North Carolina, licensed for 186 acute care beds, leased from the University, operated by the Health System and providing patient care.
- ***Duke University Affiliated Physicians, Inc. (DUAP)*** – a North Carolina nonprofit corporation, doing business as Duke Primary Care, consisting of twenty-six primary care physician practices located in Alamance, Chatham, Durham, Granville, Orange, Vance, and Wake Counties, North Carolina, five urgent care centers located in Durham and Wake Counties, and a pediatric practice with two locations in Durham County.
- ***Durham Casualty Company, Ltd. (DCC)*** – a wholly owned subsidiary of the Health System, domiciled in Bermuda, insuring a portion of the medical malpractice risks and patient general liability risks of Health System clinical providers and the Private Diagnostic Clinic (PDC).

The Health System also includes other separately incorporated affiliates and subsidiaries and unincorporated divisions not listed above whose accounts are included in the accompanying consolidated financial statements. All significant intercompany accounts and transactions are eliminated in consolidation. The Health System's accounts are included in the consolidated financial statements of the University.

(b) *The University*

Pursuant to a lease and operating agreement between the University and the Health System, the Health System acquired, or has acquired the right to operate, all of the operating assets of the University's health system and has assumed all of the University's liabilities and obligations related to the transferred assets. Under the Health System's current Master Trust Indenture, the owners of Health

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

System bonds look solely to the Health System for repayment of those obligations. The operating agreement between the University and the Health System provides for certain common administrative services, human resources policy and practice, fiduciary responsibility, investment policies, and support for the School of Medicine.

Certain shared administrative and general service expenses are incurred by the University for the benefit of the Health System. These are included within other operating expenses and amounted to approximately \$34,697 and \$35,133 in 2016 and 2015, respectively.

(c) *School of Medicine (SOM)*

The SOM is one of the top-ranked medical schools and one of the largest biomedical research enterprises in the United States. The SOM is organized and operated as part of the University and is included in the University's consolidated financial statements (not in the Health System's consolidated financial statements). The Health System provides support to the SOM in the form of cash (and some noncash) equity transfers. Examples of transfers to the SOM include but are not limited to support of specific initiatives, specific departments, or general support for the Chancellor for Health Affairs or a departmental chair. For the years ended June 30, 2016 and 2015, unrestricted transfers to the University and other changes are as follows:

	<u>2016</u>	<u>2015</u>
Transfers to the School of Medicine	\$ 91,676	223,711
Transfers to the University	8,263	5,541
Transfers from the University/School of Medicine	(46)	(3,221)
Total funded transfers, net	<u>99,893</u>	<u>226,031</u>
Transfer payable to the School of Medicine	510,000	—
Fixed assets and other unfunded transfers, net	<u>4,681</u>	<u>4,799</u>
Unrestricted transfers to the University, net	<u>\$ 614,574</u>	<u>230,830</u>

On July 1, 2016, the Health System transferred \$510,000 consisting of \$501,417 of Long Term Pool (LTP) investments and \$8,583 in cash to the SOM to fund future academic activities. Of the \$510,000 transfer, \$310,000 is intended to cover, in advance, planned SOM support for the ten-year period beginning July 1, 2016; the remaining \$200,000 will be used to establish a quasi-endowment fund which, from 2017-2026, the SOM will leave intact with all income accumulated and added to the principal of the fund. The \$510,000 of investments and cash subsequently transferred and \$510,000 payable are reported in current assets limited as to use and current due to the University, net, respectively, in the consolidated balance sheet as of June 30, 2016. In addition to the \$510,000 transfer, the Health System plans to transfer \$107,800 in cash (and some noncash) equity transfers to the University in 2017.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(d) Private Diagnostic Clinic, PLLC (PDC)

The PDC is a professional limited liability company consisting of physicians practicing primarily within Health System facilities and PDC clinics. The purpose of the PDC is to provide a structure separate from the University and the Health System in which the members of the physician faculty of the School of Medicine may engage in the private practice of medicine and still serve as members of the faculty of the University conducting clinical teaching and medical research. The PDC, under agreements with the University and the Health System, occupies and utilizes certain of the Health System's facilities. PDC physicians are not employed by the Health System, and the PDC is not included in the Health System's or the University's consolidated financial statements.

The Health System has numerous agreements with the PDC. Many are for services related to clinical operations such as professional service agreements (PSA) for physician staffing of certain Health System facilities, medical directors, and lab services. The Health System, through its Patient Revenue Management Organization (PRMO), has contracted responsibility for the billing and accounts receivable operations of the PDC. DCC provides the malpractice insurance coverage for the PDC. The PDC subleases, at market rates, clinical and administrative space owned by the University and leased to the Health System. The Health System also subleases to the PDC, at full cost, leased space from nonaffiliated third parties. The following table summarizes the PDC-related revenue reported in other operating revenue in the Health System's consolidated statements of operations:

	2016	2015
Billing and collection services	\$ 35,857	37,668
Revenue under service agreements	53,048	43,871
DCC malpractice insurance premiums	6,234	9,980
Rental income	11,854	11,965
Total	\$ 106,993	103,484

For the years ended June 30, 2016 and 2015, other operating expenses in the Health System's consolidated statements of operations include PDC-related expenses under service agreements of \$113,388 and \$100,382, respectively. The Health System has net payables to the PDC of \$4,666 and \$10,145, respectively, as of June 30, 2016 and 2015 related to various transactions.

(e) DUMAC, Inc. (DUMAC)

DUMAC, a separate nonprofit support corporation organized and controlled by the University, manages multiple investment pools on behalf of the Health System and the University including the Health System Pool (HSP) and the LTP. DUMAC also manages the investment assets of the Employee's Retirement Plan of the University (ERP).

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(2) Summary of Significant Accounting Policies

Significant accounting policies of the Health System are as follows:

(a) Cash and Cash Equivalents

Cash and cash equivalents include certain assets invested in the University Short Term Account (STA), which the Health System utilizes to fund daily cash needs. The STA currently invests in short-term and highly liquid investments, which can be liquidated within thirty days.

Cash and cash equivalents that are invested in the HSP and LTP are reported within short-term and noncurrent investments as these funds are not typically used for current operating needs.

(b) Short-Term Investments

Short-term investments include debt securities and other instruments with maturities of one year or less from the balance sheet date and are not included in cash and cash equivalents.

(c) Investments

Reporting

Investments are classified as trading securities. As such, investment income or loss (including realized and unrealized gains and losses on investments, interest, and dividends) is included in excess of revenues over expenses unless the income or loss is restricted by donor or law.

Valuation

Investments are recorded in the consolidated financial statements at estimated fair value. For investments made directly by the Health System whose values are based on quoted market prices in active markets, the market price of the investment is used to report fair value. For shares in mutual funds, fair values are based on share prices reported by the funds as of the last business day of the fiscal year. The Health System's interests in alternative investment funds such as fixed income, equities, hedged strategies, private capital, and real assets are generally reported at the net asset value (NAV) reported by the fund managers. Unless it is probable that all or a portion of the investment will be sold for an amount other than NAV, the Health System has concluded, as a practical expedient, that the NAV approximates fair value.

Derivatives

Derivatives are used by the Health System and external investment managers to manage market risks. The most common derivative strategies entered into are total return swaps, futures contracts, and short sales. These derivative instruments are recorded at their respective fair values (note 8).

(d) Assets Limited as to Use

Assets limited as to use include funds on deposit with bond trustees, funds pledged as collateral under derivative swap agreements, investments and cash designated to fund the \$510,000 transfer to the

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

University, externally restricted funds, and amounts required to settle estimated professional liability costs recorded in DCC.

(e) Property and Equipment

Property and equipment acquisitions are recorded at original cost or, where original cost data is not available, at estimates of original cost. Property and equipment under capital leases are initially valued and recorded based on the present value of minimum lease payments. Costs associated with the development and installation of internal-use software may be capitalized or expensed. These costs are expensed if they are incurred in the preliminary project or post-implementation/operation stages and capitalized if they are incurred in the application development stage and meet certain capitalization requirements. Depreciation and amortization is calculated on the straight line basis over the estimated useful lives of the respective assets, except for leasehold improvements and property and equipment held under capital leases, which are amortized over the shorter of the expected useful life of the asset or related lease term. The estimated useful lives by asset type are as follows:

Asset type	Useful life
Buildings and utilities	10–50 years
Furnishings and equipment	3–20 years
Computer software	5–10 years

Gains and losses from the disposal of property and equipment are included in operating income. Interest on borrowings to finance facilities is capitalized during construction, net of any investment income earned through the temporary investment of project borrowings.

(f) Asset Impairment

The Health System assesses the recoverability of long lived assets by determining whether the carrying value of these assets can be recovered through undiscounted future operating cash flows generated by these assets. The amount of impairment, if any, is measured by comparison of the fair value of the assets to their carrying value. Fair value is determined using market data, if available, or projected discounted future operating cash flows using a discount rate reflecting the Health System’s weighted average cost of capital.

