**BROWN UNIVERSITY**

Financial Statements

June 30, 2018 and 2017

(With Independent Auditors’ Report Thereon)

KPMG LLP
One Financial Plaza, Suite 2300
Providence, RI 02903

## Independent Auditors' Report

The President and Corporation
Brown University:

We have audited the accompanying financial statements of Brown University, which comprise the balance sheets as of June 30, 2018 and 2017, the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

### Management's Responsibility for the Financial Statements

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

### Auditors' Responsibility

Our responsibility is to express an opinion on these 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 financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the organization's preparation and fair presentation of the 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 organization'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 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 financial statements referred to above present fairly, in all material respects, the financial position of Brown University as of June 30, 2018 and 2017, and the changes in its net assets and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

KPMG LLP

October 29, 2018

**BROWN UNIVERSITY**

Balance Sheets

June 30, 2018 and 2017

(Dollars in thousands)

| **Assets** | | **2018** | **2017** |
|---|---|---|---|
| Cash and cash equivalents | $ | 243,241 | 210,714 |
| Accounts receivable and other assets | | 62,500 | 59,362 |
| Contributions receivable, net | | 217,634 | 158,224 |
| Notes receivable, net | | 28,306 | 29,031 |
| Funds held in trust by others | | 94,443 | 35,530 |
| Investments | | 4,021,114 | 3,777,316 |
| Land, buildings and equipment, net | | 1,124,728 | 1,099,743 |
| Total assets | $ | 5,791,966 | 5,369,920 |
| **Liabilities and Net Assets** | | | |
| Liabilities: | | | |
| Accounts payable and accrued liabilities | $ | 106,288 | 59,761 |
| Liabilities associated with investments | | 60,128 | 157,954 |
| Student deposits and grant advances | | 65,655 | 65,099 |
| Federal student loan advances | | 19,875 | 25,271 |
| Split-interest obligations | | 17,019 | 18,986 |
| Other long-term obligations | | 66,849 | 82,225 |
| Bonds, loans and notes payable | | 819,661 | 773,910 |
| Total liabilities | | 1,155,475 | 1,183,206 |
| Net assets: | | | |
| Unrestricted | | 1,077,926 | 964,088 |
| Temporarily restricted | | 1,934,290 | 1,708,549 |
| Permanently restricted | | 1,624,275 | 1,514,077 |
| Total net assets | | 4,636,491 | 4,186,714 |
| Total liabilities and net assets | $ | 5,791,966 | 5,369,920 |

See accompanying notes to financial statements.

**BROWN UNIVERSITY**

Statement of Activities

Year ended June 30, 2018

(Dollars in thousands)

| | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|
| Operating revenues: | | | | |
| Tuition and fees | $ 550,763 | — | — | 550,763 |
| Less university scholarships | (197,449) | — | — | (197,449) |
| Net tuition and fees | 353,314 | — | — | 353,314 |
| Grants and contracts – direct | 144,228 | — | — | 144,228 |
| Grants and contracts – indirect | 46,002 | — | — | 46,002 |
| Contributions | 65,238 | 47,250 | — | 112,488 |
| Endowment return appropriated | 149,064 | 2,577 | | 151,641 |
| Sales and services of auxiliary enterprises | 100,036 | — | — | 100,036 |
| Other income | 43,975 | — | — | 43,975 |
| Net assets released from restrictions | 15,654 | (15,654) | — | — |
| Total operating revenues | 917,511 | 34,173 | — | 951,684 |
| Operating expenses: | | | | |
| Salaries and wages | 376,515 | — | — | 376,515 |
| Employee benefits | 108,990 | — | — | 108,990 |
| Graduate student support | 75,640 | — | — | 75,640 |
| Purchased services | 107,452 | — | — | 107,452 |
| Supplies and general | 141,806 | — | — | 141,806 |
| Utilities | 31,153 | — | — | 31,153 |
| Interest | 27,491 | — | — | 27,491 |
| Depreciation | 78,176 | — | — | 78,176 |
| Operating expenses | 947,223 | — | — | 947,223 |
| Change in net assets from operating activities | (29,712) | 34,173 | — | 4,461 |
| Nonoperating activities: | | | | |
| Contributions | 1,231 | 62,981 | 105,068 | 169,280 |
| Net investment return | 93,782 | 340,802 | 1,122 | 435,706 |
| Endowment return appropriated | (25,283) | (126,358) | — | (151,641) |
| Other changes, net | (5,613) | (6,424) | 4,008 | (8,029) |
| Net assets released from restrictions | 79,433 | (79,433) | — | — |
| Change in net assets from nonoperating activities | 143,550 | 191,568 | 110,198 | 445,316 |
| Change in net assets | 113,838 | 225,741 | 110,198 | 449,777 |
| Net assets, beginning of year | 964,088 | 1,708,549 | 1,514,077 | 4,186,714 |
| Net assets, end of year | $ 1,077,926 | 1,934,290 | 1,624,275 | 4,636,491 |

See accompanying notes to financial statements.

