

**Princeton University**  
Consolidated Financial Statements  
June 30, 2017 and 2016



## Report of Independent Auditors

To the Trustees of Princeton University:

We have audited the accompanying consolidated financial statements of Princeton University (the "University"), which comprise the consolidated statements of financial position as of June 30, 2017 and 2016, 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 Princeton University as of June 30, 2017 and 2016, and the changes in their net assets and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

*PricewaterhouseCoopers LLP*

November 20, 2017

# Consolidated Statements of Financial Position

June 30, 2017 and 2016

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
<b>Assets</b>		
Cash	\$ 14,981	\$ 8,003
Accounts receivable	115,667	103,015
Receivables associated with investments	14,920	103,974
Educational and mortgage loans receivable	418,456	395,178
Contributions receivable	168,867	178,280
Inventories and deferred charges	12,688	9,442
Managed investments at market value	23,545,982	21,807,342
Funds held in trust by others	110,033	144,452
Other investments	928,747	711,804
Property, net of accumulated depreciation	4,098,654	3,952,390
<b>Total assets</b>	<b>\$ 29,428,995</b>	<b>\$ 27,413,880</b>
<b>Liabilities</b>		
Accounts payable	\$ 75,435	\$ 103,036
Liabilities associated with investments	16,246	207,828
Deposits, advance receipts, and accrued liabilities	153,491	125,797
Deposits held in custody for others	123,495	121,667
Deferred revenues	38,633	39,099
Liability under planned giving agreements	94,447	90,998
Federal loan programs	4,769	5,574
Indebtedness to third parties	3,637,389	3,495,552
Accrued postretirement benefits	481,587	516,887
<b>Total liabilities</b>	<b>\$ 4,625,492</b>	<b>\$ 4,706,438</b>
<b>Net assets</b>		
Unrestricted	\$ 10,649,353	\$ 9,693,143
Temporarily restricted	11,921,478	11,062,850
Permanently restricted	2,041,247	1,951,449
<b>Net assets: University</b>	<b>24,612,078</b>	<b>22,707,442</b>
Net assets: non-controlling interests	191,425	-
<b>Total net assets</b>	<b>\$24,803,503</b>	<b>\$ 22,707,442</b>
<b>Total liabilities and net assets</b>	<b>\$29,428,995</b>	<b>\$ 27,413,880</b>

See notes to consolidated financial statements.

# Consolidated Statements of Activities

Year ended June 30, 2017

<i>(dollars in thousands)</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	2017 Total
<b>Operating revenues</b>				
Tuition and fees	\$ 353,296	-	-	\$ 353,296
Less scholarships and fellowships	(244,598)	-	-	(244,598)
Net tuition and fees	108,698	-	-	108,698
Government grants and contracts	295,545	-	-	295,545
Private gifts, grants, and contracts	102,627	-	-	102,627
Auxiliary sales and services	93,148	-	-	93,148
Other sources	115,122	-	-	115,122
Investment earnings distributed	489,544	\$ 609,145	-	1,098,689
Operating revenues	1,204,684	609,145	-	1,813,829
Net assets released from restrictions	637,220	(637,220)	-	-
<b>Total operating revenues</b>	<b>1,841,904</b>	<b>(28,075)</b>	<b>-</b>	<b>1,813,829</b>
<b>Operating expenses</b>				
Educational and general:				
Academic departments and programs	735,016	-	-	735,016
Academic support	94,302	-	-	94,302
Student services	119,358	-	-	119,358
Library	82,450	-	-	82,450
General administration and institutional support	178,344	-	-	178,344
Other student aid	64,061	-	-	64,061
Plasma Physics Laboratory	112,649	-	-	112,649
Total educational and general	1,386,180	-	-	1,386,180
Auxiliary activities	81,031	-	-	81,031
Interest on indebtedness	148,764	-	-	148,764
<b>Total operating expenses</b>	<b>1,615,975</b>	<b>-</b>	<b>-</b>	<b>1,615,975</b>
<b>Results of operations</b>	<b>225,929</b>	<b>(28,075)</b>	<b>-</b>	<b>197,854</b>
<b>Nonoperating activities</b>				
Adjustments to planned giving agreements	(975)	12,056	-	11,081
Increase in value of assets held in trust by others	-	1,647	\$ 6,406	8,053
Private gifts, noncurrent	77,877	4,144	72,665	154,686
Net realized and unrealized appreciation on investments	1,147,526	1,483,246	879	2,631,651
Distribution of investment earnings	(489,544)	(609,145)	-	(1,098,689)
Reclassifications, transfers, and other nonoperating	(4,603)	(5,245)	9,848	-
Increase from nonoperating activities	730,281	886,703	89,798	1,706,782
Increase in net assets - University	956,210	858,628	89,798	1,904,636
Change in non-controlling interests	191,425	-	-	191,425
Total increase in net assets	1,147,635	858,628	89,798	2,096,061
<b>Net assets at the beginning of the year</b>	<b>9,693,143</b>	<b>11,062,850</b>	<b>1,951,449</b>	<b>22,707,442</b>
<b>Net assets at the end of the year</b>	<b>\$ 10,840,778</b>	<b>\$ 11,921,478</b>	<b>\$ 2,041,247</b>	<b>\$ 24,803,503</b>

See notes to consolidated financial statements.

# Consolidated Statements of Activities

Year ended June 30, 2016

<i>(dollars in thousands)</i>	<b>Unrestricted</b>	<b>Temporarily Restricted</b>	<b>Permanently Restricted</b>	<b>2016 Total</b>
<b>Operating revenues</b>				
Tuition and fees	\$ 337,396	-	-	\$ 337,396
Less scholarships and fellowships	(226,235)	-	-	(226,235)
Net tuition and fees	111,161	-	-	111,161
Government grants and contracts	290,238	-	-	290,238
Private gifts, grants, and contracts	92,719	-	-	92,719
Auxiliary sales and services	90,359	-	-	90,359
Other sources	169,645	-	-	169,645
Investment earnings distributed	413,874	\$ 519,760	-	933,634
Operating revenues	1,167,996	519,760	-	1,687,756
Net assets released from restrictions	575,263	(575,263)	-	-
<b>Total operating revenues</b>	<b>1,743,259</b>	<b>(55,503)</b>	<b>-</b>	<b>1,687,756</b>
<b>Operating expenses</b>				
Educational and general:				
Academic departments and programs	768,283	-	-	768,283
Academic support	116,811	-	-	116,811
Student services	121,041	-	-	121,041
Library	83,632	-	-	83,632
General administration and institutional support	166,422	-	-	166,422
Other student aid	61,017	-	-	61,017
Plasma Physics Laboratory	125,610	-	-	125,610
Total educational and general	1,442,816	-	-	1,442,816
Auxiliary activities	84,638	-	-	84,638
Interest on indebtedness	143,286	-	-	143,286
<b>Total operating expenses</b>	<b>1,670,740</b>	<b>-</b>	<b>-</b>	<b>1,670,740</b>
<b>Results of operations</b>	<b>72,519</b>	<b>(55,503)</b>	<b>-</b>	<b>17,016</b>
<b>Nonoperating activities</b>				
Adjustments to planned giving agreements	(1,038)	(3,098)	-	(4,136)
Decrease in value of assets held in trust by others	-	(312)	\$ (9,398)	(9,710)
Private gifts, noncurrent	63,886	23,655	83,791	171,332
Net realized and unrealized appreciation on investments	47,818	89,428	887	138,133
Distribution of investment earnings	(413,874)	(519,760)	-	(933,634)
Reclassifications, transfers, and other nonoperating	(5,144)	(6,931)	4,541	(7,534)
Increase (decrease) from nonoperating activities	(308,352)	(417,018)	79,821	(645,549)
Increase (decrease) in net assets	(235,833)	(472,521)	79,821	(628,533)
<b>Net assets at the beginning of the year</b>	<b>9,928,976</b>	<b>11,535,371</b>	<b>1,871,628</b>	<b>23,335,975</b>
<b>Net assets at the end of the year</b>	<b>\$ 9,693,143</b>	<b>\$ 11,062,850</b>	<b>\$ 1,951,449</b>	<b>\$ 22,707,442</b>

See notes to consolidated financial statements.

