University of Pennsylvania

Consolidated Financial Statements
June 30, 2016 and 2015

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Report of Independent Auditors

To the Trustees of the University of Pennsylvania:

We have audited the accompanying consolidated financial statements of the University of Pennsylvania (the "University"), which comprise the consolidated statements of financial position as of June 30, 2016 and 2015, and the related consolidated statements of activities and of cash flows for the years then ended.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; 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 the 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 our 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, we consider internal control relevant to the University'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 University'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 the University of Pennsylvania as of June 30, 2016 and 2015, and their changes in net assets and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

PricewaterhouseCoopers LLP

September 23, 2016

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University of Pennsylvania
(in thousands)

	June 30, 2016	June 30, 2015
Assets		
Cash and cash equivalents	$ 1,127,602	$ 933,984
Accounts receivable, net	323,787	312,577
Patient receivables, net	646,878	464,309
Contributions receivable, net	242,849	271,574
Loans receivable, net	97,663	97,047
Other assets	279,887	200,927
Investments, at fair value	12,452,410	11,565,722
Property, plant and equipment, net	6,202,907	5,154,095
Total assets	$ 21,373,983	$ 19,000,235
Liabilities		
Accounts payable	$ 237,835	$ 188,870
Accrued expenses and other liabilities	1,650,439	1,429,762
Deferred income	210,331	170,099
Deposits, advances and agency funds	162,719	116,133
Federal student loan advances	80,796	80,349
Liabilities associated with investments	333,080	207,158
Accrued retirement benefits	1,625,740	1,127,085
Debt obligations	2,560,454	2,189,759
Total liabilities	6,861,394	5,509,215
Net assets		
Unrestricted	8,447,469	7,153,207
Temporarily restricted	2,629,729	3,026,715
Permanently restricted	3,435,391	3,311,098
	14,512,589	13,491,020
Total liabilities and net assets	$ 21,373,983	$ 19,000,235

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Activities

University of Pennsylvania
for the years ended June 30, 2016 and 2015
(in thousands)

	2016	2015
Unrestricted		
Revenue and other support:		
Tuition and fees, net	$ 903,076	$ 845,313
Commonwealth appropriations	32,927	31,514
Sponsored programs	904,337	909,869
Contributions and donor support	201,488	193,417
Investment income	439,405	402,059
Net patient service revenue	5,319,743	4,044,499
Sales and services of auxiliary enterprises	118,629	119,196
Other income	577,691	501,673
Independent operations	79,024	72,457
	8,576,320	7,119,997
Expenses:		
Compensation and benefits	4,728,829	3,892,829
Depreciation and amortization	452,748	366,290
Interest on indebtedness	78,634	73,092
Other operating expenses	2,879,776	2,390,904
	8,139,987	6,723,115
Increase in net assets from operations	**436,333**	**396,882**
Nonoperating revenue, net gains, reclassifications and other:		
(Loss) gain on investments, net	(112,464)	285,137
Investment income, net of amounts classified as operating revenue	(117,008)	(98,594)
Pension, OPEB and other, net	(326,234)	(339,626)
Contributions and donor support for capital related activities	1,413,635	40,207
Total nonoperating revenue, net gains, reclassifications and other	857,929	(112,876)
Increase in unrestricted net assets	1,294,262	284,006
Temporarily Restricted		
Contributions	202,633	91,440
(Loss) gain on investments, net	(97,930)	316,822
Investment income	15,086	32,238
Net assets released from restrictions	(516,775)	(374,057)
(Decrease) increase in temporarily restricted net assets	(396,986)	66,443
Permanently Restricted		
Contributions	136,471	151,909
(Loss) gain on investments, net	(12,691)	16,111
Investment income	513	714
Increase in permanently restricted net assets	124,293	168,734
Increase in net assets from nonoperating and restricted revenue, net gains, reclassifications and other	**585,236**	**122,301**
Increase in total net assets	**1,021,569**	**519,183**
Net assets, beginning of year	13,491,020	12,971,837
Net assets, end of year	$ 14,512,589	$ 13,491,020

The accompanying notes are an integral part of these consolidated financial statements.

University of Pennsylvania
for the years ended June 30, 2016 and 2015
(in thousands)

	2016	2015
Cash flows from operating activities:		
Increase in net assets	$ 1,021,569	$ 519,183
Adjustment to reconcile increase in net assets to net cash provided by operating activities:		
Depreciation and amortization	452,748	366,290
Provision for bad debts	222,591	236,210
Loss (gain) on investments, net	223,085	(618,070)
Loss on disposal of property, plant and equipment	4,562	57,392
Donated equipment	(341)	(939)
Proceeds from split-interest agreements designated for operations	22,508	22,530
Receipt of contributed securities	(49,593)	(67,154)
Proceeds from contributed securities	18,112	28,159
Receipt of contributions designated for the acquisition of long-lived assets and long-term investment	(1,507,309)	(169,937)
Pension, OPEB and other, net	321,672	286,515
Changes in operating assets and liabilities:		
Patient, accounts and loans receivable	(300,276)	(316,832)
Contributions receivable	29,298	58,091
Other assets	(16,797)	(33,545)
Accounts payable, accrued expenses and accrued retirement benefits	31,433	98,060
Deposits, advances and agency funds	46,737	(5,867)
Deferred income	40,232	4,400
Net cash provided by operating activities	560,231	464,486
Cash flows from investing activities:		
Purchase of investments	(7,428,846)	(10,443,898)
Proceeds from sale of investments	7,504,319	10,293,702
Purchase of property, plant and equipment	(767,373)	(793,332)
Cash acquired in Lancaster General Hospital (LGH) membership substitution	97,307	-
Net cash used by investing activities	(594,593)	(943,528)
Cash flows from financing activities:		
Proceeds from contributions received designated for the acquisition of long-lived assets and long-term investment	220,594	171,052
Proceeds from contributed securities received designated for the acquisition of long-lived assets and long-term investment	30,338	36,974
Federal student loan advances	447	411
Repayment of long-term debt	(103,366)	(61,883)
Proceeds from issuances of long-term debt	79,967	150,000
Net cash provided by financing activities	227,980	296,554
Net increase (decrease) in cash and cash equivalents	193,618	(182,488)
Cash and cash equivalents, beginning of year	933,984	1,116,472
Cash and cash equivalents, end of year	$ 1,127,602	$ 933,984
Supplemental disclosure of cash flow information:		
Cash paid for interest, net of amounts capitalized	$ 81,108	$ 78,483
Contributed securities received	49,593	67,154
Increase (decrease) in accrued property, plant and equipment	18,572	(37,142)
Assets contributed under split-interest agreements	-	5,024
Assets acquired in LGH membership substitution	1,984,574	-
Liabilities assumed in LGH membership substitution	696,689	-
Contribution received in LGH membership substitution	1,287,885	-

The accompanying notes are an integral part of these consolidated financial statements.

1. Significant Accounting Policies

Organization

The University Of Pennsylvania (the University), located in Philadelphia, Pennsylvania, is an independent, nonsectarian, not-for-profit institution of higher learning founded in 1740. The University Academic Component (Academic Component) provides educational services, primarily for students at the undergraduate, graduate, professional and postdoctoral levels and performs research, training and other services under grants, contracts and similar agreements with sponsoring organizations, primarily departments and agencies of the United States Government. The University also operates an integrated health care delivery system, the University of Pennsylvania Health System (UPHS). The University is a tax-exempt organization under Section 501(c) (3) of the Internal Revenue Code.

Basis of Presentation

The consolidated financial statements have been prepared on the accrual basis of accounting and include the accounts of the University and its subsidiaries, over which the University has a controlling financial interest or exercises control. All material transactions between the University and its subsidiaries are eliminated in consolidation. Investments in subsidiaries over which the University has the ability to exercise significant influence are reported using the equity method of accounting. Other investments in subsidiaries are reported using the cost method of accounting.

The net assets of the University are classified and reported as follows:

> Unrestricted - Net assets that are not subject to donor-imposed restrictions.
>
> Temporarily restricted - Net assets that are subject to legal or donor-imposed restrictions that will be met by actions of the University and/or the passage of time. These net assets include gifts donated for specific purposes and appreciation on permanent endowment, which is restricted by Pennsylvania law on the amounts that may be expended in a given year.
>
> Permanently restricted – The original value of donor restricted net assets, the use of which is limited to investment and can only be appropriated for expenditure by the University in accordance with the Pennsylvania Uniform Principal and Income Act (Pennsylvania Act).

Expenses are reported as a decrease in unrestricted net assets. Gains and losses on investments are reported as increases or decreases in unrestricted net assets unless their use is restricted by explicit donor stipulation or by law. Donor-restricted resources intended for the acquisition or construction of long-lived assets are initially reported as temporarily restricted net assets and released from restrictions from temporarily restricted net assets to unrestricted net assets when the asset is placed in service or in accordance with donor-specified terms.

Expirations of temporary restrictions on contributions and investment income, reported as Net assets released from restrictions, and the corresponding amounts are included in the Consolidated Statements of Activities as follows (in thousands):

Temporarily Restricted Net Assets	**2016**	**2015**
Net assets released from restrictions	$ (516,775)	$ (374,057)

Unrestricted Net Assets	**2016**	**2015**
Contributions and donor support	$ 125,241	$ 114,707
Investment income	241,766	219,143
Contributions and donor support for capital related activities	149,768	40,207
Net assets released from restrictions	$ 516,775	$ 374,057

Gains or losses associated with investment activities are included in net gains (losses) on investments. Gains or losses associated with all other activities, such as property, plant and equipment sales, debt retirements and pension and postretirement plan actuarial valuation adjustments are reported in Pension, Other post-retirement employee benefits (OPEB) and other, net.

Fair Value

The University values certain financial and non-financial assets and liabilities by applying the Financial Accounting Standards Board (FASB) pronouncement on *Fair Value Measurements.* The pronouncement defines fair value and establishes a framework for measuring fair value that includes a hierarchy that categorizes and prioritizes the sources used to measure and disclose fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The hierarchy is broken down into three levels based on inputs that market participants would use in valuing the asset or liability and are developed based on market data obtained from sources independent of the University as follows:

Level 1: Unadjusted quoted market prices in active markets for identical assets or liabilities.

Level 2: Unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or inputs other than quoted prices that are observable.

Level 3: Unobservable inputs for the asset or liability.

Inputs broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics and other factors. The University is required by the pronouncement to maximize the use of observable inputs (Levels 1 and 2) and minimize the use of unobservable inputs (Level 3). The University considers observable data to be that market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary and provided by independent sources that are actively involved in the relevant market. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to the University's perceived risk of that instrument.

Assets and liabilities are disclosed in the Consolidated Notes to Financial Statements within the hierarchy based on the lowest (or least observable) input that is significant to the measurement. The University's assessment of the significance of an input requires judgment, which may affect the valuation and categorization within the fair value hierarchy. The fair value of assets and liabilities using Level 3 inputs are generally determined by using pricing models or discounted cash flow methods, which all require significant management judgment or estimation.

As a practical expedient, the University is permitted to estimate the fair value of an investment in an investment company at the measurement date using the reported net asset value (NAV). Adjustment is required if the University expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with US generally accepted accounting principles (US GAAP). The University holds investments in its portfolio which are generally valued based on the most current NAV. This amount represents fair value of these investments at June 30, 2016 and 2015.

The University performs additional procedures including due diligence reviews on its investments in investment companies and other procedures with respect to the capital account or NAV provided to ensure conformity with US GAAP. The University has assessed factors including, but not limited to, managers' compliance with the *Fair Value Measurement* standard, price transparency and valuation procedures in place.

Cash and Cash Equivalents

Cash equivalents include short-term, highly liquid investments and are carried at cost which approximates fair value. Unrestricted short-term investments available for current operations with maturities of three months or less when purchased are classified as cash equivalents.