**BROWN UNIVERSITY**

Statement of Activities

Year ended June 30, 2017

(Dollars in thousands)

| | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|
| Operating revenues: | | | | |
| Tuition and fees | $ 514,459 | — | — | 514,459 |
| Less university scholarships | (187,013) | — | — | (187,013) |
| Net tuition and fees | 327,446 | — | — | 327,446 |
| Grants and contracts – direct | 130,539 | — | — | 130,539 |
| Grants and contracts – indirect | 41,657 | — | — | 41,657 |
| Contributions | 69,673 | 33,386 | — | 103,059 |
| Endowment return appropriated | 164,085 | 882 | — | 164,967 |
| Sales and services of auxiliary enterprises | 96,970 | — | — | 96,970 |
| Other income | 37,775 | — | — | 37,775 |
| Net assets released from restrictions | 13,099 | (13,099) | — | — |
| Total operating revenues | 881,244 | 21,169 | — | 902,413 |
| Operating expenses: | | | | |
| Salaries and wages | 357,895 | — | — | 357,895 |
| Employee benefits | 104,795 | — | — | 104,795 |
| Graduate student support | 68,385 | — | — | 68,385 |
| Purchased services | 89,835 | — | — | 89,835 |
| Supplies and general | 131,123 | — | — | 131,123 |
| Utilities | 26,733 | — | — | 26,733 |
| Interest | 29,291 | — | — | 29,291 |
| Depreciation | 73,843 | — | — | 73,843 |
| Operating expenses | 881,900 | — | — | 881,900 |
| Change in net assets from operating activities | (656) | 21,169 | — | 20,513 |
| Nonoperating activities: | | | | |
| Contributions | 1,330 | 43,865 | 66,130 | 111,325 |
| Net investment return | 93,471 | 312,110 | 3,764 | 409,345 |
| Endowment return appropriated | (28,180) | (136,787) | — | (164,967) |
| Other changes, net | (276) | 3,500 | 4,993 | 8,217 |
| Net assets released from restrictions | 6,414 | (6,414) | — | — |
| Change in net assets from nonoperating activities | 72,759 | 216,274 | 74,887 | 363,920 |
| Change in net assets | 72,103 | 237,443 | 74,887 | 384,433 |
| Net assets, beginning of year | 891,985 | 1,471,106 | 1,439,190 | 3,802,281 |
| Net assets, end of year | $ 964,088 | 1,708,549 | 1,514,077 | 4,186,714 |

See accompanying notes to financial statements.

**BROWN UNIVERSITY**

Statements of Cash Flows

Years ended June 30, 2018 and 2017

(Dollars in thousands)

| | | 2018 | 2017 |
|---|---|---|---|
| Cash flows from operating activities: | | | |
| Change in net assets | $ | 449,777 | 384,433 |
| Adjustments to reconcile change in net assets to net cash used in operating activities: | | | |
| Net realized and unrealized gains on investments | | (421,118) | (396,398) |
| Depreciation | | 78,176 | 73,843 |
| Amortization of bond premium | | (4,663) | (4,066) |
| Gain on KARING transaction | | (13,748) | — |
| Loss from disposals of land, building and equipment | | 1,422 | 902 |
| Change in funded status of pension obligation | | (6,533) | (12,859) |
| Change in fair value of interest rate swap liabilities | | (9,125) | (18,474) |
| Change in asset retirement obligation | | 282 | 1,675 |
| Change in estimate of split-interest obligations | | 242 | (40) |
| Contributions restricted for plant and endowment | | (126,462) | (127,117) |
| Change in accounts receivable and other assets | | (3,138) | (3,976) |
| Change in accounts payable and accrued liabilities | | 34,086 | 3,363 |
| Change in contributions receivable, net | | (59,410) | 12,680 |
| Change in other operating liabilities, net | | (4,840) | 3,105 |
| Net cash used in operating activities | | (85,052) | (82,929) |
| Cash flows from investing activities: | | | |
| Additions to land, buildings and equipment | | (92,142) | (111,452) |
| Purchases of investments | | (1,132,366) | (665,839) |
| Sales and redemptions of investments | | 1,254,399 | 751,975 |
| Purchases of securities sold short | | (855,901) | (153,933) |
| Proceeds from securities sold short | | 792,455 | 199,079 |
| Notes repaid by students and others, net | | 725 | 2,157 |
| Change in funds held in trust by others, excluding swap collateral | | (63,013) | 28,625 |
| Net cash (used in) provided by investing activities | | (95,843) | 50,612 |
| Cash flows from financing activities: | | | |
| Contributions restricted for plant and endowment | | 126,462 | 127,117 |
| Proceeds from sale of restricted gifts of securities | | 20,907 | 23,650 |
| Payments under split-interest obligations | | (2,209) | (2,309) |
| Payments on long-term debt | | (96,495) | (66,700) |
| Proceeds from issuance of debt, including premium | | 160,657 | — |
| Cash collateral posted under swap agreements | | (1,200) | (9,800) |
| Cash collateral returned under swap agreements | | 5,300 | 20,700 |
| Advance from line of credit | | 55,000 | — |
| Payment of advance from line of credit | | (55,000) | — |
| Net cash provided by financing activities | | 213,422 | 92,658 |
| Change in cash and cash equivalents | | 32,527 | 60,341 |
| Cash and cash equivalents, beginning of year | | 210,714 | 150,373 |
| Cash and cash equivalents, end of year | $ | 243,241 | 210,714 |

See accompanying notes to financial statements.

## (1) Summary of Significant Accounting Policies

### *(a) Organization*

Brown University is a private, not-for-profit, nonsectarian, co-educational institution of higher education with approximately 6,670 undergraduate students and 3,000 graduate and medical students. Established in 1764, Brown University offers educational programs for undergraduates in liberal arts and engineering, professional training for students pursuing a career in medicine, and graduate education and training in the arts and sciences, engineering and medicine.

### *(b) Basis of Presentation and Tax Status*

The accompanying financial statements are presented on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles (GAAP) and present balances and transactions according to the existence or absence of donor-imposed restrictions.

The John Nicholas Brown Center for the Study of American Civilization; Farview Incorporated, a real estate holding company; KARING, a Rhode Island not-for-profit corporation that holds certain property of the Warren Alpert Medical School; and certain entities established by the University's investment office that holds certain investment funds, are all separate legal entities that are consolidated in the financial statements. Brown University and these consolidated entities are collectively referred to herein as the University. All significant inter-entity transactions and balances have been eliminated.