# Consolidated Statements of Cash Flows

Years ended June 30, 2017 and 2016

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
<b>Cash flows from operating activities</b>		
Change in net assets	\$ 2,096,061	\$ (628,533)
Adjustments to reconcile change in net assets to net cash used by operating activities:		
Depreciation expense	158,542	149,653
Amortization of bond issuance costs and premiums	(14,023)	(5,878)
Property gifts-in-kind	(2,623)	(1,777)
Adjustments to planned giving agreements	(11,081)	4,136
Net realized and unrealized losses (gains) on investments	(2,509,376)	17,300
Loss on disposal of fixed assets	638	1,260
Decrease in value of assets held in trust by others	34,419	9,711
Contributions received for long-term investment	(72,665)	(83,791)
Change in non-controlling interest	(191,425)	-
Changes in operating assets and liabilities:		
Receivables	(26,517)	(12,997)
Inventory and deferred charges	(3,246)	1,009
Accounts payable	(11,580)	420
Deposits, advance receipts, and accrued liabilities	27,694	772
Deposits held in custody for others	1,828	(37,049)
Deferred revenue	(466)	(421)
Accrued postretirement benefits	(35,300)	100,762
<b>Net cash used by operating activities</b>	<b>(559,120)</b>	<b>(485,423)</b>
<b>Cash flows from investing activities</b>		
Purchases of property, plant, and equipment	(326,162)	(368,296)
Proceeds from disposal of property, plant, and equipment	7,322	6,454
Purchases of investments	(12,620,331)	(14,041,165)
Proceeds from maturities/sales of investments	13,263,020	14,618,756
<b>Net cash provided by investing activities</b>	<b>323,849</b>	<b>215,749</b>
<b>Cash flows from financing activities</b>		
Issuance of indebtedness to third parties	716,377	415,100
Payment of debt principal	(560,518)	(215,083)
Contributions received for long-term investment	72,665	83,791
Transactions on planned giving agreements	14,530	(14,795)
Net additions (reductions) under federal loan programs	(805)	(2,880)
<b>Net cash provided by financing activities</b>	<b>242,249</b>	<b>266,133</b>
<b>Net increase (decrease) in cash</b>	<b>6,978</b>	<b>(3,541)</b>
<b>Cash at the beginning of the year</b>	<b>8,003</b>	<b>11,544</b>
<b>Cash at the end of the year</b>	<b>\$ 14,981</b>	<b>\$ 8,003</b>
<b>Supplemental disclosures</b>		
Interest paid	\$ 162,484	\$ 152,060

See notes to consolidated financial statements.

# Notes to Consolidated Financial Statements

Years ended June 30, 2017 and 2016

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## 1. NATURE OF OPERATIONS

Princeton University (the “University”) is a private, not-for-profit, nonsectarian institution of higher learning. When originally chartered in 1746 as the College of New Jersey, it became the fourth college in British North America. It was renamed Princeton University in 1896. First located in Elizabeth, and briefly in Newark, the school moved to Princeton in 1756.

The student body numbers approximately 5,232 undergraduates and 2,747 graduate students in more than 90 departments and programs. The University offers instruction in the liberal arts and sciences and in professional programs of the School of Architecture, the School of Engineering and Applied Science, and the Woodrow Wilson School of Public and International Affairs. The faculty numbers approximately 1,250, including visitors and part-time appointments.

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## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements of Princeton University (now legally known as “The Trustees of Princeton University”) are prepared on the accrual basis and include the accounts of its wholly owned subsidiaries, foundation, and investments controlled by the University. Financial information conforms to the statements of accounting principles of the Financial Accounting Standards Board (FASB) and to the American Institute of Certified Public Accountants *Audit and Accounting Guide for Not-for-Profit Entities*. Relevant pronouncements include FASB Accounting Standards Codification (ASC) 958-310, *Not-for-Profit Entities—Receivables*, and ASC 958-205, *Not-for-Profit Entities—Presentation of Financial Statements*.

Unconditional promises to give are recognized as revenues in the year made, not in the year in which the cash is received. The amounts are discounted based on timing of expected collections. Amounts received from donors to planned giving programs are shown in part as a liability for the present value of annuity payments to the donor; the balance is shown as a gift of either temporarily or permanently restricted net assets.

External financial statements of not-for-profit organizations require the preparation of a statement of financial position, a statement of activities, and a statement of cash flows. The classification of the organization’s net assets and its revenues and expenses into three categories according to the existence or absence of donor-imposed restrictions—permanently restricted, temporarily restricted, or unrestricted—is also required. Changes, including reclassification and transfers, in each category are reflected in the statement of activities, certain of which are further categorized as nonoperating. Such nonoperating activities primarily reflect transactions of a long-term investment or capital nature, contributions receivable in future periods, contributions subject to donor-imposed restrictions, gains and losses on investments in excess of the University’s spending rule and other non-recurring activities. Temporarily restricted gift revenue expended in the same fiscal year is recorded as unrestricted revenue.

Other significant accounting policies are described elsewhere in these notes.

The preparation of the University’s financial statements in conformity with generally accepted accounting principles (GAAP) 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 dates of the consolidated statements of financial position, and the reported amounts of revenue and expense included in the consolidated statements of activities. Actual results could differ from such estimates.

Certain prior-year balances have been reclassified to conform to the current-year presentation.

# Notes to Consolidated Financial Statements

(Continued)

## New Authoritative Pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs - Contracts with Customers (Subtopic 340-40)*. This ASU implements a single framework for revenue recognition ensuring that revenue is recognized in a manner which reflects the consideration to which the entity expects to be entitled to in exchange for goods and services. The ASU is effective for fiscal years beginning after December 15, 2017. The University is evaluating the impact on the University consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The new ASU establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. The ASU is effective for fiscal years beginning after December 15, 2018 with early adoption permissible. The University is evaluating the impact of the new standard on the University consolidated financial statements.

In August 2016, the FASB issued ASU 2016-14, *Presentation of Financial Statements for Not-for-Profit Entities*. The ASU amends the financial reporting requirements in Topic 958, *Not-for-Profit Entities*. Changes include revisions to the classification of net assets and expanded liquidity disclosures. The ASU is effective for fiscal years beginning after December 15, 2017 with early adoption permissible. The University is evaluating the impact of the new standard on the University consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, the ASU requires that in instances where an operating measure is included in the Consolidated Statement of Activities, the service cost component of the net periodic cost be included as a component of the operating measure. Other components of net periodic costs are to be presented separately from the service cost component in the nonoperating section of the Consolidated Statement of Activities. The ASU is effective for fiscal years beginning after December 15, 2017 with early adoption permissible. The University is evaluating the impact of the new standard on the University consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments*. The ASU amends the financial reporting requirements in Topic 230, *Statement of Cash Flows*. Changes include revisions to the classification of cash flows related to certain transactions including the presentation of cash flows related to the settlement of debt instruments with coupon rates that are insignificant in relation to the effective interest rate of the borrowing and distributions received from equity method investees. The ASU is effective for fiscal years beginning after December 15, 2017 with early adoption permissible. The University is evaluating the impact of the new standard on the University consolidated financial statements.

# Notes to Consolidated Financial Statements

(Continued)

## 3. INVESTMENTS

### Managed Investments

All managed investments are reported at fair value. The fair value of marketable equity, debt, and certain derivative securities (which includes both domestic and foreign issues) is generally based upon a combination of published current market prices and exchange rates. The fair value of restricted securities and other investments for which published market prices are not available is based on estimated values using discounted cash flow analysis and other industry standard methodologies. Where applicable, independent appraisers and engineers assist in the valuation. The fair value of limited partnerships and similar investment vehicles is based on the net asset value of such investments and is generally estimated by external investment managers, including general partners or valuation committees. These valuations necessarily involve assumptions and methods that are reviewed, evaluated, and adjusted, if necessary, by the University. Changes in assumptions could have a significant effect on the fair values of these investments. Actual results could differ from these estimates and could have a material impact on the financial statements. These investments are generally less liquid than other investments, and the values reported may differ from the values that would have been reported had a ready market for these securities existed. Securities transactions are reported on a trade-date basis. Realized gains and losses are calculated using the specific identification cost method.