Investments, at Fair Value

The majority of the University's investments are held in the Associated Investments Fund (AIF). The AIF is invested in accordance with the investment policies set out by an Investment Board which has been appointed by the Trustees. The Office of Investments is responsible for the day-to-day management of the AIF including identifying, selecting and monitoring a variety of external investment managers to implement the strategic asset allocation set forth by the Investment Board. The AIF may include marketable and not readily marketable securities that it intends to hold for an indefinite period of time. The University also holds other investments which are not invested in the AIF due to various restrictions. The majority of these investments are in highly liquid short-term and equity type investments. Changes in the fair value of investments are reported in Gains or losses on investment in the Consolidated Statements of Activities. The following is a summary of the investments held in the AIF by asset allocation as well as investment risk:

Short-Term

Short-term investments include cash equivalents and fixed income investments with maturities of less than one year. Short-term investments are valued using observable market data and are categorized as Level 1 based on quoted market prices in active markets. The majority of these short-term investments are held in a US Treasury money market account.

Equity

Equity investments consist of direct holdings of public securities in managed accounts as well as exchange traded funds, commingled funds and limited partnerships. The securities held in managed accounts, along with exchange traded funds are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1. Commingled funds and limited partnerships are valued at NAV.

Debt

Debt investments consist of direct holdings of securities in managed accounts and limited partnerships. Securities such as US Treasuries, held in managed accounts, are valued based on quoted market prices in active markets and are categorized as Level 1. Securities such as corporate bonds, high yield bonds and bank loans, also held in managed accounts, are valued based on quoted market prices or dealer or broker quotations and are categorized as Level 2 or in the cases where inputs are unobservable as Level 3. Limited partnership interests are valued at NAV.

Absolute Return

Absolute return investments are made up of allocations to partnerships. The fund managers invest in a variety of securities, based on the strategy of the fund, which may or may not be quoted in an active market. Illiquid investments, if any, are generally designated as a side pocket by hedge fund managers and may be valued based on an appraised value, discounted cash flow, industry comparables or some other method. Limited partnership interests are valued at NAV.

Real Estate

Investments in real estate are primarily in the form of close-ended limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV. Real estate investments also include an open-ended real estate investment trust valued at NAV.

Private Equity

Investments in private equity are in the form of close-ended limited partnership interests. The fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV.

Natural Resources

Investments in natural resources are made up of limited partnership interests and securities in managed accounts. The limited partnership fund managers primarily invest in private investments for which there is no readily determinable market value. The fund manager may value the underlying private investments based on an appraised value, discounted cash flow, industry comparables or some other method. These limited partnership investments are valued at NAV. The University directly holds the securities held in the managed accounts through a custodial relationship. The securities held in the managed accounts are generally valued based on quoted market prices in active markets obtained from exchange or dealer markets for identical assets, and are accordingly categorized as Level 1.

Derivatives

The University, in the normal course of business, utilizes derivative financial instruments in connection with its investment activity. Derivatives utilized by the University include futures, options, swaps and forward currency contracts and are reflected at fair value following the definition of Level 1 and 2 assets and liabilities as previously described. Investments in derivative contracts are subject to foreign exchange and equity price risks that can result in a loss of all or part of an investment. In addition, the University is also subject to additional counterparty risk should its counterparties fail to meet the terms of their contracts.

Investment Risks

The University's investing activities expose it to a variety of risks, including market, credit and liquidity risks and attempts to identify, measure and monitor risk through various mechanisms including risk management strategies and credit policies.

Market risk is the potential for changes in the fair value of the University's investment portfolio. Commonly used categories of market risk include currency risk (exposure to exchange rate differences between functional currency relative to other foreign currencies), interest rate risk (changes to prevailing interest rates or changes in expectations of futures rates) and price risk (changes in market value other than those related to currency or interest rate risk, including the use of NAV provided).

Credit risk is the risk that one party to a financial investment will cause a financial loss for the other party by failing to discharge an obligation (counterparty risk).

Liquidity risk is the risk that the University will not be able to meet its obligations associated with financial liabilities.

Endowment

The University's endowment consists of 5,936 donor-restricted permanent or term endowment funds and 876 unrestricted endowment funds established by management for a variety of purposes. The University reports all endowment investments at fair value. The majority of the endowment funds of the University have been pooled in the University's AIF, which is invested in equities, bonds, hedge funds, natural resources, private equity and real estate limited partnerships. The endowment funds not pooled in the AIF are primarily invested in equities and bonds.

The Commonwealth of Pennsylvania has not adopted the Uniform Management of Institutional Funds Act (UMIFA) or the Uniform Prudent Management of Institutional Funds Act (UPMIFA). Rather, the Pennsylvania Act governs the investment, use and management of the University's endowment funds.

The Pennsylvania Act does not require the preservation of the fair value of a donor's original gift as of the gift date of a donor-restricted endowment fund, absent explicit donor stipulations to the contrary. However, based on its interpretation of the Pennsylvania Act and relevant accounting literature, the University classifies as permanently restricted net assets for reporting purposes: (i) the original value of gifts donated to the permanent endowment; (ii) the original value of subsequent gifts to the permanent endowment; and (iii) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the University. The Pennsylvania Act allows a nonprofit to elect to appropriate for expenditure between 2% and 7% of the endowment fair value, determined at least annually and averaged over a period of three or more preceding years.

In accordance with the Pennsylvania Act, the University has elected to adopt and follow an investment policy seeking a total return for the investments held by the AIF, whether the return is derived from appreciation of capital or earnings and distributions with respect to capital or both. The endowment spending policy which the Board of Trustees has elected to govern the expenditure of funds invested in the AIF is designed to manage annual spending levels and is independent of the cash yield and appreciation of investments for the year. For Fiscal Year 2016, the spending rule target payout was based on the sum of: (i) 70% of the prior fiscal year distribution adjusted by an inflation factor; and (ii) 30% of the prior fiscal year-end fair value of the AIF, lagged one year, multiplied by 5.9% for financial aid funds and 4.7% for all other funds. The payout or allocation to operations exceeded actual income, net of expenses and net of income permanently reinvested, by $365,366,000 in 2016 and by $336,543,000 in 2015.

Effective for Fiscal Year 2017, the University revised its spending rule formula to reduce the target spending rate on financial aid endowments to 5.3% and increase the target spending rate on non-financial aid endowments to 5.0%

Property, Plant and Equipment

Property, plant and equipment ('PPE') is reported net of related depreciation. Donated PPE is reported based on estimated fair value at the date of acquisition. Capital leases are categorized as buildings or equipment and are reflected at the lower of the net present value of the minimum lease payments or the fair value of the leased asset at the inception of the lease. All other PPE is reported at cost. Depreciation is computed on the straight-line method over the estimated useful lives of the assets or the shorter of the lease term or estimated useful life of the asset for capital lease assets. Contributions of rare books and other collectibles are not recorded for financial statement presentation, while purchases are recorded as Other operating expenses on the Consolidated Statement of Activities in the period acquired.

Split-Interest Agreements

The University's split-interest agreements with donors consist primarily of irrevocable charitable remainder trusts, charitable gift annuities, pooled income funds, perpetual trusts and charitable lead trusts. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements.

The University recognizes assets contributed to charitable remainder trusts, charitable gift annuities and pooled income funds, where it serves as trustee, at fair value, recognizes a liability to the beneficiaries based on the present value of the estimated future payments to beneficiaries to be made over the estimated remaining life of those beneficiaries using current market rates at the date of the contribution, and recognizes the difference as contribution revenue. Subsequently, the trust assets, invested in equity and debt securities, are measured at fair value at quoted market prices, and are categorized as Level 1, with the changes reported as an adjustment to Investments, at fair value on the Consolidated Statements of Position and Gains or losses on investment on the Consolidated Statements of Activities. Liabilities to beneficiaries are revalued based on current market rates, and are categorized as Level 2, with the changes reported as an adjustment to Liabilities associated with investments on the Consolidated Statements of Position and Gains or losses on investments on the Consolidated Statements of Activities.

Charitable remainder trust assets, where the University does not serve as trustee, are initially valued using the current fair value of the underlying assets, using observable market inputs based on its beneficial interest in the trust, discounted to a single present value using current market rates at the date of the contribution. The initially contributed assets are categorized as Level 3, and reported as Investments, at fair value on the Consolidated Statements of Position and Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Position and Gains or losses on investments on the Consolidated Statements of Activities. The primary unobservable input used in the fair value measurement of the Charitable remainder trust assets is the discount rate. Significant fluctuation in the discount rates utilized in this calculation could result in a material change in fair value.

Perpetual trust assets are initially valued at the current fair value of the underlying assets using observable market inputs based on its beneficial interest in the trust. The initially contributed assets are categorized as Level 3 and are reported as Investments, at fair value on the Consolidated Statements of Position and as Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Position and Gains or losses on investments on the Consolidated Statements of Activities. The primary unobservable inputs used in the fair value measurement of the perpetual trust assets are the underlying securities held by the trust. Significant fluctuation in the market value of these underlying securities could result in a material change in fair value.

Charitable lead trust assets contributed prior to July 1, 2010 were initially valued based on estimated future payments discounted to a single present value using current market rates at the date of the contribution, matched to the payment period of the agreement. Effective July 1, 2010, the University elected to fair value new charitable lead trust assets contributed under the FASB Fair Value Option standard to more appropriately approximate the value that would be received if the right to these future payments could be sold. The University values these assets by discounting future cash flows using current market rates at the measurement date, matched to the payment period of the agreement. The initially contributed assets are categorized as Level 3, and reported as Investments, at fair value on the Consolidated Statements of Position and as Contribution revenue on the Consolidated Statements of Activities. Subsequent valuation follows this same approach with changes in fair value reported as an adjustment to Investments, at fair value on the Consolidated Statements of Position and Gains or losses on investments on the Consolidated Statements of Activities. The primary unobservable input used in the fair value measurement of the Charitable lead trust assets is the discount rate. Significant fluctuation in the discount rates utilized in this calculation could result in a material change in fair value.

Income Taxes

The University is a tax exempt organization under Section 501 (c) (3) of the Internal Revenue Code. Most of its activities and income are related to its exempt purposes and are exempt from federal and state income taxes. None of its activities and income is subject to Pennsylvania income tax. Unrelated activities and income, including certain sales of healthcare related products and services and certain sales of computer hardware and software, are subject to federal "Unrelated Business Income Tax."

The University regularly evaluates its tax position and does not believe it has any uncertain tax positions that require disclosure or adjustment to the consolidated financial statements.

Tuition and Fees

The University maintains a policy of offering qualified undergraduate applicants admission to the University without regard to financial circumstance. This policy provides financial aid to eligible students in the form of direct grants and employment during the academic year. The University maintains an all-grant aid program whereby any qualified undergraduate student with demonstrated financial need receives an all-grant aid package which includes only grants and a work-study award. Students may still borrow at their discretion to supplement their aid packages. Tuition and fees have been reduced by certain grants and scholarships in the amount of $322,367,000 in 2016 and $306,831,000 in 2015.

Sponsored Programs

The University receives grant and contract revenue from governmental and private sources. In 2016 and 2015, grant and contract revenue earned from governmental sources totaled $696,148,000 and $705,987,000, respectively. The University generally recognizes revenue associated with the direct and the applicable indirect costs of sponsored programs as the related costs are incurred. The University negotiates its federal indirect rate with its cognizant federal agency. Indirect costs recovered on federally-sponsored programs are generally based on predetermined reimbursement rates which are stated as a percentage and distributed based on the modified total direct costs incurred. Indirect costs recovered on all other grants and contracts are based on rates negotiated with the respective sponsors. Funds received for sponsored research activity are subject to audit. Based upon information currently available, management believes that any liability resulting from such audits will not materially affect the financial position or operations of the University.