The University is a not-for-profit organization as described in Section 501(c)(3) of the Internal Revenue Code, as amended, and is generally exempt from income taxes. The University assesses uncertain tax positions and determined that there are no such positions that have a material effect on the financial statements.

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was enacted. The Act impacts the University in several ways, including the addition of excise taxes on executive compensation and new rules for calculating unrelated business taxable income. While further regulatory guidance is necessary to calculate the tax assets and liabilities under the Act, we do not believe it will be material to the financial statements.

### *(c) Classification of Net Assets*

The University is incorporated in and subject to the laws of Rhode Island, which contain the provisions outlined in the Uniform Prudent Management of Institutional Funds Act (UPMIFA). Under UPMIFA, the net assets of a donor-restricted endowment fund may be appropriated for expenditure by the Corporation of the University (the Corporation) in accordance with the standard of prudence prescribed by UPMIFA. The University has classified its net assets as follows:

- *Permanently restricted net assets* contain donor-imposed stipulations that neither expire with the passage of time nor can be fulfilled or otherwise removed by actions of the University and primarily consist of the historic dollar value of contributions to establish or add to donor-restricted endowment funds.

- *Temporarily restricted net assets* contain donor-imposed stipulations as to the timing of their availability or use for a particular purpose. These net assets are released from restrictions when the specified time elapses or actions have been taken to meet the restrictions. Net assets of donor-restricted endowment funds in excess of their historic dollar value are classified as temporarily restricted net assets until appropriated by the Corporation and spent in accordance with the standard of prudence imposed by UPMIFA and in accordance with the donors intent.
- *Unrestricted net assets* contain no donor-imposed restrictions and are available for the general operations of the University. Such net assets may be designated by the Corporation for specific purposes, including to function as endowment funds.

### *(d) Fair Value Measurements*

Investments, funds held in trust by others, and interest rate swaps are reported at fair value in the University's financial statements. Fair value represents the price that would be received upon the sale of an asset or paid upon the transfer of a liability in an orderly transaction between market participants as of the measurement date. The University uses a three-tiered hierarchy to categorize those assets and liabilities based on the valuation methodologies employed. The hierarchy is defined as follows:

- Level 1 – Valuation based on quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities;
- Level 2 – Valuations based on inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 – Valuation based on unobservable inputs used in situations in which little or no market data is available.

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs. The University utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. Transfers between categories occur when there is an event that changes the inputs used to measure the fair value of an asset or liability. Transfers between fair value categories are recognized at the end of the reporting period.

Investments measured at net asset value as a practical expedient to estimate fair value are not categorized in the fair value hierarchy.

### *(e) Statements of Activities*

The statements of activities separately report changes in net assets from operating and nonoperating activities. Operating activities consist principally of revenues and expenses related to ongoing educational and research programs, including endowment return appropriated by the Corporation to support those programs. Nonoperating activities consist of net investment return, an offset for endowment return appropriated for operating activities, changes in fair values of interest rate swaps, change in pension plan and other long-term obligations, contributions for long-term purposes, net assets released from donor restrictions for property placed in service, and other activities not in direct support of annual operations.

Revenues are derived from various sources, as follows:

- Tuition and fees are recognized at established rates, net of financial aid and scholarships provided directly to students, in the period in which the sessions are primarily provided. Deposits and other advance payments are reported as a liability. Sales and services of auxiliary enterprises are recognized at the time the services are provided.
- Contributions, including unconditional promises from donors reported as contributions receivable, are recognized at fair value in the period received and are classified based upon the existence or absence of donor-imposed restrictions. Expirations of donor-imposed restrictions are reported as net assets released from restrictions. Contributions subject to donor-imposed stipulations that are met in the same reporting period are reported as unrestricted revenue. Bequest intentions and conditional promises are not recorded in the University's financial statements.
- Government grants and contracts normally provide for the recovery of direct and indirect costs, subject to audit. The University recognizes revenue associated with direct and indirect costs as direct costs are incurred. The recovery of indirect costs is pursuant to an agreement which provides for a predetermined fixed indirect cost rate. Payments received in advance of grant and contract expenditures are reported as a liability.
- Dividends, interest and realized and unrealized gains (losses) on investments are reported as increases (decreases) in (1) permanently restricted net assets if the terms of the contributions require them to be added to principal; (2) temporarily restricted net assets if the terms of the related contributions impose restrictions on their availability or use; or (3) unrestricted net assets in all other cases. Investment return attributable to donor-restricted endowment funds is reported as temporarily restricted to the extent not appropriated and spent.

Expenses are reported as decreases in unrestricted net assets.

### *(f) Cash Equivalents*

For purposes of the statements of cash flows, cash equivalents, except for those held by investment managers, consist of money market funds and investments with original maturities of three months or less and are carried at cost, which approximates fair value.

### *(g) Accounts Receivable and Other Assets and Notes Receivable*

Accounts receivable and other assets include amounts due from students, reimbursements due from sponsors of externally funded research, accrued income on investments, inventory and prepaid expenses. Notes and accounts receivable are presented net of an allowance for uncollectible amounts.

### *(h) Land, Buildings and Equipment*

Land, buildings and equipment are stated at cost of acquisition or construction (including capitalized interest) or, to the extent received as a gift, at estimated fair value at the time of receipt, and are presented net of accumulated depreciation. All other expenditures for maintenance and repairs are charged to operating activities as incurred.

Depreciation is calculated using the straight-line method with estimated useful lives of 30-to-40 years for buildings, 20-to-30 years for building improvements, and 3-to-15 years for equipment, depending upon asset class.