(g) Net Assets

Net assets and revenues, expenses, gains, and losses are classified based on the existence or absence of externally imposed restrictions. Accordingly, net assets of the Health System and changes therein are classified and reported as follows:

Unrestricted net assets – Net assets that are not subject to externally imposed stipulations.

Temporarily restricted net assets – Net assets subject to externally imposed stipulations that may or will be met either by actions of the Health System and/or the passage of time.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

Temporarily restricted net assets are available for the following purposes at June 30:

	2016	2015
Health care services:		
Health education	\$ 5,891	4,899
Capital expenditures	19,973	21,882
Other	18,252	19,294
	\$ 44,116	46,075

Permanently restricted net assets – Net assets subject to externally imposed stipulations that they be maintained by the Health System in perpetuity.

Revenues are reported as increases in unrestricted net assets unless use of the related asset is limited by externally imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses are reported as increases or decreases in unrestricted net assets unless use of the related asset is limited by externally imposed restrictions or law. Expirations of temporary restrictions of net assets (i.e., the externally stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as reclassifications between the applicable classes of net assets if used to acquire capital assets; otherwise, they are recorded as unrestricted operating revenue. Unrealized gains and losses on permanently restricted net assets are included in the change in temporarily restricted net assets unless the donor stipulates that such activity be restricted to endowment, in which case it is included in change in permanently restricted net assets.

(h) Excess of Revenues over Expenses

Changes in unrestricted net assets that are excluded from excess of revenues over expenses include certain nonperiodic defined benefit plan accounting adjustments, permanent transfers of assets to and from affiliates for other than goods and services, and assets acquired using contributions, which by externally imposed restriction, were used for the purposes of acquiring long lived assets.

(i) Net Patient Service Revenue (Net of Contractual Allowances and Discounts)

The Health System recognizes revenues in the period in which services are rendered. The Health System has agreements with third-party payors that provide for payments to the Health System at amounts that are generally less than its established rates. Payment arrangements include prospectively determined rates per discharge, reimbursed costs, discounted charges, and per diem payments. Accordingly, net patient service revenue is reported at the estimated net realizable amounts from patients, third-party payors, and others, including estimated retroactive adjustments under reimbursement agreements with third-party payors. Adjustments are accrued on an estimated basis in the period the related services are rendered and retroactively adjusted in future periods as changes to estimates become known and tentative and final settlement adjustments are identified.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(j) *Charity Care*

The Health System provides care to patients who meet certain criteria under its financial assistance policy without charge or at amounts less than its established rates. Because the Health System does not pursue collection of amounts determined to qualify as charity care, they are not reported as revenue or included in patient accounts receivable.

(k) *Meaningful Use Incentive Revenue*

The American Recovery and Reinvestment Act of 2009 established incentive payments under the Medicare and Medicaid programs for certain professionals and hospitals that meaningfully use certified electronic health record technology. The Health System has recorded as revenue the estimated incentive amount for the entire reporting period in a lump sum at the point reasonable assurance of satisfying compliance requirements was determined by management. The Health System recognized meaningful use revenues of \$5,081 and \$9,340, in fiscal years 2016 and 2015, respectively, which is reported in other operating revenue. The income recognized is based on the cost report data, which is subject to change and audit by the government. In addition, the attestation of compliance is subject to audit by the government and subject to change.

(l) *Derivative Financial Instruments*

The Health System has elected not to use hedge accounting with respect to any of its debt derivative financial instruments. Derivative financial instruments are recognized as assets or liabilities in the consolidated balance sheets at fair value. Realized and unrealized gains and losses on derivatives are included in investment income in the consolidated statements of operations.

(m) *Income Taxes*

The Health System and substantially all of its affiliates are organizations described under Section 501(c)(3) of the Internal Revenue Code. Such organizations are not subject to federal and state income tax on income related to their exempt purpose. Accordingly, no provision for income taxes is made in the consolidated financial statements for these entities. As of June 30, 2016, there were no material uncertain tax positions.

(n) *Use of Estimates*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include valuation allowances for receivables, third-party reimbursement settlements, self-insurance liabilities, retirement obligations, and the carrying amounts of property, equipment, investments, and derivative instruments. Actual results could differ from those estimates.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(o) *Recently Issued Accounting Standards*

The Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (Topic 606)*. This ASU establishes principles for reporting useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from the entity's contracts with customers. Particularly, that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 is effective for fiscal year 2019. The Health System expects to record a decrease in net patient service revenue related to self-pay patients and a corresponding decrease in bad debt expense upon adoption of the standard.

The FASB issued ASU 2016-02, *Leases (Topic 842)* in February 2016. This ASU requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP which have terms of greater than 12 months. This ASU defines a lease as a contract, or part of a contract, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration. This ASU retains a distinction between finance leases and operating leases. The result of retaining a distinction between finance leases and operating leases in the statement of operations and the statement of cash flows is largely unchanged from existing GAAP. ASU 2016-02 is effective for fiscal year 2020. The Health System expects to record an increase in lease assets and lease liabilities presented in the consolidated balance sheets upon adoption of the standard.

(p) *Recently Adopted Accounting Standards*

The FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* in January 2016. This ASU, among other things, removes the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public business entities. The Health System early adopted this specific provision of ASU 2016-01 in 2016 and removed the fair value disclosure for its fixed rate debt.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(3) Net Patient Service Revenue and Estimated Third-Party Payor Settlements

Patient service revenue, net of contractual allowances and discounts, but before the provision for bad debts, recognized in 2016 and 2015 from major payor sources is as follows:

	2016		2015	
	Amount	Percentage	Amount	Percentage
Commercial payors	\$ 1,790,723	58.7%	\$ 1,693,475	57.4%
Medicare	868,575	28.5	807,539	27.4
Medicaid	302,383	9.9	314,014	10.6
Self-pay patients	23,594	0.8	43,753	1.5
Other third-party payors	64,679	2.1	92,750	3.1
Total	<u>\$ 3,049,954</u>	<u>100.0%</u>	<u>\$ 2,951,531</u>	<u>100.0%</u>

The Health System has entered into payment agreements with third-party payors including certain commercial insurance carriers, health maintenance organizations, and preferred provider organizations. The basis for payment to the Health System under these agreements includes prospectively determined rates per discharge, prospectively determined daily rates, and discounts from established charges. The Health System recognizes patient service revenue associated with services provided to patients who have third-party coverage on the basis of contractual rates for the services rendered.

Net patient service revenue includes estimated retroactive adjustments under reimbursement agreements with governmental programs. Adjustments are accrued on an estimated basis in the period the related services are rendered and retroactively adjusted in future periods as changes to estimates become known and tentative and final settlement adjustments are identified. The effects of these retroactive adjustments are to increase net patient service revenue by \$4,404 and \$4,459 in 2016 and 2015, respectively. The amounts due to and from governmental programs (Medicare and Medicaid) for final settlement of reimbursements are determined based upon cost reports filed annually with the respective programs. The reports for all years through June 30, 2007 for Medicare and June 30, 2006 for Medicaid have been substantially resolved with the respective fiscal intermediary. In the opinion of management, adequate provisions have been made in the consolidated financial statements for adjustments that may result from final settlements of reimbursable amounts.

The Health System receives supplemental Medicaid payments from the State of North Carolina through a federally approved disproportionate share program (Medicaid DSH). Medicaid DSH payments are part of the Medicaid Program and are designed to offset a portion of the Medicaid losses incurred. Amounts

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

recognized in the Health System's consolidated financial statements related to supplemental Medicaid follows:

	2016	2015
Supplemental Medicaid amounts included in net patient service revenue	\$ 154,469	156,417
Medicaid assessments included in other operating expenses	(68,032)	(70,024)
Net supplemental Medicaid revenue in operating income	\$ 86,437	86,393
Net (payable) receivable from supplemental Medicaid included in estimated third-party payor settlements, net	\$ (9,982)	105

There can be no assurance that the Health System will continue to qualify for future participation in this program or that the program will not be discontinued or materially modified.

For uninsured patients who do not qualify for charity care, the Health System recognizes revenue on the basis of its discounted rates. Uninsured patients automatically receive a discount from billed charges (excluding cosmetic services). On the basis of historical experience, a significant portion of the Health System's uninsured patients who do not qualify for charity care will fail to pay for the services provided. Thus, the Health System records a significant provision for bad debts related to uninsured patients in the period the services are provided.