Contributions

Unrestricted Contributions and donor support includes net assets released as a result of corresponding expenditures which met donor imposed restrictions. Contributions, including unconditional promises to donate cash and other assets, are recognized as revenue in the period received and are reported as increases in the appropriate net asset category based on donor restrictions. Contributions designated for the acquisition of long-lived assets and long-term investment are reported in Nonoperating revenue, net gains, reclassifications and other. Unconditional pledges received prior to July 1, 2010 are recognized at their estimated net present value using current market rates, at the date of the pledge, ranging from 3.97% to 5.64%, net of an allowances for doubtful amounts, and are classified in the appropriate net asset category.

Effective July 1, 2010, the University elected to fair value new unconditional pledges received under the FASB Fair Value Option standard to more appropriately approximate the value that would be received if the right to these future payments could be sold. The University values these assets by discounting future cash flows using current market rates at the measurement date, ranging from 1.34% to 2.70%, matched to the payment period of the agreement, and accordingly categorizes these assets as Level 3. The primary unobservable input used in the fair value measurement of the University's Contributions receivable is the discount rate. Significant fluctuation in the discount rates utilized in this calculation could result in a material change.

Net Patient Service Revenue

Net patient service revenue is derived from UPHS patient services and is accounted for at established rates on the accrual basis in the period the service is provided. Patient service revenue is net of charity care and community services. Certain revenue received from third-party payors is subject to audit and retroactive adjustment. Any changes in estimates under these contracts are recorded in operations currently.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Recent Authoritative Pronouncements

In April 2015, the FASB issued a standard on Simplifying the Presentation of Debt Issuance Costs. This standard requires all costs incurred to issue debt to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability. The standard is effective for fiscal years beginning after December 15, 2015. University management is evaluating the impact this will have on the consolidated financial statements beginning in Fiscal Year 2017.

In May 2014, the FASB issued a standard on Revenue from Contracts with Customers. This standard implements a single framework for recognition of all revenue earned from customers. This framework ensures that entities appropriately reflect the consideration to which they expect to be entitled in exchange for goods and services by allocating transaction price to identified performance obligations and recognizing revenue as performance obligations are satisfied. Qualitative and quantitative disclosures are required to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The standard is effective for fiscal years beginning after December 15, 2017. University management is evaluating the impact this will have on the consolidated financial statements beginning in Fiscal Year 2019.

In August 2016, the FASB issued a standard on the Presentation of Financial Statements of Not-for-Profit Entities. The new guidance requires improved presentation and disclosures to help not-for-profits provide more relevant information about their resources to donors, grantor, creditors and other users. The standard is effective for fiscal years beginning after December 15, 2017. University management is evaluating the impact this will have on the consolidated financial statements beginning in Fiscal Year 2019.

In February 2016, the FASB issued a standard on Leases. This standard requires lessees to recognize assets and liabilities for the rights and obligations created by leases with terms in excess of 12 months. The recognition, measurement, and presentation of expenses and cash flows arising from a lease will primarily depend on its classification as a finance or operating lease. The accounting by lessors remains largely unchanged. This standard is effective for fiscal years beginning after December 15, 2018. University management is evaluating the impact this will have on the consolidated financial statements beginning in Fiscal Year 2020.

2. University of Pennsylvania Health System - Summarized financial and related information

The Trustees of the University formed Penn Medicine, the governance structure which oversees the activities of UPHS and the University of Pennsylvania Perelman School of Medicine (PSOM). The governing body operates, oversees and coordinates the academic, research and clinical missions of Penn Medicine.

UPHS is comprised of the following operating entities: Clinical Practices of the University of Pennsylvania; Clinical Care Associates; Hospital of the University of Pennsylvania; Penn Presbyterian Medical Center; Pennsylvania Hospital of the University of Pennsylvania Health System; Chester County Hospital and Health System; Wissahickon Hospice of the University of Pennsylvania Health System; Franklin Casualty Insurance Company, a wholly owned Risk Retention Group; and, Quaker Insurance Company Ltd., a wholly owned offshore captive insurance company, (collectively referred to as RRG/Captive). In August 2015, through a membership substitution, Lancaster General Health (LGH) became a part of UPHS.

Throughout the year, certain transactions (primarily billings for allocations of common costs, physicians' salaries and benefits, certain purchased services and support for PSOM) are conducted between UPHS and the University. Nonoperating, net, as shown below, includes transfers from UPHS to the University of $159,055,000 and $113,279,000 in 2016 and 2015, respectively, to further the research and educational activities of PSOM and $1,748,000 and $34,516,000 in 2016 and 2015, respectively, for other activities. In addition, UPHS recognized operating expenses of $20,648,000 and $20,676,000 in 2016 and 2015, respectively, to support academic operating activities in the clinical departments of PSOM. The effect of all these transactions is included in the following summarized financial information of UPHS as of and for the years ended June 30, 2016 and 2015 (in thousands):

	2016	2015
Net patient service revenue	$ 5,545,187	$ 4,283,346
Provision for bad debt	(218,621)	(231,955)
Net patient service revenue less bad debts	5,326,566	4,051,391
Other revenue	375,249	274,262
Total expenses	(5,282,693)	(3,980,490)
Excess of revenue over expenses from operations	419,122	345,163
Nonoperating, net	843,161	(188,797)
Increase in net assets	$ 1,262,283	$ 156,366
Total current assets	$ 1,522,213	$ 1,062,050
Assets whose use is limited:		
Held by trustees	66,596	7,686
RRG/ Captive	177,873	127,852
Donor restricted and other	538,122	545,235
Designated	2,009,628	1,223,513
Property and equipment, net	3,082,914	2,187,607
Investments and other assets	933,134	820,253
Total assets	$ 8,330,480	$ 5,974,196
Total current liabilities	$ 808,518	$ 634,653
Long-term debt, net of current portion	1,482,176	1,121,910
Other liabilities	2,017,880	1,458,010
Total liabilities	$ 4,308,574	$ 3,214,573
Net assets		
Unrestricted	$ 3,479,899	$ 2,211,529
Temporarily restricted	367,159	382,287
Permanently restricted	174,848	165,807
Total net assets	$ 4,021,906	$ 2,759,623
Total liabilities and net assets	$ 8,330,480	$ 5,974,196

Net Patient Service Revenue

Net Patient Service Revenue ('NPSR'), net of contractual allowances and discounts, is as follows for the years ended June 30, 2016 and 2015 (in thousands):

	2016	2015
Third Party Payors	$ 5,378,831	$ 4,069,179
Self-Pay	166,356	214,167
Total All Payors	$ 5,545,187	$ 4,283,346

NPSR for the years ended June 30, 2016 and 2015 is derived from the following payors:

	2016	2015
Medicare (including Managed Medicare)	30%	28%
Medicaid (including Managed Medicaid)	11%	12%
Managed Care	29%	32%
Independence Blue Cross (IBC)	23%	19%
Commercial	4%	4%
Self Pay	3%	5%
	100%	100%

UPHS has agreements with the following third-party payors that provide for payments at amounts that differ from its established rates:

Effective July 1, 2012, UPHS and IBC reached agreement on terms of a four-year agreement. Payments made for inpatient services provided to IBC traditional and managed care subscribers are effected on a per case rate basis for most services. Payment for outpatient services is principally based upon negotiated fee schedules. Hospital and physician rates also provide for annual inflationary increases. In addition, incentives are paid for high performance with regard to clinical outcomes and patient quality. The agreement continues unless terminated by the parties.

During 2015, UPHS and Aetna reached agreement on terms of a new five-year agreement. The terms of the agreement provide payments for inpatient hospital services on a per case rate basis. Payments for outpatient services continue to be predominantly based upon negotiated fee schedules.

UPHS also has reimbursement agreements with certain commercial insurance carriers, health maintenance organizations and preferred provider organizations. The basis for reimbursement under these agreements includes prospectively determined rates per discharge, discounts from established charges and prospectively determined per diem rates.

Charity Care

UPHS provides services to patients, who meet certain criteria under its charity care policy, without charge or at amounts less than UPHS' established rates. Because UPHS does not pursue collections, such amounts have been excluded from NPSR. UPHS estimates the costs of providing charity care services based on data derived from a combination of UPHS' cost accounting system and the ratio of costs to charges. Of the Total expenses reported above by UPHS, an estimated $16,282,000 and $7,077,000 were incurred as a result of providing services to charity patients for the years ended June 30, 2016 and 2015, respectively.

Provision for Bad Debt

The provision for bad debt is based on management's assessment of expected net collections considering economic conditions, historical experience, trends in health care coverage and other collection indicators. Included in this assessment are patients who do not have health insurance or do not meet the criteria to qualify for UPHS' charity care policy. UPHS pursues collection of these amounts, however certain amounts are deemed to be uncollectible. Periodically throughout the year, management assesses the adequacy of the allowances for uncollectible accounts based upon historical write-off experience by payor category, including not covered by insurance, and history of cash collections. The results of this review are then used to make any modifications to the provision for bad debt to establish an appropriate allowance for uncollectible accounts. No significant modifications were made for Fiscal Years 2016 or 2015. After satisfaction of amounts due from insurance and reasonable efforts to collect from patients have been exhausted, UPHS follows established guidelines for placing certain past-due patient balances with collection agencies, subject to terms of certain restrictions on collection efforts as determined by UPHS. Account receivables are written off after collection efforts have been followed in accordance with UPHS' policy. UPHS' allowances for uncollectible accounts totaled $220,700,000 and $178,299,000 at June 30, 2016 and 2015, respectively.

LGH Membership Substitution

Effective August 1, 2015, UPHS and LGH entered into an affiliation agreement whereby UPHS became the sole corporate member of LGH. LGH operates three hospitals in South Central Pennsylvania, including Lancaster General Hospital, a 533-bed general acute care hospital, Women & Babies Hospital, a 98-bed facility specializing in women's health and maternity services, and Lancaster Rehabilitation Hospital, a 59-bed rehabilitation hospital, as well as 14 outpatient centers, 3 urgent care sites, and a physician practice network with nearly 200 primary care and specialty practices at 40 practice sites.

No consideration was exchanged for the net assets contributed and costs are expensed as incurred. UPHS recorded non-operating contribution income of $1,287,885,000 in fiscal year 2016 reflecting the fair value of the contributed net assets of LGH on August 1, 2015, of which, $11,289,000 and $12,729,000 were recorded in temporarily restricted and permanently restricted net assets, respectively.

Total fair value of assets, liabilities and net assets contributed by LGH and its subsidiaries at August 1, 2015 were as follows (in thousands):

	August 1, 2015
Cash and cash equivalents	$ 97,307
Patients accounts receivable, net	99,793
Prepaid expenses and other current assets	56,839
Assets limited as to use	160,855
Property, plant and equipment, net	702,845
Other assets	866,935
Total assets acquired	$ 1,984,574
Accounts payable and accrued expense	$ 28,668
Accrued compensation and related benefits	269,072
Estimated third-party settlements	12,484
Long-term debt	306,703
Other liabilities	79,762
Total liabilities assumed	$ 696,689
Unrestricted	$ 1,263,867
Temporarily restricted	11,289
Permanently restricted	12,729
Total net assets	$ 1,287,885
Total liabilities and net assets	$ 1,984,574

A summary of the pro-forma combined financial results of LGH and UPHS for the years ended June 30, 2016 and 2015, as if the affiliation had occurred on July 1, 2014, is as follows (unaudited and in thousands):

	2016	2015
Total operating revenue	$ 5,788,466	$ 5,363,237
Total operating expense	5,365,082	4,970,213
Excess of revenue over expenses from operations	$ 423,384	$ 393,024
Non-operating (loss) gain	(24,554)	114,429
Pension and other postretirement plan adjustments	(282,763)	(173,007)
Transfers and other	(135,902)	(140,949)
(Decrease) increase in unrestricted net assets	$ (19,835)	$ 193,497

3. Accounts Receivable

The major components of receivables, net of allowances for doubtful accounts of $15,209,000 and $13,480,000 at June 30, 2016 and 2015, respectively, are as follows (in thousands):

	2016	2015
Sponsored research	$ 123,735	$ 141,507
Malpractice	91,350	80,951
Student	12,798	17,579
Trade	44,318	36,508
Investment income	3,843	6,011
Other	47,743	30,021
Total Accounts receivable	$ 323,787	$ 312,577

Accounts receivable are reported at their net realizable value.