***(i) Fund Held in Trust by Others***

Funds held in trust by others represent funds that are held and administered by outside trustees, including perpetual trusts established by donors of $28,827 and $29,439 at June 30, 2018 and 2017, respectively. The University receives all or a specified portion of the return on the underlying assets of most of the trusts, which is primarily restricted for scholarships. Most of these trust interests are classified in Level 3 in the fair value hierarchy. Other trusteed funds of $65,616 and $6,091 at June 30, 2018 and 2017, respectively, represent debt proceeds to be utilized for construction projects or otherwise required to be held as collateral or in reserve in accordance with debt or interest rate swap agreements. These are classified in Level 1 in the fair value hierarchy because the underlying securities held by the trustee are based on quoted market prices.

***(j) Federal Student Loan Advances***

The University holds certain amounts advanced by the U.S. government under the Federal Perkins Loan Program and the Health Professions Student Loan Program (the Programs). Such amounts may be re-loaned by the University after collection; however, in the event that the University no longer participates in the Programs, the amounts are generally refundable to the U.S. government.

***(k) Collections***

The University's collections include works of art, historical treasures, and artifacts that are maintained in the University's libraries and museums. These collections are protected and preserved for education and research purposes. The collections are not recognized as assets in the financial statements of the University.

***(l) Derivatives***

The University uses derivatives for both debt and investment-related purposes. Interest-rate swaps, as described in note 6 *(c)*, are initially used to manage interest-rate risk by fixing the rate on associated variable-rate debt issuances. In addition, certain of the University's investment strategies utilize various derivative financial instruments for a number of investment purposes, including hedging or altering exposure to certain asset classes and cost-effectively adding exposures to portions of the portfolio. Positions are expected to create gains or losses which, when combined with the applicable portion of the total investment portfolio, provide an expected result. Among the derivative instruments that may be entered from time to time include total return swaps to manage exposures in equity markets, foreign currency forward contracts to manage currency exposures in the portfolio. The University has established policies and procedures to monitor and manage risks related to these instruments. In connection with its investment derivative activities, the University generally maintains master netting agreements and collateral agreements with its counterparties. The agreements provide the University the right, in the event of default by the counterparty, to net a counterparty's rights and obligations under the agreement and to liquidate and offset collateral against any net amount owed by the counterparty.


(Continued)

***(m) Liabilities Associated with Investments***

The University may, from time to time, incur liabilities associated with its investments portfolio as a result of securities sold short or other transactions. In order to terminate a short position, the University must acquire and deliver to the lender a security identical to the one it borrowed and sold short, and a realized gain or loss is recognized for the difference between the short sale proceeds and the cost of the identical security acquired. Liabilities reported on the balance sheets at June 30, 2018 and 2017 include $54,068 and $148,753, respectively, representing the fair value of identical securities that must be acquired to settle obligations to the lender. The liabilities would be classified as Level 1 in the fair value hierarchy given that they are measured based on quoted market prices. In addition, liabilities associated with investments include the fair value of total return swaps $6,060 and $9,201 entered into in fiscal 2018 and 2017, respectively.

***(n) Other Long-Term Obligations***

Other long-term obligations include the funded status of the defined benefit pension plan of $19,829 and $26,362 at June 30, 2018 and 2017, respectively; interest-rate swap liabilities aggregating $31,757 and $40,882 at June 30, 2018 and 2017, respectively; and asset retirement obligations of $15,263 and $14,981 at June 30, 2018 and 2017, respectively.

***(o) Use of Estimates***

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

***(p) Recent Accounting Pronouncement***

In August 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities*. The primary changes include revisions to simplify and enhance the presentation of net assets, a requirement to present functional and natural expenses in a single location, and expanded disclosures regarding liquidity and availability of resources. The ASU is effective for the University's fiscal year ending June 30, 2019. The University is evaluating the effects this will have on the presentation of its 2019 financial statements.

ASU 2014-09, *Revenue from Contracts with Customers,* was issued by the FASB in May 2014 and is intended to improve the financial reporting requirements for revenue from contracts with customers. The Standard establishes a five-step model and application guidance for determining the timing and amount of revenue recognition. The related application guidance in the Standard will replace most existing revenue recognition guidance in US GAAP. The ASU is effective for the University's fiscal year ending June 30, 2019. The University is currently evaluating the effects this will have on its 2019 financial statements.

(Dollars in thousands)

ASU 2018-08, *Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made,* was issued by the FASB in June 2018. The new ASU should assist entities in (1) evaluating whether transactions should be accounted for as contributions (nonreciprocal transactions) within the scope of Topic 958, Not-for-Profit Entities, or as exchange (reciprocal) transactions subject to other guidance and (2) determining whether a contribution is conditional. The ASU is effective for the University's fiscal year ending June 30, 2019. The University is currently evaluating the effects this will have on its 2019 financial statements.

***(q) Reclassifications***

Certain 2017 financial information has been reclassified to conform to the 2018 presentation.

## (2) Contributions Receivable

The University's contributions receivable are recognized net of discounts at rates commensurate with the risks involved and after allowance for uncollectibles are reported at net realizable value, which approximates fair value. Contributions receivable were as follows at June 30:

| | | 2018 | 2017 |
|---|---|---|---|
| Contributions expected to be received in: | | | |
| Less than one year | $ | 50,066 | 44,291 |
| Between one and five years | | 111,168 | 96,540 |
| More than five years | | 131,082 | 45,147 |
| Gross contributions receivable | | 292,316 | 185,978 |
| Unamortized discount (at rates ranging from 0.7% to 4.8%) and allowance for uncollectibles | | (74,682) | (27,754) |
| Contributions receivable, net | $ | 217,634 | 158,224 |

## (3) Investments

*Investment Strategy*

In addition to traditional stocks and fixed-income securities, the University may also hold shares or units in institutional funds as well as in alternative investment funds involving hedged, private equity and real asset strategies. Hedged strategies involve funds whose managers have the authority to invest in various asset classes at their discretion, including the ability to invest long and short. Funds with hedged strategies generally hold securities or other financial instruments for which a ready market exists and may include stocks, bonds, put or call options, swaps, currency hedges and other instruments, and are valued accordingly. Private equity funds employ buyout and venture capital strategies and may focus on investments in turn-around situations. Real asset funds generally hold interests in public real estate investment trusts (REITs), commercial properties or commodities, or oil and gas, generally through commingled funds. Private equity and real asset strategies therefore often require the estimation of fair values by fund managers in the absence of readily determinable market values.