A summary of managed investments by asset category at fair value at June 30, 2017 and 2016 is presented below. The managed investment categories are presented on a “manager-mandate” basis, that is, all of the assets and market value of the underlying funds and accounts are included in the asset class that is the primary focus of the fund or account. (Many funds and accounts have contractual flexibility to invest across more than one asset class.)

<i>(dollars in millions)</i>	2017	2016
Managed investments:		
Domestic equity	\$ 2,034.0	\$ 2,218.3
International equity	3,401.3	3,108.2
Independent return	6,288.5	5,763.1
Private equity	7,495.3	7,049.1
Real assets	3,346.4	3,053.2
Fixed income	580.5	416.0
Cash and other	400.0	199.4
<b>Gross managed investments<sup>1</sup></b>	<b>\$ 23,546.0</b>	<b>\$ 21,807.3</b>
Receivables (liabilities) associated with investments—net	(1.4)	(103.8)
Non-controlling interests	(191.4)	-
<b>Net managed investments</b>	<b>\$23,353.2</b>	<b>\$ 21,703.5</b>

<sup>1</sup>Includes derivative financial instruments at fair value

# Notes to Consolidated Financial Statements

(Continued)

The Princeton University Investment Company (PRINCO) manages investments for a foundation that the University controls, the Stanley J. Seeger Hellenic Fund, and deposits held in custody for others. The investment balances managed by PRINCO for these entities as of June 30, included in the University's consolidated financial statements, are as follows:

<i>(dollars in millions)</i>	<b>2017</b>	<b>2016</b>
Princeton University	\$ 23,201.0	\$ 21,554.4
Stanley J. Seeger Hellenic Fund	45.1	42.1
Deposits held in custody for others	107.1	107.0
<b>Net managed investments</b>	<b>\$ 23,353.2</b>	<b>\$ 21,703.5</b>

The composition of net investment return from managed and other investments for the years ended June 30 was as follows:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Net realized and unrealized gains (losses)	\$ 2,509,376	\$ (17,300)
Interest, dividends, and other income	122,275	155,433
<b>Total</b>	<b>\$ 2,631,651</b>	<b>\$ 138,133</b>

Princeton University investments together with the Stanley J. Seeger Hellenic Fund and deposits held in custody for others are invested in a single unitized pool. The market value of each unit was \$11,273.97 and \$10,521.24 at June 30, 2017 and 2016, respectively. The average value of a unit during the years ending June 30, 2017 and 2016, was \$10,863.01 and \$10,473.19, respectively.

The average invested market balance in the unitized pool during the years ending June 30, 2017 and 2016, was \$22.489 billion and \$21.494 billion, respectively.

The University follows a spending rule for its unitized investments, including funds functioning as endowment, that provides for regular increases in spending while preserving the long-term purchasing power of the endowment. Earnings available for spending are shown in operating revenue, and the balance is shown as nonoperating revenue. Amounts distributed per unit under that rule were \$525.53 and \$449.17 for fiscal years 2017 and 2016, respectively.

The University invests in various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

## Derivative Financial Instruments

As part of its investment strategy, the University enters into transactions utilizing a variety of financial instruments and strategies, including futures, swaps, options, short sales, and forward foreign currency contracts. These financial instruments and strategies allow the University to fine-tune the asset allocation of the investment portfolio. In the case of forward currency exchange contracts, options, and swap contracts, these instruments are traded through securities and commodities exchanges. These financial instruments are executed with creditworthy banks and brokerage firms, are subject to an enforceable master netting arrangement or similar agreement, and are presented at fair value on a net basis on the consolidated statements of financial position.

# Notes to Consolidated Financial Statements

(Continued)

Investment related derivative exposures at June 30 are as follows:

2017 (dollars in millions)	Long Notional <sup>1</sup>	Short Notional <sup>1</sup>	Net Derivative Assets (Liabilities)	Gains (Losses) <sup>2</sup>
Index Futures	\$ 168.9	170.9	0.3	24.5
Equity Swaps	\$ 380.0	359.5	(44.5)	(118.8)
Options Contracts	-	-	-	(1.0)
Forward Contracts	-	\$ 1,103.6	(24.0)	6.3
<b>Total</b>	<b>\$ 548.9</b>	<b>\$ 1,634.0</b>	<b>\$ (68.2)</b>	<b>\$ (89.1)</b>

2016 (dollars in millions)	Long Notional <sup>1</sup>	Short Notional <sup>1</sup>	Net Derivative Assets (Liabilities)	Gains (Losses) <sup>2</sup>
Index Futures	\$ 219.8	-	\$ (4.4)	\$ 4.6
Equity Swaps	249.9	\$ 207.5	39.9	66.9
Forward Contracts	-	1,699.3	10.2	2.5
<b>Total</b>	<b>\$ 469.7</b>	<b>\$ 1,906.8</b>	<b>\$ 45.7</b>	<b>\$ 74.0</b>

<sup>1</sup> Notional amounts are representative of the volume and activity of each derivative type during the years ended June 30, 2017 and June 30, 2016

<sup>2</sup> Gains and losses on derivatives are recorded under "Net realized and unrealized appreciation on investments" in the Consolidated Statement of Activities

Investment related derivative assets, liabilities and collateral by counterparty at June 30, are as follows:

2017 (dollars in millions)	# of Contracts	Fair Value				Net
		Gross Derivative Assets	Gross Derivative Liabilities	Collateral (Held) Pledged		
Counterparty A	10	\$ 1.1	\$ (45.9)	\$ 45.1	-	
Counterparty B	3	-	(1.7)	-	\$ (1.7)	
Counterparty C	3	-	(9.6)	-	(9.6)	
Counterparty D	6	-	(20.1)	5.9	(14.3)	
Counterparty E	1	7.9	-	-	7.9	
<b>Total</b>	<b>23</b>	<b>\$ 9.0</b>	<b>\$ (77.3)</b>	<b>\$ 51.0</b>	<b>\$ (17.7)</b>	

2016 (dollars in millions)	# of Contracts	Fair Value				Net
		Gross Derivative Assets	Gross Derivative Liabilities	Collateral (Held) Pledged		
Counterparty A	14	\$ 29.3	\$ (7.5)	\$ (13.0)	\$ 8.8	
Counterparty B	6	12.6	(1.0)	(10.7)	0.9	
Counterparty C	6	6.3	-	(7.0)	-	
Counterparty D	10	6.6	(0.7)	-	5.9	
<b>Total</b>	<b>36</b>	<b>\$ 54.8</b>	<b>\$ (9.2)</b>	<b>\$ (30.7)</b>	<b>\$ 15.6</b>	

## Funds Held in Trust by Others

The University is the income beneficiary of various trusts that are held and controlled by independent trustees. In addition, the University is the income beneficiary of entities that qualify as supporting organizations under Section 509(a)(3) of the U.S. Internal Revenue Code. Funds held in trust by others are recognized at the estimated fair value of the assets or the present value of the future cash flows when the irrevocable trust is established or the University is notified of its existence. Funds held in trust by others, stated at fair value, amounted to \$110.0 million in 2017 and \$144.4 million in 2016.

# Notes to Consolidated Financial Statements

(Continued)

## Other Investments

Other investments include working capital (consisting primarily of U.S. Treasury bonds), a small number of funds that must be separately invested due to donor or legal restrictions, planned giving investments, proceeds from debt, and local real estate holdings expected to be liquidated strategically over several years. A summary of other investments at fair value at June 30, 2017 and 2016, is as follows:

<i>(dollars in millions)</i>	<b>2017</b>	<b>2016</b>
Working capital	\$ 459.4	\$ 354.4
Planned giving investments	175.5	160.8
Proceeds from debt	215.0	114.4
Strategic real estate investments	32.6	47.2
Other	46.3	35.0
<b>Total</b>	<b>\$ 928.8</b>	<b>\$ 711.8</b>

## 4. FAIR VALUE MEASUREMENTS

ASC 820, *Fair Value Measurements and Disclosures*, defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosure about fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date. Fair value should be based on assumptions that market participants would use when pricing an asset or liability, including assumptions about risk and the risks inherent in valuation techniques and the inputs to valuations. Fair value measurements assume that the transaction occurs in the principal market for the asset or liability (the market with the most volume and activity for the asset or liability from the perspective of the reporting entity), or in the absence of a principal market, the most advantageous market for the asset or liability (the market in which the reporting entity would be able to maximize the amount received or minimize the amount paid). The University applies fair value measurements to certain assets and liabilities, including the University's managed investments, other investments, and funds held in trust by others, in accordance with the requirements described above.