4. Loans Receivable

Loans receivable, and related allowances for doubtful accounts, consist of the following at June 30, 2016 and 2015 (in thousands):

2016	Receivable	Allowance	Net
Student Loans:			
Federally-sponsored	$ 72,836		$ 72,836
Other	17,612	$ 3,803	13,809
Total Student loans	$ 90,448	$ 3,803	$ 86,645
Other	11,247	229	11,018
Total	$ 101,695	$ 4,032	$ 97,663

2015	Receivable	Allowance	Net
Student Loans:			
Federally-sponsored	$ 72,313		$ 72,313
Other	17,376	$ 3,675	13,701
Total Student loans	$ 89,689	$ 3,675	$ 86,014
Other	11,250	217	11,033
Total	$ 100,939	$ 3,892	$ 97,047

Loans receivable primarily consists of student loans. Student loans include federally-sponsored student loans and donor-restricted student loans with mandated interest rates and repayment terms. The federally-sponsored student loans represent amounts due from current and former students under various Federal Government funded loan programs, including Perkins and other health professional programs offered to graduate and undergraduate students. Loans disbursed under these programs are able to be assigned to the Federal Government upon default by the borrower, and therefore, no related allowance is considered necessary. Funding received under these programs is ultimately refundable to the Federal Government in the event the University no longer participates and accordingly is reported as a liability in Federal student loan advances in the Consolidated Statements of Position. Determination of the fair value of student loans receivable is not practicable.

Loans receivable are reported at their net realizable value. The University regularly assesses the adequacy of the allowances for credit losses of its loans by performing ongoing evaluations, including such factors as aging, differing economic risks associated with each loan category, financial condition of specific borrowers, economic environment in which the borrowers operate, level of delinquent loans, value of collateral and existence of guarantees or indemnifications.

5. Contributions Receivable

A summary of contributions receivable at June 30, 2016 and 2015, is as follows (in thousands):

	2016	2015
Unconditional promises expected to be collected in:		
Less than one year	$ 118,920	$ 151,446
One year to five years	134,532	144,036
Over five years	38,853	23,827
	292,305	319,309
Less: Discount	(16,107)	(15,806)
Less: Allowances for doubtful amounts	(33,349)	(31,929)
Total Contributions receivable, net	$ 242,849	$ 271,574

At June 30, 2016 and 2015, the University has outstanding unrecorded conditional promises to give, including non-legally binding bequests, of $300,919,000 and $292,691,000, respectively. When they become unconditional promises to give or are received in cash, they will be recorded and generally will be restricted for operations, endowment and capital projects as stipulated by the donors.

6. Investments, at Fair Value

In Fiscal Year 2015, the University adopted the standard on *Fair Value Measurement and Disclosure Requirements in Certain Entities That Calculated Net Asset Value (NAV) per Share*. As a result of the adoption, investments reported at net asset value per share, as a practical expedient, are no longer included within levels 1, 2, or 3 in the fair value hierarchy.

A summary of investments, including the AIF, measured at fair value in accordance with the *Fair Value Measurements* standard, as of June 30, 2016 and June 30, 2015 is as follows (in thousands):

Assets	Level 1	Level 2	Level 3	Investments at NAV	2016
Short-term	$ 1,144,489				$ 1,144,489
Equity:					
US equities	1,169,071			$ 870,155	2,039,226
International equities	456,661			516,157	972,818
Emerging market equities	105,645	$ 6,915		871,350	983,910
Total Equity	1,731,377	6,915		2,257,662	3,995,954
Debt:					
US treasuries	1,112,101	64,229			1,176,330
Corporate bonds	105,474	186,214	3,542		295,230
High yield				439	439
Total Debt	1,217,575	250,443	3,542	439	1,471,999
Split-interest agreements	71,723		$ 400,045		471,768
Absolute return				2,622,488	2,622,488
Real estate		1,090	136,139	539,075	676,304
Private equity			8,698	1,570,942	1,579,640
Natural resources	297,708			174,718	472,426
Derivative instruments	867	13,937			14,804
Other			2,538		2,538
Total assets	$ 4,463,739	$ 272,385	$ 550,962	$ 7,165,324	$ 12,452,410

Assets	Level 1	Level 2	Level 3	Investments at NAV	2015
Short-term	$ 793,370				$ 793,370
Equity:					
US equities	949,346			$ 893,408	1,842,754
International equities	395,287			666,056	1,061,343
Emerging market equities	152,088	$ 4,964		905,680	1,062,732
Total Equity	1,496,721	4,964		2,465,144	3,966,829
Debt:					
US treasuries	1,179,144			121,535	1,300,679
Corporate bonds		35,851			35,851
High yield				921	921
Total Debt	1,179,144	35,851		122,456	1,337,451
Split-interest agreements	74,639		$ 416,382		491,021
Absolute return				2,850,658	2,850,658
Real estate		60	44,767	482,372	527,199
Private equity			9,635	1,132,606	1,142,241
Natural resources	282,678			132,862	415,540
Derivative instruments	2,972	16,387			19,359
Other		19,800	2,254		22,054
Total assets	$ 3,829,524	$ 77,062	$ 473,038	$ 7,186,098	$ 11,565,722

A summary of Liabilities associated with investments as of June 30, 2016 and 2015 is as follows (in thousands):

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2016
Securities sold, not yet purchased	$ 253,890	$ 2,949	$ 354		$ 257,193
Derivative instruments	1,486	12,745			14,231
Split-interest agreements		47,424			47,424
Other	14,232				14,232
Total liabilities	$ 269,608	$ 63,118	$ 354	$ -	$ 333,080

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2015
Securities sold, not yet purchased	$ 113,897	$ 9,756			$ 123,653
Derivative instruments	1,956	7,617			9,573
Split-interest agreements		44,799			44,799
Other	9,203	19,930			29,133
Total liabilities	$ 125,056	$ 82,102	$ -	$ -	$ 207,158

Included in Short-term investments is $59,386,000 and $2,033,000 of amounts held by trustees under indenture and escrow agreements at June 30, 2016 and 2015, respectively.

At June 30, 2016 and 2015, Short-term investments include $39,905,000 and $49,039,000, respectively, of outstanding receivables from trading activities. At June 30, 2016 and 2015, Short-term investments include $145,893,000 and $36,928,000, respectively, of outstanding payables from trading activities.

As of June 30, 2016 and 2015 there were no transfers between Level 1 and 2.

The University has made investments in various long-lived partnerships and, in other cases, has entered into contractual agreements that may limit its ability to initiate redemptions due to notice periods, lock-ups and gates. The University has also made commitments to various limited partnerships. The University expects these funds to be called over the next 5 years. The total amount of unfunded commitments is $2,666,200,000 which represents 27.9% of the AIF value as of June 30, 2016.

Details on the fair value, remaining estimated life, outstanding commitments, current redemption terms and restrictions by strategy and type of investment are provided below (in thousands):

Strategy	Fair Value June 30, 2016	Fair Value June 30, 2015	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Restrictions
Short-term	$ 1,144,489	$ 793,370	N/A	$ -	Daily	None
Equity						
Managed accounts	891,040	1,108,414	N/A	-	Daily, monthly and semi-annually	None
Mutual funds	307,379	-	N/A	-	Daily	None
Exchange traded funds	48,462	-	N/A	-	Daily	None
Commingled funds	690,917	949,036	N/A	18,200	Weekly to annually with varying notice periods	Lock-up provisions ranging from 0 to 5 years
Partnerships	2,058,156	1,909,379	N/A	164,075	Quarterly to annually with varying notice periods	Lock-up provisions ranging from 0 to 5 years. Excludes $63 million in one fund with no redemptions permitted and $11 million of side pocket investments
Total Equity	3,995,954	3,966,829		182,275		
Debt						
Managed accounts	1,358,267	1,206,012	N/A	-	Daily	None
Partnership	113,732	131,439	N/A	-	Daily to annually with varying notice periods	$439,000 of side pocket investments
Total Debt	1,471,999	1,337,451				
Absolute return	2,622,488	2,850,658	N/A	384,755	Quarterly, annually, and 2 years with varying notice periods. Excludes 20 limited partnerships with no redemptions permitted. Distributions received as underlying investments are liquidated	Lock-up provisions ranging from 0 to 2 years with some earlier redemptions permitted subject to redemption fee. Excludes $434 million in 20 limited partnerships with no redemptions permitted and $148 million of side pocket investments
Real estate	676,304	527,199	1 to 15 years	514,842	Redemptions not permitted. Distributions received as underlying investments are liquidated. Excludes 1 fund with quarterly liquidity on 90 day notice period	N/A
Private equity	1,579,640	1,142,241	1 to 16 years	1,305,957	Redemptions not permitted. Distributions received as underlying investments are liquidated	N/A
Natural resources						
Managed account	260,352	282,678	N/A	-	Daily and quarterly	Lock-up provisions range from 0 to 2 years
Commingled fund	37,356	-	N/A	-	Daily	None
Partnerships	174,718	132,862	1 to 15 years	278,371	Redemptions not permitted. Distributions received as underlying investments are liquidated	N/A
Total Natural resources	472,426	415,540		278,371		
Totals	$ 11,963,300	$ 11,033,288		$ 2,666,200		

Included in Level 1 Split-interest agreement investments above are readily marketable assets invested by the University separately from the AIF where the University serves as trustee with an aggregate fair value of $71,723,000 and $74,639,000 at June 30, 2016 and 2015, respectively. Level 3 Split-interest agreement investments are managed and invested outside of the University by external trustees.

Invested in the AIF with an aggregate fair value of $141,294,000 and $150,173,000 at June 30, 2016 and 2015, respectively, is a perpetual trust managed by an external trustee who has delegated investment decisions to the University. The University invests the assets of this trust in accordance with its Endowment Policy.

Included in Split-interest agreements are amounts held to meet legally mandated annuity reserves of $29,815,000 and $30,100,000 as of June 30, 2016 and 2015, respectively, as required by the laws of the following states where certain individual donors reside: California, New Jersey and New York.