Investments also include assets related to donor annuities, pooled income funds, and charitable remainder trusts. Certain of these funds are held in trust by the University for one or more beneficiaries who are generally paid lifetime income, after which the principal is made available to the University in accordance with donor restrictions, if any. The assets are reported at fair value and related liabilities, which are reported as split-interest obligations, represent the present value of estimated future payments to beneficiaries.

*Basis of Reporting*

Investments are reported at estimated fair value. If an investment is held directly by the University and an active market with quoted prices exists, the market price of an identical security is used to report fair value. Fair values for shares in registered mutual funds are based on published share prices. The University’s interests in alternative investment funds are generally reported at the net asset value (NAV) reported by the fund managers and assessed as reasonable by the University, which is used as a practical expedient to estimate the fair value of the University’s interest therein, unless it is probable that all or a portion of the investment will be sold for an amount different from NAV. At June 30, 2018 and 2017, the University had no plans or intentions to sell investments at amounts different from NAV.

Because of the inherent uncertainties of valuation, these estimated fair values may differ significantly from values that would have been used had a ready market existed, and the differences could be material. Such valuations are determined by fund managers and generally consider variables such as operating results, comparable earnings multiples, projected cash flows, recent sales prices, and other pertinent information, and may reflect discounts for the illiquid nature of certain investments held.

(Dollars in thousands)

The following tables summarize the University’s investments by strategy type as of June 30, 2018 and 2017:

| | 2018 | | | | |
|---|---|---|---|---|---|
| | | Investments classified in the fair value hierarchy | | | |
| | Investments measured at NAV | Level 1 | Level 2 | Level 3 | Total |
| Investments: | | | | | |
| Equities: | | | | | |
| U.S. equities | $ 192,076 | 104,720 | 42,679 | 580 | 340,055 |
| Non-U.S. equity funds | 544,063 | 94,032 | — | — | 638,095 |
| Fixed income: | | | | | |
| Domestic | 58,903 | 8,553 | 85,870 | 32,548 | 185,874 |
| Hedged strategies: | | | | | |
| General arbitrage funds | 580,102 | 9,837 | — | 850 | 590,789 |
| Distressed funds | 2,159 | — | — | — | 2,159 |
| Global/Non-U.S. funds | 781,341 | 67,600 | — | — | 848,941 |
| Private equity: | | | | | |
| Buy-out funds | 580,966 | — | — | 8,216 | 589,182 |
| Venture funds | 342,917 | — | — | 12,958 | 355,875 |
| Real assets: | | | | | |
| Real estate and timber | 25,755 | 710 | — | 26,001 | 52,466 |
| Commodities, oil and gas | 70 | 25,546 | — | 36,490 | 62,106 |
| Cash and cash equivalents | — | 355,572 | — | — | 355,572 |
| Total | $ 3,108,352 | 666,570 | 128,549 | 117,643 | 4,021,114 |

(Dollars in thousands)

| | 2017 | | | | |
|---|---|---|---|---|---|
| | | Investments classified in the fair value hierarchy | | | |
| | Investments measured at NAV | Level 1 | Level 2 | Level 3 | Total |
| Investments: | | | | | |
| Equities: | | | | | |
| U.S. equities | $ 166,476 | 99,520 | 5,601 | 841 | 272,438 |
| Non-U.S. equity funds | 494,035 | 96,416 | — | — | 590,451 |
| Fixed income: | | | | | |
| Domestic | 46,809 | 13,117 | 123,170 | 29,429 | 212,525 |
| U.S. Treasury inflation-protected | 7,348 | — | — | — | 7,348 |
| Hedged strategies: | | | | | |
| General arbitrage funds | 522,692 | 9,985 | — | 1,000 | 533,677 |
| Distressed funds | 2,623 | — | — | — | 2,623 |
| Global/Non-U.S. funds | 935,547 | — | — | — | 935,547 |
| Private equity: | | | | | |
| Buy-out funds | 418,108 | — | — | 8,492 | 426,600 |
| Venture funds | 289,382 | — | — | 4,892 | 294,274 |
| Real assets: | | | | | |
| Real estate and timber | 35,608 | 1,201 | — | 32,542 | 69,351 |
| Commodities, oil and gas | 68,391 | 28,465 | — | 44,515 | 141,371 |
| Cash and cash equivalents | — | 291,111 | — | — | 291,111 |
| Total | $ 2,987,019 | 539,815 | 128,771 | 121,711 | 3,777,316 |

Registered mutual funds and directly held equity securities are classified in Level 1 of the fair value hierarchy. Investments classified in Level 2 and 3 consist of directly held investments that have valuations based on inputs other than quoted prices.

Certain funds contain “rolling” lock-up provisions. Under such provisions, tranches of the investment are available for redemption once every two to five years, if the University makes a redemption request prior to the next available withdrawal date in accordance with the notification terms of the agreement. Private equity and real assets are held in funds that have initial terms of ten to twelve years with extensions of one to three years, and have an average remaining life of approximately four to seven years.