Patient accounts receivable, net at June 30 consists of the following:

	2016	2015
Patient accounts receivable	\$ 1,239,379	1,331,736
Less:		
Allowance for bad debts	(61,811)	(59,608)
Allowance for contractual adjustments	(810,109)	(870,567)
Patient accounts receivable, net	\$ 367,459	401,561

The Health System analyzes historical collections and write-offs and identifies trends for each of its major payor sources of revenue to estimate the appropriate balance sheet allowance for bad debts and statement of operations provision for bad debts. For receivables associated with services provided to patients who have third-party coverage, the Health System analyzes contractually due amounts and provides an allowance for bad debts, allowance for contractual adjustments, provision for bad debts, and contractual adjustments on accounts for which the third-party payor has not yet paid or for payors who are known to be having financial difficulties that make the realization of amounts due unlikely. For receivables associated with self-pay patients or with balances remaining after the third-party coverage has already paid, the Health System records a significant provision for bad debts in the period of service on the basis of its historical collections. The

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

difference between the discounted rates and the amounts collected after all reasonable collection efforts have been exhausted is charged off against the allowance for bad debts.

The activity in the allowance for bad debts by major payor sources is as follows:

<u>Allowance for bad debts</u>	<u>Commercial</u>	<u>Medicare</u>	<u>Medicaid</u>	<u>Self-Pay</u>	<u>Other Third-Party</u>	<u>Total</u>
Balance as of June 30, 2014	\$ 18,895	15,578	5,845	14,798	1,654	56,770
Provision for bad debts	41,985	18,335	4,386	11,273	5,533	81,512
Less: net write-offs	<u>(41,372)</u>	<u>(11,309)</u>	<u>(2,626)</u>	<u>(22,012)</u>	<u>(1,355)</u>	<u>(78,674)</u>
Balance as of June 30, 2015	19,508	22,604	7,605	4,059	5,832	59,608
Provision for bad debts	42,026	9,066	2,407	17,927	1,415	72,841
Less: net write-offs	<u>(37,734)</u>	<u>(9,592)</u>	<u>(4,028)</u>	<u>(16,973)</u>	<u>(2,311)</u>	<u>(70,638)</u>
Balance as of June 30, 2016	<u>\$ 23,800</u>	<u>22,078</u>	<u>5,984</u>	<u>5,013</u>	<u>4,936</u>	<u>61,811</u>

The Health System's net write-offs decreased \$8,036 from 2015 to 2016 and increased \$21,796 from 2014 to 2015. The increase from 2014 to 2015 is partially a resolution of the decrease that occurred from 2013 to 2014 due to an increase in lag time in writing off accounts attributable to the implementation of a new patient accounting system. In addition, the Health System experienced an increase in bad debt write-offs due to the growing levels of patient liability as a result of increased participation in high deductible health plans. This includes patients obtaining insurance through the Health Exchange established in accordance with the Affordable Care Act, who previously would have been eligible for some level of charity care.

The Health System grants credit without collateral to its patients, most of whom are insured under third-party payor agreements. The mix of gross receivables from patients and third-party payors at June 30 is as follows:

	<u>2016</u>	<u>2015</u>
Commercial payors	41.2%	39.6%
Medicare	35.8	35.2
Medicaid	11.4	12.8
Self-pay patients	3.2	3.8
Other third-party payors	8.4	8.6
	<u>100.0%</u>	<u>100.0%</u>

(4) Charity Care and Other Community Benefits

The Health System provides services at no charge or at a substantially discounted rate to patients who are approved under the guidelines of its financial assistance policy. The Health System does not pursue collection of amounts determined to qualify as charity care. Services qualifying for charity care consideration include emergent and medically necessary services as determined by a Health System physician. Patient

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

household income in relation to the federal poverty guidelines and the equity value of real property assets is included in the determination for charity care qualification.

While charity care is excluded from net patient revenue and receivables, the Health System maintains records to identify and monitor the level of charity care it provides. These records include the amount of charges foregone and estimated costs incurred for services and supplies furnished under its financial assistance policy and other equivalent service statistics. Costs incurred are estimated based on the ratio of total operating expenses to gross charges applied to charity care charges. The Health System received gifts and grants of \$25 and \$155 in 2016 and 2015, respectively, to subsidize charity care.

In addition to charity care, the Health System provides services under the Medicare and Medicaid programs, medical education (for which payments received from Medicare and Medicaid are less than the full cost of providing these activities), and research activities. The Health System also provides both in-kind service contributions and direct support payments to Lincoln Community Health Center (LCHC) and the Durham Emergency Medical Services (EMS). LCHC is an outpatient clinic serving the Durham County, North Carolina community, supported in part by a U.S. Public Service Grant. EMS serves as the primary provider of emergency ambulance service in Durham County and is a unit of the Durham County government.

The Health System estimates charity care and other community benefits in accordance with Internal Revenue Code Section 501(r). Estimates of the cost of charity care and other community benefits provided during the years ended June 30 are as follows:

	2016	2015
Charity care at cost	\$ 81,504	70,060
Unreimbursed Medicaid	86,398	65,316
Total charity care and means-tested programs	167,902	135,376
Health professionals education	62,835	61,429
Cash and in-kind contributions to community groups	11,592	11,265
Total other benefits	74,427	72,694
Total charity care and other community benefits at cost	\$ 242,329	208,070

In addition to the above total charity care and other community benefits reported on Internal Revenue Service (IRS) Form 990, Schedule H, the Health System also provided services under the Medicare program for which payments received were less than the full cost of providing the services. The estimated unreimbursed costs attributable to providing services under Medicare are \$183,077 and \$179,456 for the years ended June 30, 2016 and 2015, respectively. The Health System provides additional uncompensated care in the form of bad debts. Estimated uncompensated costs associated with bad debt accounts were \$19,251 and \$21,458 for June 30, 2016 and 2015, respectively.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(5) Cash and Investments

The following is a summary of cash and investments included in consolidated balance sheets at June 30:

	<u>2016</u>	<u>2015</u>
Cash and cash equivalents	\$ 281,143	434,336
Short-term investments	237,859	156,374
Investments	<u>2,024,867</u>	<u>2,320,919</u>
Cash and investments available for operations	2,543,869	2,911,629
Assets limited as to use, current	547,481	26,469
Assets limited as to use, noncurrent	78,617	84,081
Less: receivables and other assets included in assets limited as to use	<u>(6,731)</u>	<u>(7,405)</u>
Total cash and investments	<u>\$ 3,163,236</u>	<u>3,014,774</u>

The Health System invests through separate accounts and commingled vehicles (including limited partnerships). The fair value of cash and investments consists of the following at June 30:

	<u>2016</u>	<u>2015</u>	<u>Unfunded commitments²</u>
Cash and cash equivalents	\$ 305,636	451,375	—
Deposits with bond trustees	1,628	372	—
Short-term investments	259,728	170,837	—
Fixed income	319,195	376,508	—
Equities	413,919	548,793	—
Hedged strategies	599,831	629,311	554
Private capital	394,172	384,149	160,421
Real assets	288,266	274,483	134,079
Investment in LTP	524,422	140,011	—
Other	<u>56,439</u>	<u>38,935</u>	<u>—</u>
Total cash and investments ¹	3,163,236	3,014,774	295,054
Less cash and investments included in assets limited as to use	<u>(619,367)</u>	<u>(103,145)</u>	
Cash and investments available for operations	<u>\$ 2,543,869</u>	<u>2,911,629</u>	

¹ Includes the Health System's participation in pooled assets of \$871,918 and \$592,879 at June 30, 2016 and 2015, respectively, which are managed by DUMAC.

² Future commitments likely to be called at various dates through 2020. The Health System expects to finance these commitments with available cash and expected proceeds from the sales of securities.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The Health System's investment classes are described in further detail below. Classes include direct holdings, which are generally marketable securities, or interest in funds, which are stated at NAV as a practical expedient for which the related investment strategies are described.

Short-term investments include short-term U.S. Treasury, agency, corporate, and other highly liquid debt securities with an aggregate duration of less than a year. Short-term investments of \$29,001 and \$35,127 at June 30, 2016 and 2015, respectively, were posted as collateral under derivative agreements (including both debt and investment derivatives) and thus are not readily available for use.

Fixed income includes U.S. Treasury debt securities with maturities of more than one year and funds that invest in these types of investments and nongovernment U.S. and non-U.S. debt securities.

Equities includes U.S. and non-U.S. stocks and interests in funds that invest predominantly long but also short stocks and in certain cases are nonredeemable. The breakout by market is approximately: 15% domestic, 25% developed international, 30% emerging international, and 30% global.

Hedged strategies include interests in funds that invest both long and short in U.S. and non-U.S. stocks, credit-oriented securities and arbitrage strategies. Approximately 80% of the hedged strategies portfolio is invested through equity oriented strategies with the balance split between credit strategies and multi-strategy funds. Nearly all of the Health System's investments in these funds are redeemable, and the underlying assets of the funds are predominately marketable securities and derivatives.

Private capital includes primarily interest in funds or partnerships that hold illiquid investments in venture capital, buyouts, and credit. These funds typically have periods of 10 or more years during which committed capital may be drawn. Distributions are received through liquidation of the underlying assets of the funds, which are anticipated to occur over the next 4 to 10 years.

Real assets include interests in funds or partnerships that hold illiquid investments in residential and commercial real estate, oil and gas production, energy, other commodities, and related services businesses. These funds typically have periods of 10 or more years during which committed capital may be drawn. Distributions are received through liquidations of the underlying assets of the funds, which are anticipated to occur over the next 5 to 12 years.