The University maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. Fair value is based on actively quoted market prices, if available. In the absence of actively quoted market prices, price information from external sources, including broker quotes and industry publications, is used. If pricing information from external sources is not available, or if observable pricing is not indicative of fair value, judgment is required to develop the estimates of fair value using discounted cash flow and other income valuation approaches.

The University utilizes the following fair value hierarchy, which prioritizes, into three broad levels, the inputs to valuation techniques used to measure fair value:

**Level 1:** Quoted prices (unadjusted) in active markets for identical assets and liabilities that the University has the ability to access at the measurement date. Instruments categorized in Level 1 primarily consist of a broadly traded range of equity and debt securities.

**Level 2:** Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable for the asset or liability, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in inactive markets, inputs other than quoted prices that are observable for the asset or liability,

# Notes to Consolidated Financial Statements

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and inputs that are derived from observable market data by correlation or other means.

**Level 3:** Unobservable inputs for the asset or liability, including situations where there is little, if any, market activity for the asset or liability. Instruments categorized in Level 3 consist primarily of limited partnership interests and other similar investment vehicles.

The fair value hierarchy gives the highest priority to quoted prices in active markets (Level 1) and the lowest priority to unobservable data (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. The lowest level input that is significant to a fair value measurement in its entirety determines the applicable level in the fair value hierarchy. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, considering factors specific to the asset or liability. Fair value measurements are categorized as Level 3 when a significant amount of price or other inputs that are considered to be unobservable are used in their valuations.

Investments in investee funds that are valued using the net asset values (NAV) of the underlying investee fund as a practical expedient have been excluded from the fair value hierarchy and are shown as a separate column in the fair value levelling table. Where the University has the ability to redeem its investment with the investee at net asset value per share (or its equivalent) using the practical expedient, such investments have been excluded from the fair value hierarchy. Certain of these investments may be subject to modest holdback provisions to cover audit and other potential expenses or adjustments in the event of a complete withdrawal.

The University has various processes and controls in place to ensure investment fair value is reasonable and performs due diligence procedures on its investments, including an assessment of applicable accounting policies, a review of the valuation procedures employed, and consideration of redemption features and price transparency. The University holds direct real estate investments categorized as Level 3. Valuation for material directly held real estate investments is determined from periodic valuations prepared by independent appraisers or broker opinions.

The following tables present the University's assets that are measured at fair value for each hierarchy level, at June 30, 2017 and 2016.

Fair Value Measurements at Reporting Date Using					
<i>(dollars in millions)</i>		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	NAV as Practical Expedient
<b>2017</b>	<b>Total</b>				
<b>Assets at fair value</b>					
Managed investments (gross):					
Domestic equity	\$ 2,034.0	\$ 102.5	\$ (22.5)	\$ 1.2	\$ 1,952.8
International equity	3,401.3	497.8	(25.2)	219.1	2,709.6
Independent return	6,288.5	-	-	4.2	6,284.3
Private equity	7,495.3	2.3	(11.7)	146.9	7,357.8
Real assets	3,346.4	163.6	(9.1)	4.9	3,187.0
Fixed income	580.5	580.5	-	-	-
Cash and other	400.0	364.7	35.3	-	-
<b>Total managed investments (gross)</b>	<b>23,546.0</b>	<b>1,711.4</b>	<b>(33.2)</b>	<b>376.3</b>	<b>21,491.5</b>
Funds held in trust by others	110.0	-	-	110.0	-
Other investments	928.8	721.0	-	207.8	-
<b>Total</b>	<b>\$ 24,584.8</b>	<b>\$ 2,432.4</b>	<b>\$ (33.2)</b>	<b>\$ 694.1</b>	<b>\$ 21,491.5</b>

# Notes to Consolidated Financial Statements

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(dollars in millions)	Fair Value Measurements at Reporting Date Using				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	NAV as Practical Expedient
<b>2016</b>					
<b>Assets at fair value</b>					
Managed investments (gross):					
Domestic equity	\$ 2,218.3	\$ 109.8	\$ 7.2	\$ 1.2	\$ 2,100.1
International equity	3,108.2	436.7	6.6	210.8	2,454.1
Independent return	5,763.1	-	-	5.4	5,757.7
Private equity	7,049.1	1.5	4.5	240.4	6,802.7
Real assets	3,053.2	127.7	31.8	7.5	2,886.2
Fixed income	416.0	416.0	-	-	-
Cash and other	199.4	250.8	(51.4)	-	-
<b>Total managed investments (gross)</b>	<b>21,807.3</b>	<b>1,342.5</b>	<b>(1.3)</b>	<b>465.3</b>	<b>20,000.8</b>
Funds held in trust by others	144.5	-	-	144.5	-
Other investments	711.8	505.7	-	206.1	-
<b>Total</b>	<b>\$ 22,663.6</b>	<b>\$ 1,848.2</b>	<b>\$ (1.3)</b>	<b>\$ 815.9</b>	<b>\$ 20,000.8</b>

Assets and liabilities of a majority-owned and controlled investment fund have been consolidated for reporting purposes at June 30, 2017 and 2016. Gross managed investments, specifically the independent return asset class, includes consolidated investment fund assets of \$1,046.2 million and \$995.4 million at June 30, 2017 and 2016, respectively, and liabilities associated with investments includes consolidated investment fund liabilities of \$7.5 million and \$180.6 million at June 30, 2017 and 2016, respectively. The portion of consolidated net assets not owned by the University is reported as a non-controlling interest.

The following tables present the net change in the assets measured at fair value on a recurring basis and included in the Level 3 fair value category for the years ended June 30, 2017 and 2016:

(dollars in millions)	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)						
	June 30, 2016	Total gains or losses included in changes in net assets	Purchases	Sales and settlements	Transfers into Level 3	Transfers out of Level 3	June 30, 2017
<b>Assets at fair value</b>							
Managed investments (gross):							
Domestic equity	\$ 1.2	\$ (0.1)	-	\$ 0.1	-	-	\$ 1.2
International equity	210.8	25.3	\$ 0.2	(17.2)	-	-	219.1
Independent return	5.4	(0.5)	-	(0.7)	-	-	4.2
Private equity	240.4	(13.3)	3.4	(22.9)	-	\$(60.7)	146.9
Real assets	7.5	(2.2)	-	(0.4)	-	-	4.9
Fixed income	-	-	-	-	-	-	-
Cash and other	-	-	-	-	-	-	-
<b>Total Managed Investments (gross)</b>	<b>465.3</b>	<b>9.2</b>	<b>3.6</b>	<b>(41.1)</b>	<b>-</b>	<b>(60.7)</b>	<b>376.3</b>
Funds held in trust by others	144.5	7.0	1.6	(43.1)	-	-	110.0
Other investments	206.1	12.5	2.3	(13.1)	-	-	207.8
<b>Total Level 3 investments</b>	<b>\$ 815.9</b>	<b>\$ 28.7</b>	<b>\$ 7.5</b>	<b>\$(97.3)</b>	<b>-</b>	<b>(60.7)</b>	<b>\$ 694.1</b>

# Notes to Consolidated Financial Statements

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Fair Value Measurements Using Significant Unobservable Inputs (Level 3)							
(dollars in millions)	June 30, 2015	Total gains or losses included in changes in net assets	Purchases	Sales and settlements	Transfers into Level 3	Transfers out of Level 3	June 30, 2016
<b>Assets at fair value</b>							
Managed investments (gross):							
Domestic equity	\$ 2.4	\$ (1.2)	-	-	-	-	\$ 1.2
International equity	181.5	18.3	\$ 11.2	\$ (0.2)	-	-	210.8
Independent return	7.9	1.1	-	(3.6)	-	-	5.4
Private equity	244.2	7.6	10.6	(22.0)	-	-	240.4
Real assets	9.6	(4.1)	-	(0.5)	\$ 2.5	-	7.5
Fixed income	-	-	-	-	-	-	-
Cash and other	-	-	-	-	-	-	-
<b>Total Managed</b>							
Investments (gross)	445.6	21.7	21.8	(26.3)	2.5	-	465.3
Funds held in trust by others	154.2	(11.5)	1.8	-	-	-	144.5
Other investments	224.3	(17.0)	3.7	(4.9)	-	-	206.1
<b>Total Level 3 investments</b>	<b>\$ 824.1</b>	<b>\$ (6.8)</b>	<b>\$ 27.3</b>	<b>\$ (31.2)</b>	<b>\$ 2.5</b>	<b>-</b>	<b>\$ 815.9</b>

The University assesses the valuation hierarchy for each asset or liability measured on an annual basis. From time to time, assets or liabilities will be transferred within hierarchy levels as a result of changes in valuation methodologies, liquidity, and/or redemption terms. One transfer out of Level 3 to NAV assets occurred in the year ended June 30, 2017. The University's policy is to recognize transfers at the beginning of the reporting period.