(Dollars in thousands)

The following tables present activities for the years ended June 30, 2018 and 2017 for the University's investments classified in Level 3:

| | | 2018 | | | | | |
|---|---|---|---|---|---|---|---|
| **Level 3 roll forward** | | **Equities** | **Fixed income** | **Private equity** | **Real assets** | **Hedged strategies** | **Total** |
| Fair value as of June 30, 2017 | $ | 841 | 29,429 | 13,385 | 77,056 | 1,000 | 121,711 |
| Acquisitions | | — | 8,400 | 3,822 | — | — | 12,222 |
| Dispositions | | (276) | (13,872) | — | (14,505) | — | (28,653) |
| Net realized and unrealized gains | | 15 | 8,591 | 3,967 | (60) | (150) | 12,363 |
| Fair value at June 30, 2018 | $ | 580 | 32,548 | 21,174 | 62,491 | 850 | 117,643 |

| | | 2017 | | | | | |
|---|---|---|---|---|---|---|---|
| **Level 3 roll forward** | | **Equities** | **Fixed income** | **Private equity** | **Real assets** | **Hedged strategies** | **Total** |
| Fair value as of June 30, 2016 | $ | 678 | 43,201 | 12,987 | 63,294 | — | 120,160 |
| Acquisitions | | — | 6,459 | — | 8,895 | 1,000 | 16,354 |
| Dispositions | | (100) | (34,486) | — | (6,564) | — | (41,150) |
| Net realized and unrealized gains | | 263 | 14,255 | 397 | 11,432 | — | 26,347 |
| Fair value at June 30, 2017 | $ | 841 | 29,429 | 13,384 | 77,057 | 1,000 | 121,711 |

There were no transfers between Levels 1 and 2 and no transfers between Levels 2 and 3 in 2018 and 2017, respectively.

The following summarizes investment return components for the years ended June 30, 2018 and 2017:

| | | **2018** | **2017** |
|---|---|---|---|
| Interest and dividends | $ | 27,198 | 24,577 |
| Net realized and unrealized gains, net of investment management and advisory expenses | | 421,118 | 396,398 |
| Investment return | $ | 448,316 | 420,975 |

(Dollars in thousands)

Total investment return is included in the statements of activities as follows for the years ended June 30:

| | | 2018 | 2017 |
|---|---|---|---|
| Operating: | | | |
| Endowment return appropriated | $ | 151,641 | 164,967 |
| Included in other income | | 12,610 | 11,630 |
| Nonoperating activities: | | | |
| Net investment return | | 435,706 | 409,345 |
| Endowment return appropriated | | (151,641) | (164,967) |
| Total return | $ | 448,316 | 420,975 |

Total investment management and advisory expenses, including internal costs, were $13,276 and $15,118 for the years ended June 30, 2018 and 2017, respectively, and have been netted against the total return.

***(a) Liquidity***

Investment liquidity as of June 30, 2018 and 2017 is aggregated below based on redemption or sale ability:

| | | 2018 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Daily | Monthly | Quarterly | Semi-annually to annually | Subject to rolling lock-ups | Illiquid | Total |
| Equities | $ | 313,978 | — | 474,124 | 139,211 | — | 50,837 | 978,150 |
| Fixed income | | 91,397 | — | — | — | 12,971 | 81,506 | 185,874 |
| Hedged strategies | | 18,521 | 253,649 | 467,647 | 137,219 | 541,585 | 23,268 | 1,441,889 |
| Private equity | | — | 47,138 | — | — | — | 897,919 | 945,057 |
| Real assets | | 26,256 | — | — | — | — | 88,316 | 114,572 |
| Cash and cash equivalents | | 355,572 | — | — | — | — | — | 355,572 |
| Total | $ | 805,724 | 300,787 | 941,771 | 276,430 | 554,556 | 1,141,846 | 4,021,114 |

(Dollars in thousands)

| | | 2017 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Daily | Monthly | Quarterly | Semi-annually to annually | Subject to rolling lock-ups | Illiquid | Total |
| Equities | $ | 201,538 | — | 251,307 | 122,382 | 241,164 | 46,498 | 862,889 |
| Fixed income | | 136,286 | — | — | — | 7,348 | 76,239 | 219,873 |
| Hedged strategies | | 30,913 | 319,889 | 262,932 | 186,493 | 634,739 | 36,881 | 1,471,847 |
| Private equity | | — | 25,282 | — | — | — | 695,592 | 720,874 |
| Real assets | | 29,666 | — | — | — | — | 181,056 | 210,722 |
| Cash and cash equivalents | | 291,111 | — | — | — | — | — | 291,111 |
| Total | $ | 689,514 | 345,171 | 514,239 | 308,875 | 883,251 | 1,036,266 | 3,777,316 |

Investments with daily liquidity generally do not require advance notice prior to withdrawal. Investments with monthly, quarterly, semi-annual, and annual redemption frequency typically require notice periods, ranging from 5 to 180 days, at June 30, 2018 and 2017.

***(b) Commitments***

Private equity and real asset investments are generally made through limited partnerships. Under the terms of these agreements, the University is obligated to remit additional funding periodically as capital or liquidity calls are exercised by the manager. These partnerships have a limited existence, generally ten years, and such agreements may provide for annual extensions for the purpose of disposing portfolio positions and returning capital to investors. However, depending on market conditions, the inability to execute the fund's strategy, and other factors, a manager may extend the terms of a fund beyond its originally anticipated existence or may wind the fund down prematurely. As a result, the timing and amount of future capital or liquidity calls expected to be exercised in any particular future year is uncertain. The aggregate amount of unfunded commitments associated with private equity and real assets as of June 30, 2018 was $560,373 and $66,043, respectively.