A summary of Level 3 assets included in Split-interest agreements, where the University is not trustee, measured at fair value, as of June 30, 2016 and 2015 is as follows (in thousands):

	2016	2015
Charitable remainder trusts	$ 11,113	$ 10,966
Charitable lead trusts	113,449	129,445
Perpetual trusts	275,483	275,971
Total	$ 400,045	$ 416,382

Changes to the reported amounts of Split-interest agreements measured at fair value using unobservable (Level 3) inputs as of June 30, 2016 and 2015 are as follows (in thousands):

	Charitable Remainder Trusts	Charitable Lead Trusts	Perpetual Trusts	Total
June 30, 2015	$ 10,966	$ 129,445	$ 275,971	$ 416,382
Net realized gains			4,486	4,486
Net unrealized gains/ (losses)	289	6,534	(12,269)	(5,446)
Acquisitions			7,296	7,296
Liquidations	(142)	(22,530)	(1)	(22,673)
June 30, 2016	$ 11,113	$ 113,449	$ 275,483	$ 400,045

	Charitable Remainder Trusts	Charitable Lead Trusts	Perpetual Trusts	Total
June 30, 2014	$ 6,974	$ 148,208	$ 276,495	$ 431,677
Net realized gains			815	815
Net unrealized (losses)/ gains	(56)	2,750	(1,163)	1,531
Acquisitions	4,048	1,017		5,065
Liquidations		(22,530)	(176)	(22,706)
June 30, 2015	$ 10,966	$ 129,445	$ 275,971	$ 416,382

The following tables set forth the fair value, related Gains (losses) and notional amounts of the University's derivative instruments by contract type as of June 30, 2016 and 2015 (in thousands):

2016

	Notional Amount	Gross Derivative Assets	Gross Derivative Liabilities	Derivative Gains (Losses)
Foreign currency contracts	$ 80,261	$ 2,555	$ 1,398	$ 1,574
Futures contracts	(142,697)	-	425	21,889
Options contracts	1,011,977	2,758	1,161	(4,268)
Swaps	196,178	9,491	11,247	(6,780)
Total	$ 1,145,719	$ 14,804	$ 14,231	$ 12,415

2015

	Notional Amount	Gross Derivative Assets	Gross Derivative Liabilities	Derivative Gains (Losses)
Foreign currency contracts	$ 140,124	$ 570	$ 1,717	$ 18,904
Futures contracts	(48)	205	56	2,807
Options contracts	451	5,371	1,956	(3,080)
Swaps	153,853	13,213	5,844	(436)
Total	$ 294,380	$ 19,359	$ 9,573	$ 18,195

The notional amount is representative of the volume and activity of the respective derivative type during the years ended June 30, 2016 and 2015.

Gross derivatives assets and liabilities are shown in Investments, at fair value and Accrued expenses and other liabilities on the Consolidated Statements of Financial Position, respectively. Derivative gains (losses) are shown in Gain on investments, net on the Consolidated Statements of Activities, in the appropriate net asset classification.

A summary of the University's total investment return for the years ended June 30, 2016 and 2015 as reported in the Consolidated Statements of Activities is presented below (in thousands):

	2016	2015
AIF investment income	$ 52,748	$ 66,830
AIF realized and unrealized (losses) gains	(171,975)	628,322
Return on AIF	(119,227)	695,152
Other investment (losses) gains	(7,628)	40,192
Total Return on investments	$ (126,855)	$ 735,344

7. Endowment

The composition and changes to the amount of the University's endowment at June 30, 2016 are as follows (in thousands):

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds		$ 2,143,305	$ 3,410,740	$ 5,554,045
Quasi-endowment funds	$ 5,161,319			5,161,319
June 30, 2016	$ 5,161,319	$ 2,143,305	$ 3,410,740	$ 10,715,364

	Quasi Unrestricted	Donor Restricted Temporarily	Donor Restricted Permanently	Total
Net assets, June 30, 2015	$ 4,412,620	$ 2,442,269	$ 3,278,680	$ 10,133,569
Investment return:				
Investment income, net of expenses	5,568	8,530	295	14,393
Other income				-
Losses, realized and unrealized	(77,769)	(93,489)	(12,312)	(183,570)
Total investment return	(72,201)	(84,959)	(12,017)	(169,177)
New gifts	34,573	17,366	124,741	176,680
Allocation of endowment assets for expenditure	(365,366)			(365,366)
Other investment allocation	(5,956)			(5,956)
Transfers to create board designated funds	138,348			138,348
Other transfers	(32,509)	11,119	6,607	(14,783)
LGH membership substitution	806,451	2,869	12,729	822,049
Released from restriction	245,359	(245,359)		
Net assets, June 30, 2016	$ 5,161,319	$ 2,143,305	$ 3,410,740	$ 10,715,364

The composition and changes to the amount of the University's endowment as of June 30, 2015 are as follows (in thousands):

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds		$ 2,442,269	$ 3,278,680	$ 5,720,949
Quasi-endowment funds	$ 4,412,620			4,412,620
June 30, 2015	$ 4,412,620	$ 2,442,269	$ 3,278,680	$ 10,133,569

	Quasi Unrestricted	Donor Restricted Temporarily	Permanently	Total
Net assets, June 30, 2014	$ 4,159,362	$ 2,312,089	$ 3,110,884	$ 9,582,335
Investment return:				
Investment income, net of expenses	14,128	18,762	324	33,214
Other income	2,331		40	2,371
Gains, realized and unrealized	285,062	335,749	6,783	627,594
Total investment return	301,521	354,511	7,147	663,179
New gifts	10,955	2,409	152,029	165,393
Allocation of endowment assets for expenditure	(336,543)			(336,543)
Other investment allocation	(5,631)			(5,631)
Transfers to create board designated funds	68,802			68,802
Other transfers	(14,212)	1,626	8,620	(3,966)
Released from restriction	228,366	(228,366)		
Net assets, June 30, 2015	$ 4,412,620	$ 2,442,269	$ 3,278,680	$ 10,133,569

The fair value of certain permanently restricted endowment funds is less than the original donated value by $6,106,000 and $79,000 as of June 30, 2016 and 2015, respectively, and is reflected as a reduction of Temporarily restricted assets.

8. Property, Plant and Equipment, net

The components of PPE at June 30, 2016 and 2015 are as follows (in thousands):

	Estimated Useful Life in years	2016	2015
Land and land improvements	0 to 20	$ 369,758	$ 290,951
Buildings and fixed equipment	5 to 50	8,129,199	6,843,301
Moveable equipment and other	4 to 20	2,202,886	1,711,059
Construction-in-progress		653,532	476,926
		11,355,375	9,322,237
Less: Accumulated depreciation		(5,152,468)	(4,168,142)
Property, plant and equipment, net		$ 6,202,907	$ 5,154,095

The University recorded $451,227,000 and $365,204,000 of depreciation expense for the years ended June 30, 2016 and 2015, respectively.

The University capitalized $12,008,000 and $9,777,000 of interest costs for the years ended June 30, 2016 and 2015, respectively.

The University has conditional asset retirement obligations of $21,646,000 and $23,469,000 as of June 30, 2016 and 2015, respectively, which primarily relate to asbestos contained in buildings and underground steam distribution piping and are included within Accrued expenses and other liabilities in the Consolidated Statements of Financial Position.

9. Split-Interest Agreements

Changes in the value of assets, liabilities and net assets pursuant to split-interest agreements as of June 30, 2016 and 2015 are as follows (in thousands):

2016	Assets	Liabilities	Net Assets
June 30, 2015	$ 491,021	$ (44,799)	$ 446,222
New contributions	9,761	(1,756)	8,005
Investment income	1,346	(1,147)	199
Realized and unrealized loss, net	(1,784)		(1,784)
Payments and settlements	(28,576)	7,399	(21,177)
Actuarial adjustment		(7,121)	(7,121)
Net change	(19,253)	(2,625)	(21,878)
June 30, 2016	$ 471,768	$ (47,424)	$ 424,344

2015	Assets	Liabilities	Net Assets
June 30, 2014	$ 508,875	$ (36,607)	$ 472,268
New contributions	10,254	(6,377)	3,877
Investment income	1,527	(1,310)	217
Realized and unrealized gain, net	2,240		2,240
Payments and settlements	(31,875)	9,606	(22,269)
Actuarial adjustment		(10,111)	(10,111)
Net change	(17,854)	(8,192)	(26,046)
June 30, 2015	$ 491,021	$ (44,799)	$ 446,222

10. Medical Professional Liability Claims

The University is insured for medical professional liability claims through the combination of the Medical Care Availability and Reduction of Error Fund (Mcare, formerly, the Medical Professional Liability Catastrophe Loss Fund of the Commonwealth of Pennsylvania -- CAT Fund), various commercial insurance companies and risk retention programs.

Mcare levies health care provider surcharges, as a percentage of the Pennsylvania Joint Underwriters Association rates for basic coverage, to pay claims and pay administrative expenses of Mcare participants. These surcharges are recognized as expenses in the period incurred. Mcare operates on a pay-as-you-go basis and no provision has been made for any future Mcare assessments in the accompanying financial statements, as the University's portion of the unfunded Mcare liability cannot be estimated.

Anticipated insurance recoveries and estimated liabilities for medical malpractice claims or similar contingent liabilities are presented separately on the Consolidated Statement of Financial Position in Accounts receivable, net of allowances and Accrued expenses and other liabilities, respectively. The University accrues for estimated risks arising from both asserted and unasserted medical professional liability claims. The estimate of the gross liability and corresponding receivable for unasserted claims arising from unreported incidents is based on analysis of historical claims data by an independent actuary, which is recorded utilizing a 2.25% to 3.50% discount rate as of June 30, 2016 and 2015. The gross liability recorded under this program is $677,538,000 and $636,552,000 at June 30, 2016 and 2015, respectively, with a corresponding receivable of $91,350,000 and $80,951,000 at June 30, 2016 and 2015, respectively.

11. Contingencies, Guarantees and Commitments

The University offers various loan programs for students and families to pay tuition, fees and other costs. Certain loans issued by private lending institutions are guaranteed by the University totaling $64,992,000 and $66,857,000 at June 30, 2016 and 2015, respectively. Upon default by the borrower, the University is required to pay all or a portion of the outstanding loan balance. The University recognizes a liability for the greater of the fair value of the guarantee or defaults in the portfolio of guaranteed loans. The recognized liability is $6,193,000 and $6,173,000 at June 30, 2016 and 2015, respectively. These recognized liabilities reflect effective default reserve rates of 39.3% and 30.9% at June 30, 2016 and 2015, respectively.

Various lawsuits, claims and other contingent liabilities arise in the ordinary course of the University's education and health care activities. Based upon information currently available, management believes that any liability resulting therefrom will not materially affect the financial position or operations of the University.

The University is currently involved in various projects that have resulted in capital and property acquisition commitments from the University. As of June 30, 2016, approximately $482,795,000 has been committed by the University.

12. Pension and Other Postretirement Benefit Costs

Retirement benefits are principally provided to employees through contributory defined contribution plans. The Academic Component's policy with respect to its contribution is to provide up to 9% of eligible employees' salaries, while the UPHS contribution can be up to 6.5%. The University's contributions to these plans amounted to $159,857,000 and $125,812,000 as of June 30, 2016 and 2015, respectively.

The University also has non-contributory defined benefit pension plans. Benefits under the plans generally are based on the employee's years of service and compensation during the years preceding retirement. Contributions to the plans are made in amounts necessary to at least satisfy the minimum required contributions as specified in the Internal Revenue Service Code and related regulations. The Academic Component's plan was frozen to new full-time entrants effective July 1, 2000. UPHS' non-LGH plan was frozen to new entrants effective July 1, 2010; the benefit accruals for all participants of the LGH plan were frozen effective June 30, 2013.

Additionally, the University provides certain healthcare and life insurance benefits (Other Postretirement Employee Benefits or OPEB) for retired employees. Only a limited number of employees may become eligible for such benefits if they reach retirement age while working for the University. These and similar benefits for active and certain retired employees are provided through insurance contracts.

The University uses a measurement date of June 30 for its defined benefit pension and OPEB plans. The funded status of the plans is measured as the difference between the plan assets at fair value and the projected benefit obligation (PBO) or accumulated postretirement benefit obligation (APBO). The difference between actual amounts and estimates based on actuarial assumptions are recognized as Pension, OPEB and other, net in the Consolidated Statements of Activities in the period in which they occur.