Realized gains of \$5.8 million and \$5.7 million related to Level 3 investments and unrealized gains of \$22.9 million and unrealized losses of \$12.5 million related to Level 3 investments are included in net realized and unrealized appreciation on investments in the consolidated statements of activities for the years ended June 30, 2017 and 2016, respectively.

The following tables and disclosures set forth the significant terms of the agreements with investment managers or funds by major category at June 30, 2017 and 2016. The information is presented on a "manager-mandate" basis.

(dollars in millions)	June 30 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
<b>2017</b>				
<b>Managed investments (gross)</b>				
Domestic equity (a)	\$ 2,034.0	\$ 122.9	daily—annually	4–90 days
International equity—developed (b)	1,121.8	-	daily—annually	7–90 days
International equity—emerging (c)	2,279.5	220.3	daily—annually	7–90 days
Independent return (d)	6,288.5	619.9	monthly—annually	30–90 days
Fixed income and cash (e)	980.5	-	daily	1 day
<b>Marketable asset classes</b>	<b>\$ 12,704.3</b>	<b>\$ 963.1</b>		
Private equity (f)	7,495.3	2,680.3		
Real assets (g)	3,346.4	1,660.6		
<b>Nonmarketable asset classes</b>	<b>\$ 10,841.7</b>	<b>\$ 4,340.9</b>		
<b>Total gross managed investments</b>	<b>\$ 23,546.0</b>	<b>\$ 5,304.0</b>		

# Notes to Consolidated Financial Statements

(Continued)

<i>(dollars in millions)</i>	June 30 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
<b>2016</b>				
<b>Managed investments (gross)</b>				
Domestic equity (a)	\$ 2,218.3	\$ 181.2	daily—annually	4–90 days
International equity—developed (b)	1,028.8	-	daily—annually	7–90 days
International equity—emerging (c)	2,079.4	233.4	daily—annually	7–90 days
Independent return (d)	5,763.1	503.0	monthly—annually	30–90 days
Fixed income and cash (e)	615.4	-	daily	1 day
<b>Marketable asset classes</b>	<b>\$ 11,705.0</b>	<b>\$ 917.6</b>		
Private equity (f)	7,049.1	2,716.4		
Real assets (g)	3,053.2	1,837.9		
<b>Nonmarketable asset classes</b>	<b>\$ 10,102.3</b>	<b>\$ 4,554.3</b>		
<b>Total gross managed investments</b>	<b>\$ 21,807.3</b>	<b>\$ 5,471.9</b>		

**(a) Domestic Equity:** This asset class includes funds and accounts primarily invested in equities traded on domestic exchanges or in domestic over-the-counter markets. The fair values of the investments in this asset class have been estimated using the net asset value per share of the investee funds, or, in the case of custodied accounts, the fair value of the securities held. Investments representing approximately 3 percent of the market value of this asset class are invested in nonredeemable assets.

**(b) International Equity—Developed:** This asset class includes funds primarily invested in public equity and debt securities traded in countries with developed economies other than the United States. The fair values of the investments in this asset class have been estimated using the net asset value per share of the investee funds. Investments representing approximately 10 percent of the market value of this asset class are invested in nonredeemable assets.

**(c) International Equity—Emerging:** This asset class includes funds primarily invested in public equity and debt securities traded in countries with emerging economies. The fair values of the investments in this asset class have been estimated using the net asset value per share of the investee funds or, in the case of custodied accounts, the fair value of the securities held, at prevailing exchange rates. Investments representing approximately 9 percent of the market value of this asset class are invested in nonredeemable assets.

**(d) Independent Return:** This asset class includes funds invested in equity and debt securities and financial instruments such as options, swaps, futures, and other derivatives. Funds in this asset class may hold both long and short positions in any of these instruments and pursue a variety of investment strategies based upon the fund's investment mandate and the current opportunity set. In general terms, approximately 31 percent of independent return market value is invested in funds principally focused on long/short equity investments, 25 percent is invested in event-driven/arbitrage strategies, and 44 percent is invested in funds that opportunistically engage in both strategies. Investments representing approximately 18 percent of the market value of this asset class are invested in nonredeemable assets.

**(e) Fixed Income and Cash:** On a combined basis, these asset classes include primarily U.S. government and U.S. government-guaranteed securities held in separate accounts at the custodial bank. Virtually all of the investments in these asset classes can be liquidated on a daily basis.

**(f) Private Equity:** This asset class includes funds invested primarily in buyouts or venture capital. The fair values of the investments in this asset class have generally been estimated using

# Notes to Consolidated Financial Statements

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partners' capital statements issued by the funds, which reflect the University's ownership interest. Generally, investments in this asset class are not redeemable. Distributions from investee funds in the portfolio are received as the underlying investments of the funds are liquidated.

**(g) Real Assets:** This asset class includes funds invested primarily in real estate, energy, and timber. The fair values of the investments in this asset class have been estimated using partners' capital statements issued by the funds, which reflect the University's ownership interest. Generally, investments in this asset class are not redeemable. However, a small portion, \$270.0 million at June 30, 2017, and \$175.0 million at June 30, 2016, was invested in redeemable funds. More broadly, distributions from investee funds are received as the underlying investments of the funds are liquidated.

Investments in the marketable asset classes are generally redeemable, made in entities that allow the University to request withdrawals in specified circumstances. However, approximately \$1.5 billion of the marketable asset classes are invested in "nonredeemable assets," which are not eligible for redemption by the University. Nonredeemable assets are specific investments within a fund designated by the fund manager as ineligible for withdrawal. Due to the illiquid nature of nonredeemable assets, it is impossible for the University to predict when these assets will liquidate and the proceeds be distributed to investors.

In addition to nonredeemable assets, the University may be limited in its ability to effect a withdrawal if a fund manager invokes a "gate" provision restricting redemptions from its fund. Gates are generally triggered when aggregate fund withdrawal requests exceed a contractually predetermined threshold. No withdrawal requests were impacted by a gate in the year ended June 30, 2017.

The University is obligated under certain agreements to fund capital calls periodically up to specified commitment amounts. At June 30, 2017, the University had unfunded commitments of \$5.3 billion. Such commitments are generally called over periods of up to 10 years and contain fixed expiration dates or other termination clauses.

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## 5. ENDOWMENT

The University's endowment consists of approximately 4,300 individual funds established for a variety of purposes. The endowment includes both donor-restricted endowment funds and funds designated by the University to function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated by the University to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

ASC 958-205-45-28, *Not-for-Profit Entities—Presentation of Financial Statements—Other Presentation Matters—Classification of Donor-Restricted Endowment Funds Subject to the Uniform Prudent Management of Institutional Funds Act*, provides guidance on the net asset classification of donor-restricted endowment funds for a not-for-profit organization that is subject to an enacted version of the Uniform Prudent Management of Institutional Funds Act of 2006 (UPMIFA), which was enacted in the state of New Jersey in June 2009.