Investment in LTP includes the Health System's participation in the LTP. Participation in or withdrawal from the LTP is based on the fair value per unit at quarterly intervals during the year.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The allocation of underlying assets in the LTP at June 30 is as follows:

	<u>2016</u>	<u>2015</u>
Short-term investments	\$ 12.1%	14.0%
Equities	15.5	17.8
Fixed Income	1.8	1.5
Hedged Strategies	29.4	28.1
Private capital	22.9	22.1
Real Assets	16.4	15.6
Other	1.9	0.9
Totals	<u>\$ 100.0%</u>	<u>100.0%</u>

As of June 30, 2016, redemption frequency and the corresponding redemption notice period in days are shown below:

	<u>Daily</u>	<u>Monthly</u>	<u>Quarterly or Annually</u>	<u>Greater than 1 year</u>	<u>Total</u>	<u>Redemption notice period</u>
Cash and cash equivalents	\$ 305,636	—	—	—	305,636	1
Deposits with bond trustees	1,628	—	—	—	1,628	1
Short-term investments	259,728	—	—	—	259,728	1
Fixed income	226,544	92,651	—	—	319,195	1 to 30
Equities	34,208	216,123	161,980	1,608	413,919	1 to 90
Hedged strategies	—	108,941	459,382	31,508	599,831	2 to 95
Private capital	—	—	—	394,172	394,172	N/A
Real assets	—	8,339	—	279,927	288,266	N/A
Investment in LTP	—	—	501,417	23,005	524,422	30
Other	—	—	49,170	7,269	56,439	N/A
Total	<u>\$ 827,744</u>	<u>426,054</u>	<u>1,171,949</u>	<u>737,489</u>	<u>3,163,236</u>	

The Health System's investments are exposed to several risks, including liquidity, currency, interest rate, credit, and market risks. The Health System attempts to manage these risks through diversification, ongoing due diligence of fund managers, and monitoring of economic conditions. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Health System's consolidated financial statements.

The Health System may participate in programs to lend securities to brokers. To limit risk, collateral is posted and maintained daily at 100% to 105% of the market value of the lent securities depending on the type of security. Collateral generally is limited to cash, government securities, and irrevocable letters of credit. Both the Health System and security borrowers have the right to terminate a specific loan of securities at any time. The Health System receives lending fees and continues to earn interest and dividends on the loaned securities.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The Health System's total investment return for the years ended June 30 is detailed below:

	2016	2015
Net realized gains from sales of investments	\$ 101,980	103,443
Net unrealized losses	(218,760)	(47,012)
Total net (losses) gains	(116,780)	56,431
Investment income	24,619	18,566
Investment (losses) gains	(92,161)	74,997
Net realized losses on debt derivatives	(15,487)	(16,609)
Net unrealized (losses) gains on debt derivatives	(27,829)	654
Total investment return	\$ (135,477)	59,042

Investment return is classified in the consolidated statements of operations and changes in net assets as follows:

	2016	2015
Other operating revenue	\$ 6,060	6,009
Nonoperating (loss) income	(139,946)	53,063
(Decrease) increase in temporarily restricted net assets	(1,698)	29
Increase (decrease) in permanently restricted net assets	107	(59)
Total investment return	\$ (135,477)	59,042

Investment expenses charged directly to the Health System and netted in investment income were \$3,039 and \$3,103 for 2016 and 2015, respectively.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

A summary of assets limited as to use and externally restricted funds at June 30 is as follows:

	<u>2016</u>	<u>2015</u>
Assets limited as to use:		
Deposits with bond trustees	\$ 1,628	372
Investment securities posted as collateral for debt derivative marks-to-market	21,869	14,463
Cash and investments designated to settle transfer to the University	510,000	—
Cash, receivables and investments designated to settle estimated professional liability costs	34,785	38,136
Externally restricted assets	<u>57,816</u>	<u>57,579</u>
Total assets limited as to use	626,098	110,550
Less current portion of assets limited as to use	<u>(547,481)</u>	<u>(26,469)</u>
Assets limited as to use, excluding current portion	<u>\$ 78,617</u>	<u>84,081</u>

(6) Property and Equipment

A summary of property and equipment at June 30 is as follows:

	<u>2016</u>	<u>2015</u>
Buildings and utilities	\$ 1,601,864	1,552,767
Furnishings and equipment	810,080	766,733
Buildings and equipment under capital lease obligations	115,751	115,772
Computer software	<u>342,365</u>	<u>331,410</u>
Depreciable property and equipment	2,870,060	2,766,682
Less accumulated depreciation and amortization	<u>(1,567,358)</u>	<u>(1,432,970)</u>
Depreciable property and equipment, net	1,302,702	1,333,712
Land and land improvements	88,262	87,816
Construction in progress	<u>67,498</u>	<u>38,289</u>
Property and equipment, net	<u>\$ 1,458,462</u>	<u>1,459,817</u>

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The following table summarizes other property and equipment information for 2016 and 2015:

	2016	2015
Depreciation expense	\$ 149,603	144,112
Amortization of capital leases	2,857	2,863
Capital leases' accumulated amortization	21,465	18,628

(7) Indebtedness

A summary of indebtedness at June 30 is as follows:

Tax-exempt revenue bonds:

Series	Underlying structure	Mandatory tender date ¹	Fiscal year of maturity	Effective interest rate	Outstanding principal	
					2016	2015
2005A	Direct placement	6/1/2028	2028	1.25	\$ 100,615	107,380
2005B	Direct placement	5/29/2023	2028	0.90	32,570	107,380
2005C	Direct placement	5/30/2022	2028	1.08	—	107,380
2006A/B/C	Direct placement	3/19/2025	2039	0.93%	121,620	121,620
2012B	Direct placement	6/1/2023	2023	1.19	28,650	28,650
2016B	Direct placement	5/26/2026	2042	1.05	90,000	—
2016C	Direct placement	5/26/2026	2042	1.14	90,000	—
Total variable rate					463,455	472,410
2009A	Fixed rate	N/A	2042	5.06	—	180,000
2010A	Fixed rate	N/A	2042	4.93	120,000	120,000
2012A	Fixed rate	N/A	2042	4.73	279,570	281,515
2016A	Fixed rate	N/A	2028	2.08	167,075	—
Total fixed rate					566,645	581,515
Total indebtedness					1,030,100	1,053,925
Plus unamortized premium – net					53,599	16,716
Less unamortized debt issuance costs – net					(5,640)	(6,055)
Indebtedness, net					1,078,059	1,064,586
Less current portion					(22,275)	(22,250)
Indebtedness, net of current portion					\$ 1,055,784	1,042,336

¹Represents the date upon which the bonds are currently subject to mandatory tender by the bank.

On May 26, 2016, the Series 2016A, B, and C bonds (collectively, the Series 2016 bonds) were issued in the aggregate par amount of \$347,075 to (1) fund an escrow account that was irrevocably placed with a trustee to meet the principal and interest payments of the 2009A refunded bonds (\$180,000) until the first call date; (2) refund the 2005C privately placed bonds (\$107,380); and (3) refund a portion of the 2005B privately placed bonds (\$72,620). The Series 2016A bonds were issued at a premium of \$36,915. The refunding meets the requirements for derecognition of the bond liability. Therefore, neither the escrow nor the refunded bonds are included in the consolidated balance sheet as of June 30, 2016. The refunding transaction resulted in a

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

loss on extinguishment of debt of \$25,078 representing the write-off of the unamortized bond issue costs and discount on bonds payable related to the refunded bonds and the escrow funding requirements for principal and interest payments in excess of the face value of the 2009A refunded bonds.

On August 11, 2016, the Series 2016D bonds were issued in the par amount of \$125,100 to fund an escrow account that was irrevocably placed with a trustee to meet the principal and interest payments of the 2010A refunded bonds (\$120,000) until the first call date. The refunding meets the requirements for derecognition of the bond liability in fiscal year 2017. The refunding transaction resulted in a loss on extinguishment of debt to be recognized in fiscal year 2017 of \$18,328 representing the write-off of the unamortized bond issue costs related to the refunded bonds and the escrow funding requirements for principal and interest payments in excess of the face value of the 2010A refunded bonds.

All Duke University Health System, Inc. Tax Exempt Revenue Bonds were issued by the North Carolina Medical Care Commission (NCMCC). The Health System is obligated to make payments of principal and interest that correspond to the obligations of the NCMCC under the bond agreements. The aggregate annual maturities of indebtedness issued through the NCMCC for each of the five fiscal years subsequent to June 30, 2016 and thereafter are as follows:

2017	\$	22,275
2018		23,338
2019		23,760
2020		24,923
2021		25,969
Thereafter		<u>909,835</u>
Total	\$	<u><u>1,030,100</u></u>

The Health System must remain compliant with certain covenants and restrictions required by the trust indentures underlying its revenue bonds. These covenants include maintaining a required debt service coverage ratio and a specific liquidity target, as well as other nonfinancial restrictions.