Net Periodic Cost

The components of net periodic benefit cost for pension benefits and other postretirement benefits are as follows (in thousands):

	Pension Benefits		Other Postretirement Benefits	
Net Periodic Cost	**2016**	**2015**	**2016**	**2015**
Service cost	$ 71,063	$ 64,537	$ 30,444	$ 27,334
Interest cost	125,566	83,907	38,913	33,711
Expected return on plan assets	(151,147)	(114,248)	(28,190)	(25,987)
Amortization of:				
Net prior service cost			(108)	27
Net losses	36,436	23,104	11,720	7,261
Net periodic benefit cost	$ 81,918	$ 57,300	$ 52,779	$ 42,346

Obligation and Funded Status

The following shows changes in the benefit obligation, plan assets and funded status. Benefit obligation balances presented below reflect the PBO for pension plans and APBO for other postretirement benefits plans (in thousands):

	Pension Benefits		Other Postretirement Benefits	
Change in Benefit Obligation	**2016**	**2015**	**2016**	**2015**
Benefit obligation at beginning of year	$ 2,102,127	$ 1,889,105	$ 882,835	$ 771,183
Service cost	71,063	64,537	30,444	27,334
Interest cost	125,566	83,907	38,913	33,711
Plan participants' contributions	157	158	6,348	6,055
Retiree drug subsidy			166	163
Net actuarial loss/(gain)	167,100	112,223	(15,584)	71,631
Net transfers In--Acquisition	771,555		4,510	
Benefits paid from fund	(72,454)	(47,803)	(19,214)	(18,437)
Benefits paid outside of fund			(8,017)	(8,805)
Benefit obligation at end of year	$ 3,165,114	$ 2,102,127	$ 920,401	$ 882,835
Accumulated benefit obligation	$ 2,839,089	$ 1,807,474	$ 3,285	N/A

	Pension Benefits		Other Postretirement Benefits	
Change in Plan Assets	**2016**	**2015**	**2016**	**2015**
Fair value of plan assets at beginning of year	$ 1,496,199	$ 1,443,378	$ 369,951	$ 341,584
University contributions	98,938	62,286	26,170	27,800
Benefits paid by University			7,408	8,215
Plan participants' contributions	157	158	6,348	6,055
Benefits paid from fund	(72,454)	(47,803)	(19,214)	(18,437)
Benefits paid outside of fund			(8,017)	(8,805)
Retiree drug subsidy			166	163
Acquisition	563,617			
Actual return on assets	(4,142)	38,180	(2,887)	13,376
Fair value of plan assets at end of year	$ 2,082,315	$ 1,496,199	$ 379,925	$ 369,951

	Pension Benefits		Other Postretirement Benefits	
Funded Status	**2016**	**2015**	**2016**	**2015**
PBO / APBO	$ (3,165,114)	$ (2,102,127)	$ (920,401)	$ (882,835)
Plan assets at fair value	2,082,315	1,496,199	379,925	369,951
Funded status at end of year	$ (1,082,799)	$ (605,928)	$ (540,476)	$ (512,884)

Net Amounts Recognized in the Consolidated Statements of Financial Position (in thousands)

	Pension Benefits		Other Postretirement Benefits	
Unrestricted Net Assets	**2016**	**2015**	**2016**	**2015**
Net actuarial (gain)/loss	$ 904,181	$ 618,231	$ 261,456	$ 256,019
Net prior service cost			(1,702)	(147)
Total	$ 904,181	$ 618,231	$ 259,754	$ 255,872
Adjustment to unrestricted net assets	$ 285,950	$ 165,187	$ 3,882	$ 76,952

The University recorded year-end actuarial valuation adjustments to its pension and other postretirement benefits plans of a $289,832,000 loss and a $242,139,000 loss for the years ended June 30, 2016 and 2015 respectively, in Pension, OPEB and other, net in the Consolidated Statements of Activities.

The estimated amount that will be amortized from Unrestricted Net Assets into net periodic benefit cost in 2017 is as follows:

	Pension Benefits	Other Postretirement Benefits
Amortization of prior service cost		$ (121)
Amortization of net (gains)/ losses	$ 53,249	11,527

Aggregate underfunded plans (Accrued retirement benefits) are reported as follows:

	Pension Benefits		Other Postretirement Benefits	
	2016	**2015**	**2016**	**2015**
Accrued retirement benefits	$ (1,082,799)	$ (605,928)	$ (540,476)	$ (512,884)
Funded status at end of year	$ (1,082,799)	$ (605,928)	$ (540,476)	$ (512,884)

Reported Accrued retirement benefits includes $6,858,000 and $8,273,000 for faculty early retirement programs at June 30, 2016 and 2015, respectively.

	Pension Benefits		Other Postretirement Benefits	
Information for Plans with PBO/APBO in Excess of Plan Assets	**2016**	**2015**	**2016**	**2015**
Projected benefit obligation / accumulated postretirement benefit obligation	$ 3,165,114	$ 2,102,127	$ 920,401	$ 882,835
Accumulated benefit obligation	2,839,089	1,807,474	3,285	N/A
Fair value of plan assets	2,082,315	1,496,199	379,925	369,951

Actuarial Assumptions

The expected long-term rate of return on plan assets is management's best estimate of the average investment return expected to be received on the assets invested in the plan over the benefit period. The expected long-term rate of return on plan assets has been established by considering historical and future expected returns of the asset classes invested in by the pension trust, and the allocation strategy currently in place among those classes.

	Pension Benefits		Other Postretirement Benefits	
Weighted-Average Assumptions Used to Determine Benefit Obligations at Year End	**2016**	**2015**	**2016**	**2015**
Discount rate	4.17%	4.50%	3.95%	4.45%
Salary increase	3.94%	3.92%	4.00%	N/A
Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost				
Discount rate	4.53%	4.50%	4.45%	4.44%
Expected long-term return on plan assets	7.50%	7.93%	7.50%	7.50%
Salary increase	3.94%	3.92%	4.00%	N/A
Assumed Health Care Cost Trend Rates				
Initial trend rate	N/A	N/A	5.51%	6.72%
Ultimate trend rate	N/A	N/A	4.70%	4.70%
Fiscal year end that ultimate trend rate is reached	N/A	N/A	2023	2023

Assumed health care cost trend rates have a significant effect on the amounts reported for the other postretirement benefits. A one-percentage-point change in assumed health care trend rates would have the following effects on other postretirement benefits (in thousands):

	1-Percentage Point Increase		1-Percentage Point Decrease	
	2016	**2015**	**2016**	**2015**
Effect on total of service and interest cost	$ 14,950	$ 14,832	$ (11,288)	$ (11,253)
Effect on APBO	172,148	161,082	(134,552)	(126,432)

Plan Assets

The principal investment objectives for the pension and other postretirement benefits plans are: to ensure the availability of funds to pay pension benefits as they become due under a broad range of future economic scenarios; to maximize long-term investment returns with an acceptable level of risk based on the pension obligations; and to invest the pension trust in a diversified manner.

The University's Office of Investments is responsible for the day-to-day management of the investments of the pension and other postretirement benefits. The investments are made in accordance with policies set out by the Investment Board which has been appointed by the Trustees. The pension and other postretirement benefit investments are similar in nature to those investments discussed in Notes 1 and 6 – Investments, at Fair Value. However, the actual allocations to specific investments within each asset class may vary due to certain restrictions imposed by investment managers and ERISA regulations.

A summary of plan assets, measured at fair value, as of June 30, 2016 and 2015, is as follows (in thousands):

Pension Benefits:

Assets	Level 1	Level 2	Level 3	Investments at NAV	2016
Short-term	$ 124,576				$ 124,576
Equity:					
US equities	262,763			$ 133,428	396,191
International equities	101,543			214,627	316,170
Emerging market equities	38,354			108,440	146,794
Debt:					
US treasuries	170,169	$ 15,495			185,664
Corporate bonds		76,153		155,004	231,157
Absolute return				432,563	432,563
Real estate				26,415	26,415
Private equity				57,854	57,854
Natural resources	106,154			59,000	165,154
Derivative instruments:					
Forward currency contracts		8			8
Total assets	$ 803,559	$ 91,656	$ -	$ 1,187,331	$ 2,082,546

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2016
Derivative instruments		$ 231			$ 231
Total liabilities	$ -	$ 231	$ -	$ -	$ 231

Assets	Level 1	Level 2	Level 3	Investments at NAV	2015
Short-term	$ 96,443				$ 96,443
Equity:					
US equities	198,709			$ 85,391	284,100
International equities	28,092			240,225	268,317
Emerging market equities	32,254			109,478	141,732
Debt:					
US treasuries	157,061				157,061
Corporate bonds		$ 6,507		43,371	49,878
Absolute return				382,305	382,305
Real estate				17,732	17,732
Private equity				8,441	8,441
Natural resources	88,890			1,480	90,370
Derivative instruments:					
Forward currency contracts		8			8
Total assets	$ 601,449	$ 6,515	$ -	$ 888,423	$ 1,496,387

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2015
Derivative instruments		$ 188			$ 188
Total liabilities	$ -	$ 188	$ -	$ -	$ 188

Other Postretirement Benefits:

Assets	Level 1	Level 2	Level 3	Investments at NAV	2016
Short-term	$ 25,412				$ 25,412
Equity:					
US equities	13,783			$ 40,185	53,968
International equities	6,157			66,952	73,109
Emerging market equities	11,466			27,328	38,794
Debt:					
US treasuries	26,436				26,436
Corporate bonds		$ 623		10,207	10,830
Absolute return				98,905	98,905
Real estate				3,653	3,653
Private equity				14,544	14,544
Natural resources	33,249			1,101	34,350
Derivative instruments:					
Forward currency contracts		3			3
Total	$ 116,503	$ 626	$ -	$ 262,875	$ 380,004

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2016
Derivative instruments		$ 79			$ 79
Total	$ -	$ 79	$ -	$ -	$ 79

Assets	Level 1	Level 2	Level 3	Investments at NAV	2015
Short-term	$ 29,452				$ 29,452
Equity:					
US equities	59,314			$ 13,560	72,874
International equities	7,736			79,551	87,287
Emerging market equities	4,319			28,017	32,336
Debt:					
US treasuries	31,715				31,715
Corporate bonds		$ 1,821		9,476	11,297
Absolute return				75,655	75,655
Private equity				172	172
Natural resources	28,945			269	29,214
Derivative instruments:					
Forward currency contracts		4			4
Total	$ 161,481	$ 1,825	$ -	$ 206,700	$ 370,006

Liabilities	Level 1	Level 2	Level 3	Investments at NAV	2015
Derivative instruments		$ 55			$ 55
Total	$ -	$ 55	$ -	$ -	$ 55

As of June 30, 2016, the University has unfunded commitments to limited partnerships totaling $222,857,000, which are expected to be called over the next 5 years.

Transfers between leveled assets are based on the actual date of the event which caused the transfer. As of June 30, 2016 and 2015 there were no transfers between Level 1 and 2.