***(c) Investment Derivatives***

The University's investment-related derivative positions, categorized by primary underlying risk, are as follows as of June 30, 2018 and 2017:

| | | 2018 | | |
|---|---|---|---|---|
| | | Long notional | Short notional | Unrealized gain (loss) |
| Instrument type: | | | | |
| Total return swaps | $ | 298,590 | (45,195) | 2,242 |
| Futures and options | | 7,612 | (39,772) | (3,547) |
| Total | $ | 306,202 | (84,967) | (1,305) |

(Dollars in thousands)

| | | 2017 | | |
|---|---|---|---|---|
| | | Long notional | Short notional | Unrealized gain (loss) |
| Instrument type: | | | | |
| Total return swaps | $ | 144,306 | (79,887) | (845) |
| Foreign currency forwards | | 8,848 | — | (105) |
| Futures and options | | 6,876 | (91,792) | 580 |
| Total | $ | 160,030 | (171,679) | (370) |

Contracts in a net asset position are included in investments on the balance sheets, and contracts in a net liability position are included in liabilities associated with investments on the balance sheets. At June 30, 2018 and 2017, the University held certain total return swaps in a net liability position of $6,038 and $9,201, respectively, as well as certain total return swaps in a net asset position of $6,798 and $8,357, respectively. At June 30, 2017, the University held various foreign currency forward contracts in a net liability position of $105. At June 30, 2018 and 2017, the University held various futures and options contracts in a net asset position of $8,737 and $7,035, respectively, as well as futures and options contracts in a net liability position of $124 at June 30, 2017.

## (4) Endowment

The University's endowment consists of approximately 3,100 individual funds established for a variety of purposes, including both donor-restricted endowment funds and funds designated by the Corporation to function as endowments. Net assets associated with the endowment are classified and reported based upon the existence or absence of donor-imposed restrictions.

Endowment net assets consist of the following at June 30, 2018:

| | | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|---|
| Donor-restricted endowment funds | $ | (184) | 1,521,921 | 1,496,235 | 3,017,972 |
| Corporation-designated endowment funds | | 526,150 | 59,726 | — | 585,876 |
| Total endowment net assets | $ | 525,966 | 1,581,647 | 1,496,235 | 3,603,848 |

(Dollars in thousands)

Endowment net assets consist of the following at June 30, 2017:

| | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|
| Donor-restricted endowment funds | $ (1,362) | 1,306,637 | 1,394,885 | 2,700,160 |
| Corporation-designated endowment funds | 483,590 | 61,781 | — | 545,371 |
| Total endowment net assets | $ 482,228 | 1,368,418 | 1,394,885 | 3,245,531 |

Changes in endowment net assets for the year ended June 30, 2018 are as follows:

| | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|
| Endowment at June 30, 2017 | $ 482,228 | 1,368,418 | 1,394,885 | 3,245,531 |
| Investment return, net | 69,221 | 341,716 | — | 410,937 |
| Endowment return appropriated | (25,283) | (126,358) | — | (151,641) |
| Contributions | 200 | 266 | 98,037 | 98,503 |
| Reclassifications and other changes | (400) | (2,395) | 3,313 | 518 |
| Endowment at June 30, 2018 | $ 525,966 | 1,581,647 | 1,496,235 | 3,603,848 |

Changes in endowment net assets for the year ended June 30, 2017 are as follows:

| | Unrestricted | Temporarily restricted | Permanently restricted | Total |
|---|---|---|---|---|
| Endowment at June 30, 2016 | $ 436,177 | 1,211,827 | 1,315,362 | 2,963,366 |
| Investment return, net | 73,378 | 311,037 | — | 384,415 |
| Endowment return appropriated | (28,180) | (136,787) | — | (164,967) |
| Contributions | 360 | 230 | 74,495 | 75,085 |
| Reclassifications and other changes | 493 | (17,889) | 5,028 | (12,368) |
| Endowment at June 30, 2017 | $ 482,228 | 1,368,418 | 1,394,885 | 3,245,531 |

### *(a) Interpretation of Relevant Laws*

The portion of donor-restricted endowment funds that is not classified as permanently 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. In accordance with UPMIFA, the University considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

- The duration and preservation of the fund
- The purposes of the University and the donor-restricted endowment fund
- General economic conditions
- The possible effect of inflation and deflation
- The expected total return from income and the appreciation of investments
- Other resources of the University
- The investment policies of the University

### *(b) Funds with Deficiencies*

From time to time, the fair value of assets associated with an individual donor-restricted endowment fund may fall below the fund's historic dollar value. Deficiencies of this nature, which are reported in unrestricted net assets, aggregated $184 and $1,362 as of June 30, 2018 and 2017, respectively. These deficiencies resulted principally from investment losses and continued appropriation for certain programs that was deemed prudent by the Corporation. Subsequent gains that restore the fair value of the assets of these endowment funds to their historic dollar value will be classified as increases in unrestricted net assets.

### *(c) Return Objectives and Risk Parameters*

The University has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowment while seeking to maintain the purchasing power of the endowment assets, including both donor-restricted and designated funds. The long-term investment return objective is formulated to maintain purchasing power after accounting for both inflation and spending. The Corporation has set a long-term return goal at 5.5% above the higher education price index. Actual returns in any given year or period of years may vary from this amount.

### *(d) Strategies Employed for Achieving Objectives*

To satisfy its long-term rate-of-return objectives, the University relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The University targets a diversified asset allocation to achieve its long-term return objectives within prudent risk constraints.

(Dollars in thousands)

***(e) Spending Policy and How the Investment Objectives Relate to Spending Policy***

The University invests its endowment funds and allocates the related return for expenditure in accordance with the total return concept. The endowment utilization is determined in accordance with the policy adopted by the Corporation. This policy fixes the spending range between 4.5% and 5.5% of the average fair value of applicable endowments over the prior twelve quarters, with the objective being to hold the spending rate to no more than a 5% average over time. Applicable endowments include Corporation-designated and donor-restricted endowment funds.