(8) Derivatives and Other Financial Instruments

(a) Debt Derivatives

The Health System has executed derivative financial instruments in the normal course of managing its debt portfolio. The Health System has three interest rate swap agreements that are designed to synthetically decrease the variable rate exposure associated with its portfolio of indebtedness. In addition, the Health System has one basis swap designed to reduce the interest rate risk on variable rate indebtedness by utilizing the spread between the yield curves for taxable debt securities and tax-exempt municipal debt securities.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The following summarizes the general terms for each of the Health System's swap agreements:

Effective date	Associated debt series	Original term	Current notional amount	Health System pays	Health System receives
Interest rate:					
August 12, 1993	2012B	30 years	\$ 28,650	5.090%	SIFMA
May 19, 2005	N/A	23 years	301,835	3.601	61.520% of one-month LIBOR plus 0.28%
April 1, 2009	Portfolio ¹	30 years	127,505	3.746	67.000% of one-month LIBOR
Basis:					
July 6, 2001	N/A	20 years	400,000	SIFMA	72.125% of one-month LIBOR

¹ The notional amount of the April 2009 Interest Rate Swap declines coincident with the principal for the Series 2012C bonds, which were paid off in June 2015, and the Series 2006 bonds. The residual portion is \$5,885. The rate the Health System pays increased from 3.717% to 3.746% in June 2015.

The fair value of each swap is the estimated amount the Health System would receive or pay to terminate the swap agreement at the reporting date, taking into account current interest rates and the current creditworthiness of the swap counterparties. The fair value is included in derivative instruments on the consolidated balance sheets, while the change in fair value and the net settlement amount incurred on the swaps are included as a gain or loss in investment income on the consolidated statements of operations. The debt derivative instruments contain cross-collateralization provisions that require each counterparty to post collateral if the fair value meets certain thresholds.

The related financial information on each of these instruments at June 30 is as follows:

	Financial information related to debt derivative instruments					
	2016			2015		
	Fair value ¹	Unrealized gain or (loss) recognized in income ²	Realized gain or (loss) recognized in income ²	Fair value ¹	Unrealized gain or (loss) recognized in income ²	Realized gain or (loss) recognized in income ²
Derivatives not designated as hedging instruments under ASC Topic 815:						
August 1993:						
Interest rate swap	\$ (6,134)	28	(1,431)	(6,162)	291	(1,445)
May 2005:						
Interest rate swap	(52,869)	(8,320)	(9,996)	(44,549)	1,224	(10,354)
April 2009:						
Interest rate swap	(56,442)	(17,757)	(4,502)	(38,685)	(5,338)	(5,108)
July 2001:						
Basis swap	(1,742)	(1,780)	442	38	4,477	298
Total derivatives not designated as hedging instruments	\$ (117,187)	(27,829)	(15,487)	(89,358)	654	(16,609)

¹ Balance sheet classifications are noncurrent derivative instruments.

² The unrealized and realized gain (loss) on derivative instruments recognized in income is included in nonoperating investment (loss) income.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

Health System debt derivative instruments contain provisions requiring long term, unsecured debt to be maintained at specified credit ratings from Moody's Investor Service and Standard and Poor's Rating Service, major rating agencies. If the ratings of the Health System's debt were to fall below certain benchmarks, the counterparty could request immediate payment on derivatives in net liability positions. At June 30, 2016 and 2015, the Health System's long term debt ratings exceeded these requirements. The aggregate fair value of all derivative instruments with credit risk related contingent features that are in a liability position on June 30, 2016 and 2015 is \$117,187 and \$89,396, respectively, for which the Health System has posted collateral of \$21,869 and \$14,463, respectively, in the normal course of business. If the credit risk related features underlying these agreements were triggered on June 30, 2016 and 2015, the Health System would be required to post an additional \$95,318 and \$74,933, respectively, of collateral to its counterparties.

The 2009 interest rate swap is subject to a mandatory early termination right on April 2, 2018. When this right is exercised, the Health System may revoke it, at which time the Health System's collateral threshold reduces to \$0 for the remainder of the swap agreement.

The Health System is exposed to financial loss in the event of nonperformance by a counterparty to any of the financial instruments described above. General market conditions could impact the credit standing of the counterparties and, therefore, potentially impact the value of the instruments on the Health System's consolidated balance sheets. The Health System controls this counterparty risk by considering the credit rating, business risk, and reputation of any counterparty before entering into a transaction, monitoring for any change in credit standing of its counterparty during the life of the transaction, and requiring collateral be posted when predetermined thresholds are crossed. The Health System is also exposed to interest rate risk driven by factors influencing the spread between the taxable and tax-exempt market interest rates on its basis swap.

(b) *Investment Derivatives*

Investment strategies employed by DUMAC and investment managers retained by DUMAC incorporate the use of various derivative financial instruments with off balance sheet risk. DUMAC uses these instruments for a number of investment purposes, including hedging or altering exposure to certain asset classes and cost-effectively adding exposures to portions of the portfolio. Positions are expected to create gains or losses that, when combined with the applicable portion of the total investment portfolio, provide an expected result.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The following table provides the net notional amounts and fair value of the Health System's investment derivative activities at June 30, 2016 and 2015. It also provides the net loss amounts included in investment (loss) income during 2016 and 2015.

	<u>2016</u>	<u>2015</u>	<u>Location in financial statements</u>
Net notional amounts	\$ 2,278,740	1,681,276	N/A
Derivative assets	49,942	35,625	Investments
Derivative liabilities	(16,121)	(22,056)	Investments
Net loss	(25,485)	(35,128)	Investment (loss) income
Posted collateral	7,132	20,664	Short-term investments

(9) Fair Value Measurements

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer or settle a liability in an orderly transaction between market participants at the measurement date. ASC Topic 820, *Fair Value Measurement*, establishes a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The classification of an investment within the hierarchy is based upon the pricing transparency or ability to redeem the investment and does not necessarily correspond to the perceived risk of that investment. Inputs are used in applying various valuation techniques that are assumptions, which market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, operating statistics, specific and broad credit data, liquidity statistics, recent transactions, earnings forecasts, future cash flows, market multiples, discount rates, and other factors.

Assets and liabilities measured and reported at fair value are classified within the fair value hierarchy as follows:

Level 1 – Valuations based on quoted market prices in active markets.

Level 2 – Investments that trade in markets that are considered to be active, but are based on dealer quotations or alternative pricing sources supported by observable inputs or investments that trade in markets that are not considered to be active, but are valued based on quoted market prices, dealer quotations or alternative pricing sources supported by observable inputs.

Level 3 – Investments classified within Level 3 have significant unobservable inputs, as they trade infrequently or not at all.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The following is a summary of the levels within the fair value hierarchy for the Health System's financial assets and liabilities measured at fair value at June 30:

	<u>June 30, 2016</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Investments reported at NAV¹</u>
Assets:					
Cash and cash equivalents	\$ 305,636	305,636	—	—	—
Deposits with bond trustees	1,628	1,628	—	—	—
Short-term investments	259,728	126,056	133,672	—	—
Fixed income	319,195	16,044	262,311	—	40,840
Equities	413,919	120,915	4,795	—	288,209
Hedged strategies	599,831	44,736	5,294	—	549,801
Private capital	394,172	224	—	39,177	354,771
Real assets	288,266	13,160	540	4,468	270,098
Investment in LTP	524,422	—	—	—	524,422
Other	56,439	4,275	44,895	—	7,269
Total assets	<u>\$ 3,163,236</u>	<u>632,674</u>	<u>451,507</u>	<u>43,645</u>	<u>2,035,410</u>
Liabilities:					
Interest rate derivatives	\$ 115,445	—	115,445	—	—
Basis swap derivative	1,742	—	1,742	—	—
Total liabilities	<u>\$ 117,187</u>	<u>—</u>	<u>117,187</u>	<u>—</u>	<u>—</u>

¹ Fund investments reported at NAV as a practical expedient estimate of fair value at June 30, 2016.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

	<u>June 30, 2015</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Investments reported at NAV¹</u>
Assets:					
Cash and cash equivalents	\$ 451,375	451,375	—	—	—
Deposits with bond trustees	372	372	—	—	—
Short-term investments	170,837	24,949	145,888	—	—
Fixed income	376,508	60,391	275,420	280	40,417
Equities	548,793	190,262	(6,409)	—	364,940
Hedged strategies	629,311	9,086	925	—	619,300
Private capital	384,149	311	—	46,409	337,429
Real assets	274,483	796	(645)	3,283	271,049
Investment in LTP	140,011	—	—	—	140,011
Other	38,935	—	31,217	—	7,718
Total assets	<u>\$ 3,014,774</u>	<u>737,542</u>	<u>446,396</u>	<u>49,972</u>	<u>1,780,864</u>
Liabilities:					
Interest rate derivatives	\$ 89,396	—	89,396	—	—
Basis swap derivative	(38)	—	(38)	—	—
Total liabilities	<u>\$ 89,358</u>	<u>—</u>	<u>89,358</u>	<u>—</u>	<u>—</u>

¹ Fund investments reported at NAV as a practical expedient estimate of fair value at June 30, 2015.