	Pension Benefits			Other Postretirement Benefits		
Allocation of Plan Assets	**Target**	**2016**	**2015**	**Target**	**2016**	**2015**
Short-term	0.0%	6.0%	6.4%	0.0%	6.7%	8.0%
Equity:						
US equities	17.8%	19.0%	19.0%	15.0%	14.2%	19.7%
International equities	18.1%	15.2%	17.9%	21.5%	19.2%	23.6%
Emerging markets equities	7.3%	7.0%	9.5%	10.0%	10.2%	8.7%
Debt:						
US treasuries	21.4%	8.9%	10.5%	10.0%	7.0%	8.6%
Corporate bonds	0.0%	11.1%	3.3%		2.9%	3.0%
Absolute return	22.8%	20.8%	25.6%	29.0%	26.0%	20.5%
Real estate	1.4%	1.3%	1.2%	1.0%	1.0%	
Private equity	2.2%	2.8%	0.6%	2.5%	3.8%	7.9%
Natural resources	9.0%	7.9%	6.0%	11.0%	9.0%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Cash Flows & Estimated Future Benefit Payments (in thousands):

University contributions for the year ending:	**Pension Benefits**	**Other Postretirement Benefits**
June 30, 2015	$ 62,286	$ 27,800
June 30, 2016	98,938	26,170
June 30, 2017	128,432	32,651
Benefits paid from outside of the fund for the year ending:		
June 30, 2015	N/A	$ 8,805
June 30, 2016	N/A	8,017
June 30, 2017	N/A	9,403
Plan participants' contributions for the year ending:		
June 30, 2015	$ 158	$ 6,055
June 30, 2016	157	6,348
June 30, 2017	158	6,735

Benefits Payments in Total (in thousands):

Actual benefit payments for the year ending:	Pension Benefits	Other Postretirement Benefits before Medicare Part D Subsidy	Impact of Medicare Part D Subsidy
June 30, 2015	$ 47,803	$ 27,242	$ (163)
June 30, 2016	72,454	27,231	(166)
Expected benefit payments for the year ending (Unaudited):			
June 30, 2017	$ 83,886	$ 27,369	$ (253)
June 30, 2018	91,407	28,884	(253)
June 30, 2019	99,091	29,329	(268)
June 30, 2020	107,783	31,500	(282)
June 30, 2021	116,970	33,728	(292)
June 30, 2022 to June 30, 2026	733,717	204,037	(1,617)

13. Debt Obligations

Debt obligations at June 30, 2016 and 2015 are as follows (in thousands):

	Final Maturity	Interest Rate at June 30, 2016	2016	2015
Academic Component:				
Fixed rate debt obligations:				
The Trustees of the University of Pennsylvania				
Series 2012 Taxable Bonds	09/2112	4.67%	$ 300,000	$ 300,000
Pennsylvania Higher Educational				
Facilities Authority (PHEFA)				
Series A of 2016 revenue bonds	08/2041	2.25% - 5.00%	169,635	
Unamortized premium			17,420	
Series A of 2015 revenue bonds	10/2045	2.50% - 5.00%	205,670	205,670
Unamortized premium			20,774	21,938
Series B of 2015 revenue bonds	10/2038	3.00% - 5.00%	165,150	165,150
Unamortized premium			27,930	30,036
Series C of 2015 revenue bonds	10/2035	3.68%	8,020	8,020
Series A of 2011 revenue bonds	09/2041	4.50% - 5.00%	14,495	131,805
Unamortized premium			73	710
Series of 2010 revenue bonds	09/2033	4.00%	16,935	50,045
Unamortized premium			978	3,061
Series B of 2009 revenue bonds	09/2032	4.00% - 5.00%	10,575	20,075
Unamortized premium			212	433
Series C of 2009 revenue bonds	09/2019	5.00%	15,105	15,105
Unamortized premium			356	494
Series C of 2005 revenue bonds				5,255
Unamortized premium				52
Series A of 2005 revenue bonds				3,920
Unamortized premium				63
Series B of 2005 revenue bonds				8,495
Other loans	05/2031	3.00%	736	775
Total Fixed rate debt obligations:			974,064	971,102
Variable rate debt obligations:				
PHEFA				
Series of 1990 revenue bonds	12/2020	0.66%	6,500	6,500
Washington County Authority				
Series of 2004	07/2034	0.40%	55,500	55,500
Total Variable rate debt obligations			62,000	62,000
Total Academic Component debt obligations			$ 1,036,064	$ 1,033,102

	Final Maturity	Interest Rate at June 30, 2016	2016	2015
UPHS:				
Fixed rate debt obligations:				
LCHA				
Series A of 2016 revenue bonds	08/2042	3.38% - 5.00%	$ 173,310	
Unamortized premium			23,921	
Series B of 2016 revenue bonds	08/2046	4.00% - 5.00%	128,050	
Unamortized premium			20,527	
Series A of 2012 revenue bonds	07/2041	1.20%	23,925	
PHEFA				
Series A of 2015 revenue bonds	08/2045	3.00% - 5.00%	357,565	$ 357,565
Unamortized premium			35,976	40,101
Series A of 2012 revenue bonds	08/2032	3.00% - 5.00%	136,950	136,950
Unamortized premium			10,236	10,891
Series A of 2011 revenue bonds	08/2042	4.75% - 5.88%	123,400	150,000
Unamortized discount			(705)	(917)
Series A of 2009 revenue bonds	08/2024	3.00% - 5.25%	43,515	74,370
Unamortized premium			407	851
Series B of 2008 revenue bonds	08/2018	5.50%	52,000	52,000
Unamortized discount			(326)	(481)
Series A of 2005 revenue bonds				19,680
Unamortized premium				
Series B of 2005 revenue bonds				8,185
Unamortized premium				
LGH 2015 Taxable Direct Obligation Note	08/2022	2.66%	77,553	
Build to suit lease			123,070	123,038
Mortgages	04/2032	5.30%	25,021	8,714
Total Fixed rate debt obligations:			1,354,395	980,947
Variable rate debt obligations:				
PHEFA				
Series A of 2014 revenue bonds	06/2045	0.68%	100,000	100,000
Series A of 2008 revenue bonds	01/2038	0.39%	69,995	75,710
Total Variable rate debt obligations			169,995	175,710
Total UPHS debt obligations			1,524,390	1,156,657
Total University debt obligations			$ 2,560,454	$ 2,189,759

The fair value of the University's existing debt obligations was $2,712,630,000 and $2,211,566,000 at June 30, 2016 and 2015, respectively. The University determines the fair value of its existing fixed rate debt obligations based on trade data, broker/dealer quotes and other observable market data. The carrying amounts of its variable rate debt obligations approximate fair value because the obligations are currently callable at a price equal to the carrying amounts. The University considers this to be a Level 2 measurement.

Contractual maturities of debt obligations and build-to-suit lease payments are as follows (in thousands):

Fiscal Year	Bond and Other Loan Obligations	Build-to-Suit Lease Payments	Total
2017	$ 55,658	$ 11,738	$ 67,396
2018	56,142	12,133	68,275
2019	110,062	11,850	121,912
2020	57,050	12,007	69,057
2021	69,920	12,325	82,245
Thereafter	1,905,753	187,630	2,093,383
Total Principal	$2,254,585	$ 247,683	$2,502,268
Unamortized net premium	157,779		157,779
Build-to-suit lease related interest		(99,593)	(99,593)
Total Debt	$2,412,364	$ 148,090	$2,560,454

Academic Component

The University has variable rate debt in the amount of $62,000,000 which is subject to optional tender by the holders upon seven days' notice. These bonds are reflected in the table above based on original scheduled maturities. In the event that the University receives notice of any optional tender on its variable rate demand bonds, the purchase price will be repaid from the remarketing of the bonds. However, in the event that the entire remarketing effort were to fail, the University would have the general obligation to purchase the bonds and the 2016 principal payments in the debt obligations maturity table above would increase from $14,925,000 to $76,925,000. On June 14, 2016, the University entered into a five year agreement with a financial institution, whereby the institution has agreed to provide a line of credit in the amount of $100,000,000 in order to supplement the University's liquidity relating to its variable rate demand bonds and for other general purposes of the University. The University pays a fee annually on the unused amount of the line of credit. As of June 30, 2016, there have been no draws under the agreement.

On April 28, 2016, PHEFA issued Series A of 2016 refunding revenue bonds (PHEFA 2016A bonds) with an aggregate principal amount of $169,635,000. The proceeds were used to fund an escrow which will be used to refund $7,600,000 from the PHEFA Series B of 2009 revenue bonds (refunded PHEFA 2009B bonds), $33,110,000 from PHEFA Series 2010 revenue bonds (refunded PHEFA 2010 bonds) and $117,310,000 from PHEFA Series A of 2011 revenue bonds (refunded PHEFA 2011A). The refunded PHEFA 2009B, PHEFA 2010 and PHEFA 2011A bonds were legally defeased, and as such, are no longer included among the University's reported liabilities. Interest on the PHEFA 2016A bonds is fixed with coupons ranging between 2.250% and 5.250%. The PHEFA 2016A bonds have serial maturities which are due in amounts ranging from $1,070,000 in 2016 to $7,865,000 in 2037 and one term maturity in the amount of $45,570,000 maturing in 2041, which will be subject to mandatory sinking fund redemption. The bonds are subject to optional redemption by the University on or after August 15, 2021 for the term bond or August 15, 2026 for the serial bonds at a price equal to 100% of the principal amount plus accrued interest.

As a result of the legal defeasance of debt associated with the issuance of PHEFA 2016A bonds, the University reported a loss on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statements of Activities in the amount of $24,556,000 for the year ended June 30, 2016.

On April 16, 2015, PHEFA issued Series A of 2015 refunding revenue bonds (PHEFA 2015A bonds) with an aggregate principal amount of $205,670,000. The proceeds were used to fund an escrow which will be used to refund $199,605,000 from the PHEFA Series A of 2009 revenue bonds (refunded PHEFA 2009A bonds). The refunded PHEFA 2009A bonds were legally defeased, and as such, are no longer included among the University's reported liabilities. Interest on the PHEFA 2015A bonds is fixed with coupons ranging between 2.50% and 5.50%. The PHEFA 2015A bonds have serial maturities which are due in amounts ranging from $4,685,000 in 2016 to $7,550,000 in 2036 and one term maturity in the amount of $89,260,000 maturing in 2045, which will be subject to mandatory sinking fund redemption. The bonds are subject to optional redemption by the University on or after October 1, 2020 for the term bond or October 1, 2025 for the serial bonds at a price equal to 100% of the principal amount plus accrued interest.

On April 16, 2015, PHEFA issued Series B of 2015 refunding revenue bonds (PHEFA 2015B bonds) with an aggregate principal amount of $165,150,000. The proceeds were used to fund an escrow which will be used to refund $181,780,000 from the PHEFA Series A of 2005 revenue bonds, PHEFA Series C of 2005 revenue bonds, PHEFA Series B of 2009 revenue bonds, PHEFA Series C of 2009 revenue bonds, PHEFA Series 2010 revenue bonds and PHEFA Series A of 2011 revenue bonds. These refunded amounts were legally defeased, and as such, are no longer included among the University's reported liabilities. Interest on the PHEFA 2015B bonds is fixed with coupons ranging between 3.00% and 5.00%. The PHEFA 2015B bonds have serial maturities which are due in amounts ranging from $1,355,000 in 2016 to $18,965,000 in 2025, with a final maturity in 2035 and one term maturity in the amount of $28,595,000 maturing in 2038, which will be subject to mandatory sinking fund redemption. The serial bonds and the term bond are subject to optional redemption by the University on or after October 1, 2025 at a price equal to 100% of the principal amount plus accrued interest.

On April 16, 2015, PHEFA issued Series C of 2015 refunding revenue bonds (PHEFA 2015C bonds) with an aggregate principal amount of $8,020,000. The proceeds were used to fund an escrow which will be used to refund $5,145,000 from the refunded PHEFA 2009A bonds and fund the issuance cost of the PHEFA 2015A and PHEFA 2015B bonds. The refunded PHEFA 2009A bonds were legally defeased, and as such, are no longer included among the University's reported liabilities. Interest on the PHEFA 2015C bonds is fixed with coupon of 3.677%. The PHEFA 2015C bonds have a single maturity in 2035 and are subject to optional redemption by the University prior to maturity at the price equal to the greater of 100% of the principal of the redeemed bonds or the present value of the remaining scheduled payments of the principal amount plus accrued interest discounted at the Treasury Rate plus 20 basis points.

As a result of the legal defeasance of debt associated with the issuance of PHEFA 2015A, 2015B and 2015C bonds, the University reported a loss on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statements of Activities in the amount of $26,418,000 for the year ended June 30, 2015.

The University has letters of credit with various financial institutions to secure certain self-insured liabilities in the amount of $21,925,000 and $3,907,000 at June 30, 2016 and 2015, respectively. These letters of credit have evergreen provisions for automatic renewal. There have been no draws under these letters of credit.