**Interpretation of relevant law—**The University interprets the UPMIFA as requiring the preservation of the fair value at the original gift date of the donor-restricted endowment funds, absent explicit donor stipulations to the contrary. As a result of this interpretation, the University classifies as permanently restricted net assets: (a) the original value of gifts donated to the

# Notes to Consolidated Financial Statements

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permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) 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 net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by the University in a manner consistent with the standard of prudence prescribed by UPMIFA. The University considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

- (1) The duration and preservation of the fund
- (2) The purposes of the University and the donor-restricted endowment fund
- (3) General economic conditions
- (4) The possible effect of inflation and deflation
- (5) The expected total return from income and the appreciation of investments
- (6) Other resources of the University
- (7) The investment policies of the University

Endowment net asset composition by type of fund as of June 30, 2017 and 2016, was:

<b>2017</b> (dollars in thousands)	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	-	\$ 11,678,195	\$ 1,864,500	\$ 13,542,695
Board-designated endowment funds	\$ 9,702,394	-	-	9,702,394
<b>Total</b>	<b>\$ 9,702,394</b>	<b>\$ 11,678,195</b>	<b>\$ 1,864,500</b>	<b>\$ 23,245,089</b>
<b>2016</b> (dollars in thousands)	Unrestricted	Restricted	Restricted	Total
Donor-restricted endowment funds	\$ (535)	\$ 10,796,205	\$ 1,750,003	\$ 12,545,673
Board-designated endowment funds	9,049,775	-	-	9,049,775
<b>Total</b>	<b>\$ 9,049,240</b>	<b>\$ 10,796,205</b>	<b>\$ 1,750,003</b>	<b>\$ 21,595,448</b>

Changes in endowment net assets for the years ended June 30, 2017 and 2016, were:

<b>2017</b> (dollars in thousands)	Unrestricted	Temporarily Restricted	Permanently Restricted	2017 Total
Endowment net assets, beginning of the year	\$ 9,049,240	\$ 10,796,205	\$ 1,750,003	\$ 21,595,448
Investment return:				
Net realized and unrealized appreciation	1,224,826	1,478,221	879	2,703,926
Contributions	18,298	7,590	61,296	87,184
Appropriation of endowment assets for expenditure	(479,704)	(604,121)	-	(1,083,825)
Reclassifications, transfers, and board designations	(110,266)	300	52,322	(57,644)
<b>Endowment net assets, end of the year</b>	<b>\$ 9,702,394</b>	<b>\$ 11,678,195</b>	<b>\$ 1,864,500</b>	<b>\$ 23,245,089</b>

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<b>2016</b> (dollars in thousands)	Unrestricted	Temporarily Restricted	Permanently Restricted	2016 Total
Endowment net assets, beginning of the year	\$ 9,278,348	\$ 11,219,923	\$ 1,649,703	\$ 22,147,974
Investment return:				
Net realized and unrealized appreciation	73,178	81,036	887	155,101
Reclassification for funds with deficiencies	(535)	535	-	-
<b>Total investment return</b>	<b>\$ 72,643</b>	<b>\$ 81,571</b>	<b>\$ 887</b>	<b>\$ 155,101</b>
Contributions	13,699	1,056	94,872	109,627
Appropriation of endowment assets for expenditure	(404,369)	(511,904)	-	(916,273)
Reclassifications, transfers, and board designations	88,919	5,559	4,541	99,019
<b>Endowment net assets, end of the year</b>	<b>\$ 9,049,240</b>	<b>\$ 10,796,205</b>	<b>\$ 1,750,003</b>	<b>\$ 21,595,448</b>

**Funds with Deficiencies**—From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level that the donor of UPMIFA requires the University to retain as a fund of perpetual duration. Deficiencies of this nature that are reported in unrestricted net assets were \$0.0 and \$0.5 million at June 30, 2017 and 2016, respectively. Deficiencies can result from unfavorable market fluctuations that occur shortly after the investment of new permanently restricted contributions while continued appropriations are deemed prudent by the Board of Trustees.

In accordance with the terms of donor gift instruments, the University is permitted to reduce the balance of restricted endowments below the original amount of the gift. Subsequent investment gains are then used to restore the balance up to the fair market value of the original amount of the gift. Subsequent gains above that amount are recorded in temporarily restricted net assets.

**Return objectives and risk parameters**—The University has adopted investment and spending policies for endowment assets that attempt to support the University’s current and future operating needs, while preserving intergenerational equity. Endowment assets include those assets of donor-restricted funds that the University must hold in perpetuity or for donor-specified periods as well as University-designated funds. Under these policies, the endowment assets are invested in a manner that is intended to produce returns that exceed both the annual rate of spending and university inflation.

**Strategies employed for achieving objectives**—The vast majority of the endowment assets are actively managed by PRINCO, which is structured as a University office, but maintains its own Board of Directors, and operates under the final authority of the University’s Board of Trustees (the “Trustees”).

In pursuit of the investment return objectives, PRINCO maintains an equity-biased portfolio and seeks to partner with best-in-class investment management firms across diverse asset categories.

**Spending policy and how the investment objectives relate to spending policy**—Each year the Trustees decide upon an amount to be spent from the endowment for the following fiscal year. In their deliberations, the Trustees use a spending framework that is designed to enable sizable amounts to be spent in a reasonably stable fashion, while allowing for reinvestment sufficient to preserve purchasing power in perpetuity. The framework targets annual spending rates of between 4.0 percent and 6.25 percent.

The endowment must seek investment returns sufficient to meet spending policy targets as well as to maintain future purchasing power without deterioration of corpus resulting from university inflation.

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## 6. EDUCATIONAL AND MORTGAGE LOANS

Educational loans include donor-restricted and federally sponsored educational loans that bear mandated interest rates and repayment terms, and are subject to significant restrictions on their transfer and disposition. These loans totaled \$64.0 million and \$65.0 million at June 30, 2017 and 2016, respectively.

Through a program designed to attract and retain excellent faculty and senior staff, the University provides home acquisition and financing assistance on residential properties in the area surrounding the University. Notes receivable from faculty and staff and co-ownership interests in the properties are included in mortgage loans and are collateralized by mortgages on those properties. These loans and interests totaled \$354.7 million and \$330.6 million at June 30, 2017 and 2016, respectively.

### Allowance for Doubtful Loans

Management assesses the adequacy of the allowance for doubtful loans by performing evaluations of the loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of borrowers, the economic environment, the level of delinquent loans, and the value of any collateral associated with the loans. In addition to general economic conditions and other factors described above, a detailed review of the aging of loans receivable is considered in management's assessment. The level of the allowance is adjusted according to the results of management's analysis.

Loans less than 120 days delinquent are deemed to have a minimal delay in payment and are generally not written off. Loans delinquent by 120 days or more are subject to standard collection practices, including litigation. Only loans that are deemed uncollectible are written off, and this occurs only after several unsuccessful collection attempts, including placement at an external collection agency. Considering the other factors discussed herein, management considers the allowance for doubtful loans at June 30, 2017 and 2016, to be prudent and reasonable.

Educational and mortgage loans receivable at June 30, 2017 and 2016, are reported net of allowances for doubtful loans of \$0.3 million and \$0.4 million, respectively.

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## 7. PROMISES TO GIVE

At June 30, 2017 and 2016, the University had received from donors unconditional promises to give contributions of amounts receivable in the following periods:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Less than one year	\$ 81,163	\$ 75,600
One to five years	88,038	90,335
More than five years	19,869	23,441
<b>Total</b>	<b>189,070</b>	<b>189,376</b>
Less unamortized discount and reserve	20,203	11,096
<b>Net amount</b>	<b>\$ 168,867</b>	<b>\$ 178,280</b>

The amounts promised have been recorded after discounting the future cash flows to the present value. Current-year promises are included in revenue as additions to temporarily or permanently restricted net assets, as determined by the donors, and are included in contributions

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receivable at fair value based on observable ASC 820 Level 2 inputs.

In addition, at June 30, 2017, the University had received from donors promises to give totaling \$6.3 million, conditioned upon the raising of matching gifts from other sources and other criteria. These amounts will be recognized as income in the periods in which the conditions have been fulfilled.

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## 8. PROPERTY

Land additions are reported at estimated market value at the date of gift, or on a cost basis. Buildings and improvements are stated at cost. Expenditures for operation and maintenance of physical plant are expensed as incurred.