The following methods and assumptions are used by the Health System in estimating the fair value of each class of financial instruments:

Cash and cash equivalents, patient accounts receivable, other receivables, accounts payable, accrued salaries, wages, and vacation payable and related accruals, estimated third-party payor settlements, and other liabilities: The carrying amounts approximate fair value because of the short maturity of these instruments.

Investments and deposits with bond trustees: Reported at fair value as of the date of the consolidated financial statements.

Capital lease obligations: Estimated as the present value of future minimum lease payments during the lease term.

Derivative instruments: Based on a mid-market position obtained from the swap counterparties. The Health System engages a management advisor to validate the reasonableness of the swaps' recorded fair value. Collateral posting requirements are determined each month using the mid-market positions.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The following tables present additional information about Level 3 assets measured at fair value. Both observable and unobservable inputs may be used to determine the fair value of positions that the Health System has classified within the Level 3 category. As a result, the unrealized gains and losses for assets within the Level 3 category in the tables below may include changes in fair value that were attributable to both observable and unobservable inputs.

	<u>Balance as of June 30, 2015</u>	<u>Net realized and unrealized gains (losses)</u>	<u>Purchases</u>	<u>Sales</u>	<u>Net transfers (from) to Level 3</u>	<u>Balance as of June 30, 2016</u>
Asset category:						
Fixed income	\$ 280	1	—	—	(281)	—
Private capital	46,409	(3,752)	8,724	(6,769)	(5,435)	39,177
Real assets	3,283	(1,019)	2,026	(1,261)	1,439	4,468
Total	<u>\$ 49,972</u>	<u>(4,770)</u>	<u>10,750</u>	<u>(8,030)</u>	<u>(4,277)</u>	<u>43,645</u>

	<u>Balance as of June 30, 2014</u>	<u>Net realized and unrealized gains (losses)</u>	<u>Purchases</u>	<u>Sales</u>	<u>Net transfers (from) to Level 3</u>	<u>Balance as of June 30, 2015</u>
Asset category:						
Fixed income	\$ —	2	280	(2)	—	280
Private capital	35,978	7,056	36,650	(33,275)	—	46,409
Real assets	5,256	(1,489)	4,017	(4,501)	—	3,283
Total	<u>\$ 41,234</u>	<u>5,569</u>	<u>40,947</u>	<u>(37,778)</u>	<u>—</u>	<u>49,972</u>

The change in net unrealized losses and gains related to Level 3 assets still held at June 30, 2016 and 2015 was \$(3,763) and \$15,755, respectively. During 2016, there were net transfers of \$4,277 between Level 3 investments and investments reported at NAV. There were no transfers between Level 1 and Level 2 investments during 2016 and 2015.

(10) Professional Liability Risk Program

The accompanying consolidated financial statements include the assets and liabilities of DCC, a wholly owned subsidiary of the Health System that insures a portion of the medical malpractice risks and patient general liability risks of Health System clinical providers and the PDC. Policy limits for the years ended June 30, 2016 and 2015 were \$110,000 per incident and \$155,000 in the aggregate. DCC limits its exposure to loss through reinsurance and excess loss agreements.

Estimated professional liability costs include the estimated cost of professional liability in 2016 and 2015 for reported claims incurred in the DCC program. DCC evaluates its estimated professional liability on a discounted actuarial basis. The discount rate at June 30, 2016 and 2015 is 3.5%. Accrued professional liability costs as of June 30, 2016 and 2015 amounted to \$34,785 and \$38,136, respectively. Cash, other receivables, and investments in this amount have been designated by the Health System to settle these claims. Also included in estimated professional liability costs are estimated claims incurred but not reported related to the Health System in the amounts of \$7,272 and \$7,720 as of June 30, 2016 and 2015, respectively.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The estimated liability for professional and patient general liability claims will be significantly affected if current and future claims differ from historical trends. While management monitors reported claims closely and considers potential outcomes as estimated by its actuaries when determining its professional and general liability accruals, the complexity of the claims, the extended period of time to settle the claims and the wide range of potential outcomes complicate the estimation. In the opinion of management, adequate provision has been made for this related risk.

(11) Benefit Plans

(a) *Pension and Retirement Plans*

Staff members of the Health System are eligible to participate in the University's defined contribution retirement plan. For the years ended June 30, 2016 and 2015, the Health System contributed approximately \$40,400 and \$38,700, respectively, to this plan, which is reported in salaries, wages, and benefits expense in the consolidated statements of operations. The Health System expects to contribute \$41,800 to this plan in fiscal year 2017.

In addition, other full time Health System employees participate in the University's noncontributory defined benefit pension plan (ERP). The benefits for the defined benefit plan are based on years of service and the employee's compensation during the last ten years of employment. The Health System expects to contribute \$13,800 to this plan in 2017. The allocation of the prepaid pension asset or pension liability between the University and the Health System is based primarily on compensation expense of covered employees.

(b) *Postretirement Medical Plan*

In addition to the Health System's pension plans, the Health System sponsors an unfunded, defined benefit postretirement medical plan that covers all its full time employees who elect coverage and satisfy the plan's eligibility requirements when they retire. The plan is contributory with retiree contributions established as a percentage of the total cost for retiree healthcare and for the healthcare of their dependents. The Health System pays all benefits on a current basis. Employees hired after June 30, 2002 are not eligible for Health System contribution to the cost of this benefit and must bear the full cost themselves if elected at retirement. As a healthcare provider, the Health System utilizes an incremental cost approach to determine its liability for the postretirement medical plan. The total liability reflects estimated additional costs to provide healthcare benefits to retirees within the Health System plus the full cost to provide healthcare benefits to retirees at facilities other than Health System facilities.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(c) Pension and Postretirement Medical Plans

The measurement date for both the defined benefit pension plan and the postretirement health benefit plan is June 30. Pension and postretirement expense, pension contributions, and the associated liabilities are included in the following tables, which provide a reconciliation of the changes in the Health System's portion of the plans' benefit obligations and fair value of assets for the years ended June 30:

	Pension benefits		Postretirement benefits	
	2016	2015	2016	2015
Reconciliation of projected benefit obligation:				
Obligation at beginning of year	\$ 1,007,657	963,230	66,141	63,151
Service cost	47,518	48,576	628	732
Interest cost	47,171	42,759	2,887	2,768
Actuarial loss (gain)	216,003	(20,608)	3,928	2,768
Benefits payments	(28,335)	(24,762)	(3,979)	(3,278)
Administrative expenses (estimated)	(1,685)	(1,538)	—	—
Projected benefit obligation at end of year	<u>\$ 1,288,329</u>	<u>1,007,657</u>	<u>69,605</u>	<u>66,141</u>
Reconciliation of fair value of plan assets:				
Fair value of plan assets at beginning of year	\$ 938,903	918,516	—	—
Actual (loss) return on plan assets	(29,329)	31,635	—	—
Employer contributions	15,163	15,074	—	—
Benefits payments	(28,335)	(24,762)	—	—
Administrative expenses	(1,838)	(1,560)	—	—
Fair value of plan assets at end of year	<u>\$ 894,564</u>	<u>938,903</u>	<u>—</u>	<u>—</u>
Funded status:				
Net accrued benefit liability	<u>\$ (393,765)</u>	<u>(68,754)</u>	<u>(69,605)</u>	<u>(66,141)</u>

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The pension and postretirement benefits expected to be paid for the ten years subsequent to June 30, 2016 are as follows:

	<u>Pension benefits</u>	<u>Postretirement benefits</u>
2017	\$ 30,410	3,405
2018	32,853	3,670
2019	35,684	3,764
2020	38,684	3,845
2021	42,434	4,005
2022–2026	276,391	20,947

The expected benefits to be paid are based on the same assumptions used to measure the Health System's benefit obligation at June 30 and include estimated future employee service.