UPHS

Lancaster Hospital Authority Revenue Bonds (LCHA)

UPHS Series A of 2016 were issued April 7, 2016, of which $34.9 million was used to redeem LCHA Series A 2007 bonds and $95.3 million was used to redeem LCHA Series B of 2012 bonds. In addition to the refundings, the bonds provided $65,890,000 of funds held by trustee in a capital projects fund for future expenditures. The bonds mature in varying annual amounts from $3,950,000 to $48,935,000 through 2042 and have stated interest rates that range from 3.375% to 5.00%. The bonds maturing on and after August 15, 2027 are subject to optional redemption by the University on or after August 15, 2026 at a redemption price of 100% plus accrued interest.

UPHS Series B of 2016 were issued April 7, 2016, of which $34.6 million was used to redeem UPHS Series A of 2009 bonds and $31.9 million was used to redeem UPHS Series A of 2011 bonds. In addition to the refundings, the bonds provided $81,110,000 of funds to reimburse UPHS for expenses already paid in relation to various projects and capital expenditures. The bonds mature in varying annual amounts from $8,595,000 to $48,785,000 through 2046 and have stated interest rates that range from 4.00% to 5.00%. The bonds maturing on and after August 15, 2045 and August 15, 2046 are subject to optional redemption by the University on or after August 15, 2026 at a redemption price of 100% plus accrued interest.

As a result of the legal defeasance of debt associated with the issuance of LCHA Series A of 2007, LCHA Series B of 2012, UPHS Series A of 2009 bonds and UPHS Series A of 2011 bonds, UPHS reported a loss on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statements of Activities in the amount of $22,366,000 for the year ended June 30, 2016.

Lancaster General Health Series A of 2012 Refunding Project revenue bonds were issued on June 1, 2012 for $25,250,000. The bonds mature in varying amounts from $550,000 to $1,400,000 through 2041. Interest on the bonds is reset monthly through a remarketing process (1.2% at June 30, 2016).

Pennsylvania Higher Educational Facilities Authority Revenue Bonds

UPHS Series A of 2015 were issued May 19, 2015, of which $134.4 million was used to redeem UPHS Series A and B of 2005 bonds and $114.5 million was used to redeem UPHS Series B of 2008 bonds. In addition to the refundings, the bonds provided $150,000,000 of funds to reimburse UPHS for expenses already paid in relation to various projects and capital expenditures. The bonds mature in varying annual amounts from $1,690,000 to $38,135,000 through 2045 and have stated interest rates that range from 3.00% to 5.00%. The bonds maturing on and after August 15, 2026 are subject to optional redemption by the University on or after August 15, 2025 at a redemption price of 100% plus accrued interest.

UPHS Series B of 2008 Bonds were issued on November 12, 2008 for the purpose of redeeming the UPHS Series C of 2005 and UPHS Series D of 2005. The bonds were partially defeased by the UPHS Series A Bonds of 2015 and have a final maturity of $52,000,000 on August 15, 2018. The bond has stated interest rate of 5.50%.

UPHS Series A of 2005 Bonds were issued on February 16, 2005 for the purpose of legally defeasing the non-current maturities of the Health Services Series A of 1996 Bonds. The bonds were partially defeased by the UPHS Series A Bonds of 2015 and have a final maturity of $19,680,000 on August 15, 2015. The bond has stated interest rate of 5.00%.

UPHS Series B of 2005 Bonds were issued on February 16, 2005 for the purpose of funding various UPHS capital expenditures. The bonds were partially defeased by the UPHS Series A Bonds of 2015 and have a final maturity of $8,185,000 on August 15, 2015. The bonds have stated interest rates of 3.75% and 5.00%.

As a result of the legal defeasance of debt associated with the issuance of Series A Bonds of 2015, UPHS reported a loss on early extinguishment of debt in Pension, OPEB and other, net on the Consolidated Statements of Activities in the amount of $17,958,000 for the year ended June 30, 2015.

The LCHA and PHEFA Revenue Bonds are secured by master notes issued under the UPHS Master Trust Indenture (MTI). The MTI and related agreements contain certain restrictive covenants which limit the issuance of additional indebtedness, and among other things, require UPHS to meet an annual debt service coverage requirement of "income available for debt service" (excess of revenue over expenses plus depreciation, amortization, interest expense and extraordinary items) at an amount equal to 110% of the annual debt service requirements. If the coverage requirement for a particular year is not met, within six months of the close of that fiscal year, UPHS must retain the services of a consultant to make recommendations to improve the coverage requirement. UPHS must also implement the recommendations of the consultant to the extent that they can be feasibly implemented. UPHS will not be considered to be in default of the provisions of the MTI so long as UPHS has sufficient cash flow to pay total operating expenses and to pay debt service for the fiscal year. In both 2016 and 2015, UPHS met its debt service coverage requirement under the MTI. Additionally, UPHS has pledged its gross revenues to secure its obligation under the MTI.

Lancaster General Hospital 2015 Taxable Direct Obligation Note for $80,000,000 was issued for the construction of various LGH projects (including a new bed tower, energy plant and various renovations). The note amortizes in varying amounts beginning on August 1, 2015 from $2,343,000 to $2,675,000 with a final maturity of $62,518,000 on August 1, 2022. The note has a fixed interest rate of 2.66%.

UPHS has a mortgage payable with a monthly installment of $61,000 including interest. The mortgage has a stated interest rate of 5.3%. The mortgage will fully amortize on or before April 1, 2032 and is collateralized by land and buildings of approximately $9,500,000.

UPHS maintains various lines of credit with expirations at various dates through fiscal year 2019 totaling $105,500,000 and $100,000,000 at June 30, 2016 and 2015, respectively, to supplement liquidity, cover balances due on construction projects and reinsurance agreements. As of June 30, 2016, there are no draws under any of the agreements.

Interest Rate Swap Agreements

The University and UPHS enter into interest rate swap agreements to synthetically modify the interest rate terms of its long term debt portfolio. These agreements are not entered into for trading or speculative purposes. Fair value of these agreements is determined by obtaining quotes from Goldman Sachs Mitsui Marine Derivative Products, L.P. (GSMMDP) and Merrill Lynch, respectively, which are based on the income approach, using observable market data to discount future net payment streams and accordingly considers this to be a Level 2 measurement. The quotes provided also represent the amount the University and UPHS would accept or be required to pay to transfer the agreement to GSMMDP and Merrill Lynch, respectively, or exit price as defined by the Fair Value Measurements standard. The University and UPHS also take into account the risk of nonperformance.

The following table summarizes the terms of the University's and UPHS's interest rate swap agreements:

	University
Notional Amounts	$ 101,950,000
Trade Date	11/6/2007
Maturity Date	7/1/2034
Rates:	
Receive	67% of 1-Month LIBOR
Pay	3.573%
Default Optional Termination @ Market Value	Default by University
Optional Termination @ Market Value	University only
Collateral Posted	$ 6,900,000

	UPHS	UPHS	UPHS	UPHS
Notional Amounts	$ 24,935,000	$ 24,935,000	$ 69,995,000	$ 23,925,000
Trade Date	7/15/2009	1/7/2010	10/24/2007	6/28/2006
Maturity Date	8/15/2023	8/15/2023	1/1/2038	7/1/2041
Rates:				
Receive	3.184%	2.902%	67% of 1-Month LIBOR	3.980%
Pay	SIFMA index	SIFMA index	3.755%	
Default Optional Termination @ Market Value	Default by UPHS	Default by UPHS	Default by UPHS	Default by UPHS
Optional Termination @ Market Value	UPHS only	UPHS only	UPHS only	UPHS only

The following tables summarize the fair value of the interest rate swap agreements, not designated as hedging instruments, as of June 30, 2016 and 2015, and the effect of the interest rate swap agreements on the Consolidated Statements of Activities, both realized and unrealized, for the years ended June 30, 2016 and 2015 (in thousands):

Statements of Position

	Line Item	2016	2015
Asset interest rate swaps			
UPHS	Other assets	$ 4,844	$ 4,608
Total Asset interest rate swaps		$ 4,844	$ 4,608
Liability interest rate swaps			
Academic Component	Accrued expenses and other liabilities	$ 31,491	$ 22,924
UPHS	Accrued expenses and other liabilities	12,694	5,349
Total Liability interest rate swaps		$ 44,185	$ 28,273

Statements of Activities

	Line Item	2016	2015
Academic Component	Losses on investments	$ (11,986)	$ (5,623)
UPHS	Gains on investments	673	365
Total		$ (11,313)	$ (5,258)

14. Net Assets

The major components of net assets at June 30, 2016 and 2015 are as follows (in thousands):

2016	Unrestricted	Temporarily restricted	Permanently restricted	Total
General operating	$ 3,226,035	$ 264,047		$ 3,490,082
Sponsored programs	49,838			49,838
Capital		86,959		86,959
Student loans	10,277		$ 16,933	27,210
Planned giving agreements		135,418	7,718	143,136
Endowment	5,161,319	2,143,305	3,410,740	10,715,364
Total	$ 8,447,469	$ 2,629,729	$ 3,435,391	$ 14,512,589

2015	Unrestricted	Temporarily restricted	Permanently restricted	Total
General operating	$ 2,683,568	$ 256,176		$ 2,939,744
Sponsored programs	47,200			47,200
Capital		178,642		178,642
Student loans	9,819		$ 17,304	27,123
Planned giving agreements		149,628	15,114	164,742
Endowment	4,412,620	2,442,269	3,278,680	10,133,569
Total	$ 7,153,207	$ 3,026,715	$ 3,311,098	$ 13,491,020

15. Operating Leases

The University leases research labs, office space and equipment under operating leases expiring through July 2036. Rental expense for the years ended June 30, 2016 and 2015 totaling $93,903,000 and $78,730,000, respectively, is included in the accompanying Consolidated Statements of Activities.

At June 30, 2016, future minimum lease payments under existing operating leases were as follows (in thousands):

2017	$ 80,253
2018	78,957
2019	63,321
2020	57,054
2021	48,514
Thereafter	498,046
Total Minimum lease payments	$ 826,145

16. Functional Classification of Expenditures

Expenses for the years ended June 30, 2016 and 2015 are categorized on a functional basis as follows (in thousands):

	Compensation and benefits	Depreciation and amortization	Interest on indebtedness	Other operating expense	June 30, 2016	June 30, 2015
Instruction	$ 797,096	$ 58,830	$ 3,107	$ 394,932	$ 1,253,965	$ 1,181,690
Research	400,477	44,914	21,229	279,940	746,560	736,613
Hospital and physician practices	3,045,962	252,983	48,267	1,922,179	5,269,391	3,970,869
Auxiliary enterprises	33,593	28,608	4,632	74,482	141,315	139,803
Other educational activities	127,833	13,005	624	55,382	196,844	196,428
Student services	48,792	-	30	37,807	86,629	78,440
Academic support	36,726	30,865	209	13,213	81,013	78,991
Management and general	230,661	17,843	240	45,486	294,230	273,648
Independent operations	7,689	5,700	296	56,355	70,040	66,633
Total	$ 4,728,829	$ 452,748	$ 78,634	$ 2,879,776	$ 8,139,987	$ 6,723,115

Operation and maintenance of PPE and depreciation are allocated to functional classifications based on square footage. Interest expense is allocated to the functional classifications of the activity that directly benefited from the proceeds of the debt.

17. Subsequent Events

The University has evaluated subsequent events for the period from June 30, 2016 through September 23, 2016, the date the consolidated financial statements were issued.

UPHS Series C of 2016 bonds were issued August 4, 2016 for $129,290,000. The bond funds were used to early redeem all remaining UPHS Series A of 2011 bonds. The bonds mature in varying annual amounts from $245,000 to $57,890,000 through August 2041 and have stated interest rates that range from 2.00% to 5.00%. The bonds maturing on and after August 15, 2027 are subject to optional redemption by the University on or after August 15, 2026 at a redemption price of 100% plus accrued interest.