Items classified as property at June 30, 2017 and 2016, consisted of the following:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Land	\$ 114,599	\$ 114,272
Buildings and improvements	4,441,228	4,123,404
Construction in progress	225,521	331,167
Equipment and systems	362,733	361,528
Rare books	112,375	104,063
Library books, periodicals, and bindings	292,190	286,816
Fine art objects	137,053	132,202
<b>Total property</b>	<b>5,685,699</b>	<b>5,453,452</b>
Accumulated depreciation	(1,587,045)	(1,501,062)
<b>Total</b>	<b>\$4,098,654</b>	<b>\$ 3,952,390</b>

Equipment, library books, periodicals, and bindings are stated at cost net of accumulated depreciation. Equipment includes items purchased with federal government funds; an indeterminate portion of those items are expected to be transferred to the University at the termination of the respective grant or contract.

In addition to making purchases with University funds, the University, since its inception, has received a substantial number of fine art objects and rare books from individual gifts and bequests. Art objects and rare books acquired through June 30, 1973, are carried at insurable values at that date because it is not practicable to determine the historical cost or market value at the date of gift. Art objects and rare books acquired subsequent to June 30, 1973, are recorded at cost or fair value at the date of gift. Works of art, literary works, historical treasures, and artifacts that are part of a collection are protected, preserved, and held for public exhibition, education, and research in furtherance of public service. Collections are not capitalized, and contributed collection items are not recognized as revenues in the University's financial statements.

The University uses componentized depreciation for buildings and building improvements used for research. The costs of research facilities are separated into building shell, service system, and fixed equipment components that are separately depreciated.

Annual depreciation is calculated on the straight-line method over useful lives ranging from 15 to 50 years for buildings and improvements, 30 years for library books, and 10 and 15 years for equipment. Art objects and rare books having cultural, aesthetic, or historical value are not depreciated.

# Notes to Consolidated Financial Statements

(Continued)

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## 9. CONDITIONAL ASSET RETIREMENT OBLIGATIONS

Under ASC 410-20, *Asset Retirement and Environmental Obligations—Asset Retirement Obligations*, companies must accrue costs related to legal obligations to perform certain activities in connection with the retirement, disposal, or abandonment of assets. The obligation to perform the asset retirement activity is not conditional even though the timing or method may be conditional.

The University has identified asbestos abatement as a conditional asset retirement obligation. Asbestos abatement was estimated using site-specific surveys where available and a per-square-foot estimate based on historical cost where surveys were unavailable. The estimate is recorded as a liability and as an increase to the asset, and the capitalized portion is depreciated over the remaining useful life of the asset. The asset retirement obligation included in accrued liabilities was \$11.6 million and \$13.2 million at June 30, 2017 and 2016, respectively, and accretion expense on the asset retirement obligation was \$0.3 million for the years ended June 30, 2017 and 2016.

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## 10. INCOME TAXES

ASC 740, *Income Taxes*, prescribes the minimum recognition threshold a tax position must meet in connection with accounting for uncertainties in income tax positions taken or expected to be taken by an entity before being measured and recognized in the financial statements. The University continues to evaluate its tax positions pursuant to the principles of ASC 740, and has determined that there is no material impact on the University's financial statements.

The University is a not-for-profit organization as described in Section 501(c)(3) of the Internal Revenue Code and is exempt from income taxes on related income. The University files U.S. federal and various state and local tax returns. The statute of limitations on the University's U.S. federal tax returns remains open for the years ended June 30, 2014, through the present.

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## 11. DEFERRED REVENUES

Deferred revenues primarily represent advance receipts relating to the University's real estate leasing activities. Such amounts are amortized over the term of the related leases.

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## 12. INDEBTEDNESS TO THIRD PARTIES

At June 30, 2017 and 2016, the University's debt consisted of taxable bonds, taxable notes, loans through the New Jersey Educational Facilities Authority (NJEFA), commercial paper, various parent loans, and a note as follows:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
<b>Taxable Revenue Bonds</b>		
2009 Series A, 4.95% and 5.70%, due March 2019 and March 2039, net of unamortized discount of \$2,416 and \$2,526	\$ 997,584	\$ 997,474
2016 Series A, 1.85%, 2.61%, 3.63%, due July 2021, July 2026, July 2046	100,000	100,000
2017 Series A, 3.84% due July 2048	150,000	-

# Notes to Consolidated Financial Statements

(Continued)

<b>Taxable Notes</b>	<b>2017</b>	<b>2016</b>
2012, 3.37%, due July 2042	170,000	170,000
2013, 4.73%, due July 2044	75,000	75,000
<b>NJEFA Revenue Bonds</b>		
2003 Series D, 3.73%, due July 2019, including unamortized premium of \$1,369 and \$2,054	23,049	34,364
2007 Series E, 4.53%, due July 2037, including unamortized premium of \$0 and \$3,609	-	271,274
2007 Series F, 4.39%, due July 2030, including unamortized premium of \$0 and \$559	-	62,904
2008 Series J, 4.39%, due July 2038, including unamortized premium of \$3,305 and \$3,463	212,485	218,563
2008 Series K, 4.36%, due July 2023, including unamortized premium of \$0 and \$3,466	16,655	109,231
2010 Series B, 4.03%, due July 2040, including unamortized premium of \$9,326 and \$9,732	229,901	235,657
2011 Series B, 4.09%, due July 2041, including unamortized premium of \$13,088 and \$13,634	239,893	245,534
2014 Series B, 3.77%, due July 2044, including unamortized premium of \$17,329 and \$17,971	212,054	215,386
2015 Series A, 2.32% due July 2035, including unamortized premium of \$27,263 and \$28,779	171,933	182,294
2015 Series D, 3.40% due July 2045, including unamortized premium of \$18,474 and \$19,133	165,749	169,133
2016 Series A, 2.53% due July 2035 including unamortized premium of \$20,979 and \$22,145	130,479	131,645
2016 Series B, 1.77% due July 2027 including unamortized premium of \$26,216 and \$28,837	142,106	146,657
2017 Series B, 2.91% due July 2036, including unamortized premium of \$53,680	395,920	-
2017 Series C, 3.50% due July 2047, including unamortized premium of \$21,361	162,456	-
<b>NJEFA Capital Improvement Fund Bonds</b>		
2005 Series A, 4.12%, 2000 Series A, 5.72%, due September 2020	-	574
2006 Series A, 4.42%, 2000 Series A, 5.72%, due September 2020	-	165
2014 Series B, 3.67%, due September 2033, including unamortized premium of \$189 and \$200	2,986	3,102
2016 Series A, 2.53%, due September 2020	627	-
<b>Commercial Paper</b>		
Taxable, 1.04% and .12% with maturities up to one year	3,000	64,800
Tax-exempt (NJEFA), .00% and .08% with maturities up to one year	-	29,000
<b>Parent Loans</b> , .56% to 5.40% with maturities up to nine years		
	47,103	44,343
<b>Notes</b>		
	546	735
<hr/>		
<b>Total Borrowings</b>	<b>\$3,649,526</b>	<b>\$3,507,835</b>
Unamortized debt issuance costs	(12,137)	(12,283)
<hr/>		
<b>Total Borrowings Net of Unamortized Issuance Costs</b>	<b>\$3,637,389</b>	<b>\$3,495,552</b>

In March 2017, the University issued the 2017 Series A Taxable Bonds for general corporate purposes.

The proceeds of NJEFA loans are used primarily to finance the costs of acquisition, construction, renovation, and installation of capital assets of the University.

In April 2017, the University issued the NJEFA 2017 Series B Bonds and the 2017 Series C Bonds. The 2017 Series B Bonds were issued for the purpose of the current refunding and defeasance of the 2007 Series E and 2007 Series F, and for the purpose of advance refunding and defeasance of a portion of the Series 2008 K bonds. The 2017 Series C Bonds were issued for the purpose of funding new construction and renovations, and for the refunding of all or a portion of the taxable and tax-exempt commercial paper notes. The University is authorized by the Trustees to issue new debt up to \$350 million annually. The University intends to issue additional debt in the future.

The full faith and credit of the University is pledged in all loan agreements with the NJEFA.

In fiscal 1999, the University entered into a loan facility with a national bank to fund its parent loan program, which is currently authorized by the Trustees up to \$100 million. Fixed or variable rates may be selected on a pass-through basis to the borrowers; terms may be as long as 14 years.

# Notes to Consolidated Financial Statements

(Continued)

In fiscal year 1998, a commercial paper program was authorized as an initial step of financing to provide construction funds for approved capital projects. The commercial paper proceeds are primarily used to finance construction expenditures until permanent financing from gifts or other sources is made available. The program is currently authorized to a maximum level of \$300 million.