The following table provides the components of net periodic benefit cost for the plans for the years ended June 30:

	<u>Pension benefits</u>		<u>Postretirement benefits</u>	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
Service cost	\$ 47,518	48,576	628	732
Interest cost	47,171	42,759	2,887	2,768
Expected return on plan assets	(66,433)	(58,948)	—	—
Amortization of prior-service cost (asset)	1,024	1,119	(1,225)	(1,756)
Recognized actuarial loss	—	3,071	—	—
Net periodic benefit cost	<u>\$ 29,280</u>	<u>36,577</u>	<u>2,290</u>	<u>1,744</u>

The prior-service costs are amortized on a straight-line basis over the average remaining service period of active participants. The expected amortization of prior-service cost for 2017 is \$847 and \$0 for the pension benefits and postretirement benefits, respectively. The expected amortization of actuarial losses (gains) for 2017 is \$14,133 for the pension benefits and (\$58) for postretirement benefits.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

Included in unrestricted net assets are the following amounts that have not been recognized in net periodic benefit cost at June 30, 2016 and 2015, respectively:

	Pension benefits		Postretirement benefits	
	2016	2015	2016	2015
Unrecognized prior service cost (asset)	\$ 3,901	4,925	—	(160)
Unrecognized actuarial losses (gains)	332,010	20,092	(15,636)	(20,629)

The assumptions used in the measurement of the Health System's benefit obligation and benefit cost are shown in the following table:

	Pension benefits				Postretirement benefits			
	2016		2015		2016		2015	
	Obligation	Cost	Obligation	Cost	Obligation	Cost	Obligation	Cost
Weighted average assumptions as of measurement date:								
Discount rate	3.50%	4.75%	4.75%	4.50%	3.50%	4.50%	4.50%	4.50%
Expected return on plan assets	N/A	7.5%	N/A	7.5%	N/A	N/A	N/A	N/A
Rate of compensation increase	2.5%	3.0%	3.0%	3.0%	N/A	N/A	N/A	N/A

In order to determine the benefit obligation as of June 30, 2016, the per capita costs of covered healthcare benefits was assumed to increase to 8.0% for non-Medicare eligible employees and 7.3% for Medicare eligible employees, declining to an ultimate annual rate of increase of 5.0% by 2023. The benefit expense for 2016 was driven by the rates used to determine the benefit obligation as of June 30, 2015, which were 8.0% for non-Medicare eligible employees and 7.3% for Medicare eligible employees, declining to an ultimate annual rate of 5.0% by 2023 for non-Medicare eligible employees and 2022 for Medicare eligible employees.

Assumed healthcare cost trend rates have a significant effect on the amounts reported for healthcare plans. A 1.0% change in assumed healthcare cost trend rates would have the following effects:

	One percentage increase	One percentage decrease
Effect on net periodic postretirement health care benefit cost	\$ 437	(367)
Effect on accumulated postretirement benefit obligation	8,602	(7,275)

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

The defined benefit pension plan's investment strategy focuses on maximizing total return and places limited emphasis on liability matching and no emphasis on generating income. Over the long term, the plan's average exposure target is 49% equity (public and private investments in companies), 13% commodity (direct commodity exposure, commodity related equities, and private investments in energy, power, infrastructure and timber), 11% real estate (private real estate and REITs), 13% credit (investment-grade bonds, corporate bonds, bank debt, asset backed securities, etc.), 5% interest rates (public obligations including treasuries and agencies) and 9% other (U.S. Treasury Inflation Protected Securities, non-U.S. inflation linked bonds and absolute return oriented hedge funds).

The expected return on plan assets is established at an amount that reflects the targeted asset allocation and expected returns for each component of the plan assets. The expected return on pension plan assets was developed using a stochastic forecast model of long term expected returns for each asset class. The rate is reviewed periodically and adjusted as appropriate to reflect changes in the expected market performance or in targeted asset allocation ranges.

The same levels of the fair value hierarchy as described in note 9 are used to categorize the pension plan assets. The fair value of the Health System's portion of assets available for pension benefits as of the June 30 measurement date is as follows:

	June 30,				Investments
	2016	Level 1	Level 2	Level 3	Reported
					at NAV¹
Asset category:					
Short-term investments	\$ 146,074	(330)	146,404	—	—
Fixed income	21,654	3,261	18,393	—	—
Equities	176,257	65,101	8,261	—	102,895
Hedged strategies	229,370	19,726	4,703	—	204,941
Private capital	173,580	115	—	16,501	156,964
Real assets	132,288	5,902	603	—	125,783
Other investments	15,341	(4,035)	19,376	—	—
	<u>\$ 894,564</u>	<u>89,740</u>	<u>197,740</u>	<u>16,501</u>	<u>590,583</u>

¹ Fund investments reported at NAV as a practical expedient estimate.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

	June 30, 2015	Level 1	Level 2	Level 3	Investments Reported at NAV¹
Asset category:					
Short-term investments	\$ 191,368	(803)	192,171	—	—
Fixed income	16,950	2,598	14,234	—	118
Equities	212,161	73,355	4,729	—	134,077
Hedged strategies	215,272	2,128	1,785	—	211,359
Private capital	167,745	111	—	18,818	148,816
Real assets	126,521	375	(262)	—	126,408
Other investments	8,886	(3,989)	12,875	—	—
	<u>\$ 938,903</u>	<u>73,775</u>	<u>225,532</u>	<u>18,818</u>	<u>620,778</u>

¹ Fund investments reported at NAV as a practical expedient estimate of fair value at June 30, 2015.

The following tables present additional information about the Level 3 pension benefit assets measured at fair value. Both observable and unobservable inputs may be used to determine the fair value of positions that the Health System has classified within the Level 3 category. As a result, the unrealized gains and losses for assets within the Level 3 category in the tables below may include changes in fair value that were attributable to both observable and unobservable inputs;

	Balance as of June 30, 2015	Net realized and unrealized gains (losses)	Purchases	Sales	Net transfers (from) to Level 3	Balance as of June 30, 2016
Private capital	\$ 18,818	(1,934)	3,557	(1,556)	(2,384)	16,501

	Balance as of June 30, 2014	Net realized and unrealized gains (losses)	Purchases	Sales	Net transfers (from) to Level 3	Balance as of June 30, 2015
Private capital	\$ 15,529	3,329	11,153	(11,193)	—	18,818

The change in net unrealized gains and losses related to Level 3 assets still held at June 30, 2016 and 2015 was \$(1,627) and \$7,684, respectively, and was recorded within change in funded status of defined benefit plans on the consolidated statements of changes in net assets. During 2016, there were net transfers of \$(2,384) between Level 3 and investments reported at NAV. There were no transfers between Level 1 and Level 2 investments during 2016 or 2015.

At June 30, 2016 and 2015, the accumulated benefit obligation for pension benefits is \$1,164,883 and \$899,442, respectively, as compared to the fair value of the plan assets of \$894,564 and \$938,903,

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

respectively. At June 30, 2016 and 2015, the plan is (under) over funded in relation to accumulated benefits by \$(270,319) and \$39,461, respectively.

(12) Functional Expenses

The Health System provides general healthcare services to residents within its geographic location. Expenses related to providing these services for each year ended June 30 are as follows:

	2016	2015
Health care services	\$ 2,131,791	2,007,780
General and administrative	725,389	687,001
	\$ 2,857,180	2,694,781

(13) Commitments and Contingencies

(a) Leases

Capital

The DRH facility lease, which is a forty year evergreen lease, is classified as a capital lease. The Health System made principal and interest payments for this lease of \$9,600 and \$9,512 in 2016 and 2015, respectively.

Operating

The Health System leases various machinery, equipment, healthcare facilities and office space under operating leases expiring at various dates through 2031. Total rental expense in 2016 for all operating leases is \$39,026, consisting of \$9,463 for machinery and equipment leases and \$29,563 for facilities and office space leases. Total rental expense in 2015 for all operating leases is \$42,344, consisting of \$10,193 for machinery and equipment leases and \$32,151 for facilities and office space leases.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

Commitments

The following is a schedule by year of future minimum lease payments under leases as of June 30, 2016 that have initial or remaining lease terms in excess of one year and future minimum capital lease payments:

	Capital leases	Operating leases	Total
Year ending June 30:			
2017	\$ 9,589	40,088	49,677
2018	9,744	33,432	43,176
2019	8,454	30,652	39,106
2020	7,267	24,994	32,261
2021	7,436	22,822	30,258
Thereafter	277,479	93,919	371,398
Total minimum lease payments	319,969	245,907	565,876
Less sublease rentals from the PDC	—	(29,607)	(29,607)
Total minimum lease payments less subleases	319,969	\$ 216,300	536,269
Less interest portion	(196,552)		
Capital lease obligations	123,417		
Less current portion capital lease obligations	(1,764)		
Capital lease obligations, net of current portion	\$ 121,653		

(b) Construction and Purchase Commitments

At June 30, 2016, open contracts for the construction of physical properties and other capital expenditures amounted to approximately \$57,100, and outstanding purchase orders for normal operating supplies and equipment amounted to approximately \$3,000.

(c) Line of Credit

The Health System has an agreement with a commercial bank for a line of credit providing unsecured advances to the Health System of up to \$50,000 for working capital needs. At June 30, 2016 and 2015, there was no balance due under the agreement. Management expects to renew this line of credit annually under the same general terms and conditions as the existing facility.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Notes to Consolidated Financial Statements

June 30, 2016 and 2015

(In thousands)

(d) *Self Insurance*

The Health System provides employee healthcare benefits, long term disability benefits, unemployment benefits, and workers' compensation benefits primarily through employer contributions, participant contributions, and excess loss insurance and manages those programs through third party administrators. In the opinion of management, adequate provision has been made for the related risks.

(e) *Legal Considerations*

Laws and regulations governing Medicare and Medicaid programs are complex and subject to interpretation. The Health System, in part through its Compliance Program, seeks to ensure compliance with such laws and regulations, and to rectify instances of noncompliance with governmental program (Medicare, Medicaid, and Tricare) rules. The Health System believes that it is in compliance with all applicable laws and regulations and is not aware of any pending or threatened investigations involving allegations of potential wrongdoing that would have a material effect on the Health System's consolidated financial statements. Compliance with such laws and regulations is subject to future government review and interpretation as well as significant regulatory action, including fines, penalties, and exclusion from the Medicare and Medicaid programs.

In addition to the above, the Health System is involved in various legal actions occurring in the normal course of business. While the final outcomes cannot be determined at this time, management is of the opinion that the resolution of these matters will not have a material adverse effect on the Health System's financial position.

(14) *Subsequent Events*

The Health System has evaluated subsequent events from the balance sheet date through September 29, 2016, the date at which the consolidated financial statements were issued, and determined that there are no other items to disclose.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Combined Group under April 13, 1999 Master Trust Indenture (MTI) and Consolidated

Combining and Consolidating Balance Sheet Information

June 30, 2016

(In thousands)

Assets	Duke University Hospital	Duke Regional Hospital	Duke Raleigh Hospital	Other MTI	MTI Combined Group	Duke Univ. Affiliated Physicians	Durham Casualty Company	Other Non-MTI	2016 total DUHS consolidated
Current assets:									
Cash and cash equivalents	\$ —	—	—	268,289	268,289	—	12,763	91	281,143
Patient accounts receivable, net	282,838	32,367	42,616	(29)	357,792	7,612	—	2,055	367,459
Other receivables	12,561	1,635	2,473	11,013	27,682	1,059	—	252	28,993
Inventories of drugs and supplies	57,391	7,118	12,885	3,450	80,844	533	—	1,021	82,398
Other assets	2,431	586	200	15,415	18,632	542	—	160	19,334
Short-term investments	—	—	—	237,859	237,859	—	—	—	237,859
Assets limited as to use	—	—	—	531,869	531,869	—	15,612	—	547,481
Total current assets	355,221	41,706	58,174	1,067,866	1,522,967	9,746	28,375	3,579	1,564,667
Assets limited as to use	—	—	—	59,444	59,444	—	19,173	—	78,617
Investments	—	—	—	1,882,117	1,882,117	—	142,750	—	2,024,867
Property and equipment, net	911,976	152,618	143,935	222,555	1,431,084	20,558	—	6,820	1,458,462
Due from the University	—	—	—	708	708	—	—	—	708
Other noncurrent assets	—	—	20,466	13,730	34,196	—	—	3,408	37,604
Total assets	\$ 1,267,197	194,324	222,575	3,246,420	4,930,516	30,304	190,298	13,807	5,164,925
Liabilities and Net Assets									
Current liabilities:									
Accounts payable	\$ 61,188	8,782	20,248	31,975	122,193	3,141	111	4,871	130,316
Due to (from) the University, net	145,887	30,215	22,434	328,618	527,154	(870)	620	(3,165)	523,739
Other current liabilities	14,805	3,460	1,949	19,460	39,674	948	—	1,313	41,935
Accrued salaries, wages, and vacation payable	66,604	13,581	12,529	40,751	133,465	13,626	—	10,743	157,834
Estimated third-party payor settlements, net	18,640	(1,459)	2,063	—	19,244	—	—	—	19,244
Current portion of postretirement and postemployment benefit obligations	—	—	—	6,087	6,087	—	—	—	6,087
Current portion of indebtedness	—	—	—	22,275	22,275	—	—	—	22,275
Current portion of capital lease obligations	—	—	—	1,764	1,764	—	—	—	1,764
Current portion of estimated professional liability costs	—	—	—	—	—	—	15,612	—	15,612
Total current liabilities	307,124	54,579	59,223	450,930	871,856	16,845	16,343	13,762	918,806
Other noncurrent liabilities	4,505	4,676	2,300	49,471	60,952	2,120	—	2,066	65,138
Postretirement and postemployment benefit obligations, net of current portion	—	—	—	465,020	465,020	—	—	—	465,020
Indebtedness, net of current portion	—	—	—	1,055,784	1,055,784	—	—	—	1,055,784
Capital lease obligations, net of current portion	—	—	—	121,653	121,653	—	—	—	121,653
Derivative instruments	—	—	—	117,187	117,187	—	—	—	117,187
Estimated professional liability costs, net of current portion	—	—	—	7,272	7,272	—	19,173	—	26,445
Total liabilities	311,629	59,255	61,523	2,267,317	2,699,724	18,965	35,516	15,828	2,770,033
Net assets:									
Unrestricted	955,568	135,069	161,052	921,287	2,172,976	11,339	154,782	(2,021)	2,337,076
Temporarily restricted	—	—	—	44,116	44,116	—	—	—	44,116
Permanently restricted	—	—	—	13,700	13,700	—	—	—	13,700
Total net assets	955,568	135,069	161,052	979,103	2,230,792	11,339	154,782	(2,021)	2,394,892
Total liabilities and net assets	\$ 1,267,197	194,324	222,575	3,246,420	4,930,516	30,304	190,298	13,807	5,164,925

See accompanying independent auditors' report.

**DUKE UNIVERSITY HEALTH SYSTEM, INC.
AND AFFILIATES**

Combined Group under April 13, 1999 Master Trust Indenture (MTI) and Consolidated

Combining and Consolidating Statement of Operations Information

Year ended June 30, 2016

(In thousands)

	Duke University Hospital	Duke Regional Hospital	Duke Raleigh Hospital	Other MTI	MTI Group eliminations	MTI Combined Group	Duke Univ. Affiliated Physicians	Durham Casualty Company	Other Non-MTI	Other eliminations	2016 total DUHS consolidated
Unrestricted revenues, gains, and other support:											
Net patient service revenue (net of contractual allowances and discounts)	\$ 2,181,516	288,046	406,436	41,519	—	2,917,517	114,957	—	17,486	(6)	3,049,954
Provision for bad debts	(43,455)	(10,179)	(14,214)	(489)	—	(68,337)	(3,780)	—	(724)	—	(72,841)
Net patient revenue less provision for bad debts	2,138,061	277,867	392,222	41,030	—	2,849,180	111,177	—	16,762	(6)	2,977,113
Other revenue	66,553	8,707	14,218	150,702	(104,717)	135,463	3,321	15,768	145,651	(116,982)	183,221
Total unrestricted revenues, gains, and other support	2,204,614	286,574	406,440	191,732	(104,717)	2,984,643	114,498	15,768	162,413	(116,988)	3,160,334
Expenses:											
Salaries, wages, and benefits	691,718	134,963	113,752	236,228	—	1,176,661	83,258	—	89,957	—	1,349,876
Medical supplies	495,562	42,979	114,711	42,210	—	695,462	10,179	—	6,387	—	712,028
Interest	31,545	5,217	3,903	533	—	41,198	—	—	—	—	41,198
Depreciation and amortization	82,307	11,934	15,008	39,954	—	149,203	1,204	—	2,053	—	152,460
Other operating expenses	673,611	87,321	100,260	(129,440)	(104,717)	627,035	21,841	7,716	62,014	(116,988)	601,618
Total expenses	1,974,743	282,414	347,634	189,485	(104,717)	2,689,559	116,482	7,716	160,411	(116,988)	2,857,180
Operating income (loss)	229,871	4,160	58,806	2,247	—	295,084	(1,984)	8,052	2,002	—	303,154
Nonoperating income (loss):											
Investment income (loss)	4	—	—	(129,217)	—	(129,213)	—	(10,733)	—	—	(139,946)
Loss on the extinguishment of debt	—	—	—	(25,078)	—	(25,078)	—	—	—	—	(25,078)
Other	87	45	—	8	—	140	—	—	1,489	—	1,629
Total nonoperating income	91	45	—	(154,287)	—	(154,151)	—	(10,733)	1,489	—	(163,395)
Excess (deficit) of revenues over expenses	229,962	4,205	58,806	(152,040)	—	140,933	(1,984)	(2,681)	3,491	—	139,759
Change in funded status of defined benefit plans	(120,376)	(26,068)	(19,630)	(142,416)	—	(308,490)	(7,557)	—	—	—	(316,047)
Net assets released from restrictions for purchase of property and equipment	2,615	—	—	20	—	2,635	—	—	—	—	2,635
Intracompany transfers, net	(68,745)	12,936	(31,021)	84,006	—	(2,824)	9,334	—	(6,510)	—	—
Transfers (to) from the University, net	(99,760)	12	21	(515,317)	—	(615,044)	(248)	—	718	—	(614,574)
(Decrease) increase in unrestricted net assets	\$ (56,304)	(8,915)	8,176	(725,747)	—	(782,790)	(455)	(2,681)	(2,301)	—	(788,227)

See accompanying independent auditors' report.