Principal payments for each of the next five years and thereafter on debt outstanding at June 30, 2017, excluding commercial paper, are as follows:

<i>(dollars in thousands)</i>	Principal Payments
2018	90,929
2019	596,623
2020	93,793
2021	104,704
2022	86,421
Thereafter	2,463,892
<b>Subtotal</b>	<b>3,436,362</b>
Unamortized premium	210,164
<b>Net long-term debt</b>	<b>\$ 3,646,526</b>

The University has committed bank lines of credit totaling \$300 million, under which the University may borrow on an unsecured basis at agreed-upon rates. There were \$16.3 million and \$18.3 million in letters of credit outstanding under these credit facilities at June 30, 2017 and 2016, respectively.

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## 13. EMPLOYEE BENEFIT PLANS

All faculty and staff who meet specific employment requirements participate in a defined contribution plan, which invests in the Teachers Insurance and Annuity Association and College Retirement Equities Fund and Vanguard Fiduciary Trust Funds. The University's contributions were \$59.2 million and \$52.3 million for the years ended June 30, 2017 and 2016, respectively. The University also provides deferred compensation arrangements for certain officers, faculty and staff. Accrued benefits of \$481.6 million and \$516.9 million for the years ended June 30, 2017 and 2016 respectively, include the Accumulated Postretirement Benefit Obligation and deferred compensation.

### Postretirement Benefits Other Than Pensions

ASC 715, *Compensation—Retirement Benefits*, requires the recognition of a defined benefit postretirement plan's funded status as either an asset or a liability on the statement of financial position. Actuarial gains or losses and prior service costs or credits that arise during the period must be recognized as a component of unrestricted net assets. The University calculates its Accumulated Postretirement Benefit Obligation (APBO) in accordance with ASC 715, which was initially elected in 1993 and amortized over 20 years. The University continues to recognize the cost of providing postretirement benefits for employees over the period of their working years.

The University provides single-coverage health insurance to its retirees who meet certain eligibility requirements. Participants may purchase additional dependent or premium coverage. The accounting for the plan anticipates future cost-sharing changes to the written plan that are

# Notes to Consolidated Financial Statements

(Continued)

consistent with the University's expressed intent to increase retiree contributions in line with medical costs.

The benefit costs for the years ended June 30, 2017 and 2016, consisted of the following:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Service cost	\$ 25,302	\$ 18,434
Interest cost	17,948	17,022
Unrecognized loss amortization	3,421	-
<b>Total</b>	<b>\$ 46,671</b>	<b>\$ 35,456</b>

The APBO at June 30, 2017 and 2016, consisted of actuarially determined obligations to the following categories of employees:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Retirees	\$136,047	\$ 150,327
Active employees eligible to retire	119,080	129,857
Other active participants	183,943	203,226
<b>Total</b>	<b>\$439,070</b>	<b>\$ 483,410</b>

As of June 30, 2017 and 2016, the APBO was unfunded.

An assumed discount rate of 4.00 percent and 3.75 percent was used to calculate the APBO at June 30, 2017 and 2016, respectively. The assumed health care cost trend rate used to calculate the APBO at June 30, 2017 was 6.0 percent, declining by 0.13 percent per year until the long-term trend rate of 5.0 percent is reached for medical claims. For prescription drug claims, the assumed health care cost trend rate used to calculate the APBO at June 30, 2017 was 8.25 percent, declining by 0.41 percent per year until the long-term trend rate of 5.0 percent is reached. The assumed health care cost trend rate used to calculate the APBO at June 30, 2016 was 6.2 percent, declining by 0.24 percent per year until the long-term trend rate of 5.0 percent is reached, for medical claims. For prescription drug claims, the assumed health care cost trend rate used to calculate the APBO at June 30, 2016 was 9.0 percent, declining by 0.08 percent per year until the long-term trend rate of 5.0 percent is reached. An increase of 1 percent in the cost trend rate would raise the APBO to \$536.2 million and \$594.4 million and cause the service and interest cost components of the net periodic cost to be increased by \$13.5 million and \$10.3 million for the years ended June 30, 2017 and 2016, respectively. A decrease of 1 percent in the cost trend rate would decrease the APBO to \$364.6 million and \$398.9 million and cause the service and interest cost components of the net periodic cost to be decreased by \$9.7 million and \$7.5 million for the years ended June 30, 2017 and 2016, respectively.

Postretirement plan benefit payments for fiscal years 2018 through 2022 are expected to range from \$9.2 million to \$12.6 million per year, with aggregate expected payments of \$78.8 million for fiscal years 2023 through 2027. These amounts reflect the total benefits expected to be paid from the plan, net of the participants' share of the cost and federal subsidies. Expected benefit payments are based on the same assumptions used to measure the benefit obligations and include estimated future employee service.

The University provides Medicare retiree drug coverage through an employer group waiver plan (EGWP). Under EGWP, the cost of drug coverage is offset through direct federal subsidies, brand-name drug discounts, and reinsurance reimbursements. The net effect of these subsidies has been recognized in the calculation of the University's postretirement benefit obligation as of June 30, 2017 and 2016.

# Notes to Consolidated Financial Statements

(Continued)

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## 14. NET ASSETS

Net assets are categorized as unrestricted, temporarily restricted, and permanently restricted. Unrestricted net assets are derived from gifts and other institutional resources that are not subject to explicit donor-imposed restrictions. The unrestricted category also includes income and gains on these funds. Included in the total is the net investment in plant and equipment. Certain net assets classified as unrestricted for external reporting purposes are designated for specific purposes or uses under the internal operating budget practices of the University. Restricted net assets are generally established by donors in support of schools or departments of the University, often for specific purposes such as professorships, research, faculty support, scholarships and fellowships, athletics, the library, the art museum, building construction, and other specific purposes. Temporarily restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions and time restrictions imposed by donors or implied by the nature of the gift, or by the interpretations of law. Temporary restrictions are normally released upon the passage of time or the incurrence of expenditures that fulfill the donor-specified purpose. Permanently restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that are required by donor-imposed restrictions to be permanently retained. Investment earnings are spent for general or specific purposes in accordance with donor wishes, based on the University's endowment spending rule.

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## 15. NATURAL CLASSIFICATION OF EXPENSES

Operating expenses incurred for the years ended June 30 were as follows:

<i>(dollars in thousands)</i>	<b>2017</b>	<b>2016</b>
Salaries and wages	\$ 680,790	\$ 649,132
Employee benefits	161,632	273,827
Purchased services	165,069	177,730
Supplies and materials	117,479	113,116
Space and occupancy	68,965	68,442
Sub-recipient agreements	33,957	24,761
Other expenses	16,716	9,776
Other student aid	64,061	61,017
Depreciation	158,542	149,653
Interest	148,765	143,286
<b>Total</b>	<b>\$1,615,976</b>	<b>\$ 1,670,740</b>

Certain prior-year balances have been reclassified to conform to the current-year presentation.

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## 16. COMMITMENTS AND CONTINGENCIES

At June 30, 2017, the University had authorized major renovation and capital construction projects for more than \$1,980.6 million. Of the total, approximately \$267.0 million had not yet been expended.

# Notes to Consolidated Financial Statements

(Continued)

Minimum operating lease commitments at June 30, 2017, for space and equipment were as follows:

<i>(dollars in thousands)</i>	Lease Payments
2018	\$ 6,525
2019	6,525
2020	6,765
2021	5,542
2022	4,320
Thereafter	9,280
<b>Total</b>	<b>\$ 38,957</b>

The University has entered into certain agreements to guarantee the debt of others. Under these agreements, if the principal obligor defaults on the debt, the University may be required to satisfy all or part of the remaining obligation. The total amount of these guarantees was \$21.9 million at June 30, 2017.

The University is subject to certain legal claims that have arisen in the normal course of operations. In the opinion of management, the ultimate outcome of these actions will not have a material effect on the University's financial position, statement of activities, or cash flows.

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## 17. SUBSEQUENT EVENTS

The University has evaluated subsequent events through November 20, 2017, which is the date the financial statements were issued, and determined that there were no subsequent events requiring adjustment or disclosure in the consolidated financial statements.