## (5) Land, Buildings and Equipment

Land, buildings and equipment include the following at June 30:

| | | 2018 | 2017 |
|---|---|---|---|
| Land | $ | 85,882 | 84,651 |
| Buildings | | 729,944 | 642,702 |
| Improvements | | 1,085,518 | 1,046,911 |
| Equipment | | 215,517 | 203,800 |
| Intangible assets | | 2,633 | 2,633 |
| Construction in progress | | 68,390 | 106,105 |
| | | 2,187,884 | 2,086,802 |
| Accumulated depreciation | | (1,063,156) | (987,059) |
| Land, buildings and equipment, net | $ | 1,124,728 | 1,099,743 |

Outstanding commitments on uncompleted construction contracts total $65,787 at June 30, 2018.

(Dollars in thousands)

## (6) Bonds, Loans and Notes Payable

The University has entered into various agreements primarily for the purpose of financing the acquisition, renovation, and improvement of its facilities. The bonds, loans and notes payable outstanding for these purposes are as follows:

| Name of issue | Interest rate(s) | Type of rate | Final maturity | Balance at June 30 2018 | Balance at June 30 2017 |
|---|---|---|---|---|---|
| Rhode Island Health and Education Building Corporation (RIHEBC) Facilities Revenue Bonds: | | | | | |
| Series 2003B | 1.50% | Variable | 2044 | $ 40,680 | 41,175 |
| Series 2005A | 1.50% | Variable | 2035 | 85,500 | 85,500 |
| Series 2007 | 4.25%–5.00% | Fixed | 2038 | — | 86,360 |
| Series 2009 | 5.00% | Fixed | 2040 | 70,795 | 70,795 |
| Series 2011 | 2.50%–5.00% | Fixed | 2033 | 46,160 | 50,710 |
| Series 2012 | 5.00% | Fixed | 2023 | 118,240 | 118,240 |
| Series 2013 | 4.00%–5.00% | Fixed | 2044 | 129,925 | 132,670 |
| Series 2015 | 2.00% | Variable | 2046 | 42,755 | 43,900 |
| Series 2017A | 4.00%–5.00% | Fixed | 2048 | 141,125 | — |
| Brown University Taxable Bonds: | | | | | |
| Series 2009 | 4.57% | Fixed | 2020 | 45,000 | 45,000 |
| Commercial bank term loan | 2.39% | Variable | 2019 | 47,800 | 48,900 |
| Promissory note | noninterest bearing | N/A | 2030 | 3,200 | 3,300 |
| Loans payable – community: Development entities | 1.22% | Fixed | 2042 | — | 13,748 |
| Total bonds, loans and notes payable before premium | | | | 771,180 | 740,298 |
| Unamortized premium | | | | 48,481 | 33,612 |
| Total bonds, loans and notes payable | | | | $ 819,661 | 773,910 |

### (a) Tax Exempt Bonds

The University’s tax exempt debt, primarily Facilities Revenue Bonds, is issued through RIHEBC, a state agency serving as a conduit issuer of tax exempt debt. The University is required under certain of its financing agreements with RIHEBC to appropriate funds from operating and other net assets for payment of principal and interest and for maintenance of the related properties. The Revenue Bonds currently outstanding were issued primarily to finance new and ongoing capital projects, student housing, academic, research and administrative buildings, and infrastructure.

(Dollars in thousands)

In July 2017, the University issued through RIHEBC tax-exempt bonds with a total par value of $141,125 at an interest rate range of 4.00% to 5.00%, maturing in 2048. The bonds were sold at a premium of $19,532, resulting in effective yield of 3.25%. The proceeds were used to refinance $86,360 of Series 2007 tax-exempt bonds, with remaining proceeds to be used for capital projects.

### *(b) Taxable Bonds and Other Debt*

Series 2009 Taxable Bonds were issued to provide liquidity and to protect against a tightening in liquidity markets. In February 2017, the University redeemed $55,000 of the Series 2009 Taxable Bond. The transaction resulted in a make whole redemption expense of $3,934, which is included in other changes on the 2017 statement of activities.

The University has a $50,000 Taxable Commercial Paper Program that allows for the issuance of Standard Commercial Paper Notes, Series A, and Extendible Commercial Paper Notes, Series B. These unsecured, taxable promissory notes can be issued in various amounts with maturities no greater than 270 days. At June 30, 2018 and 2017, there were no outstanding notes.

Principal payments of bonds, notes and loans payable as of June 30, 2018 for each of the succeeding five fiscal years ending June 30 and thereafter are as follows:

| | | |
|---|---|---|
| Fiscal year: | | |
| 2019 | $ | 57,235 |
| 2020 | | 54,795 |
| 2021 | | 7,775 |
| 2022 | | 65,765 |
| 2023 | | 70,100 |
| Thereafter | | 515,510 |
| Total | $ | 771,180 |

At June 30, 2018 and 2017, the University had a $125,000 and $100,00 line of credit, respectively, which matured in July 2018 and July 2017, respectively. The line of credit was subsequently renewed in July 2018. As of June 30, 2018, the full amount of $125,000 was available at a rate of one month LIBOR plus 40 basis points.

The University has two stand-by bond purchase agreements with financial institutions totaling approximately $126,000 in the event that the Series 2003B and Series 2005A bonds cannot be remarketed. The $85,500 agreement matures November 2020 and the $40,680 agreement matures January 2020. There were no amounts outstanding at June 30, 2018 and 2017, under these agreements, nor has either agreement ever been called upon.

The University provided self-liquidity for its taxable commercial paper program at June 30, 2018 and 2017.

(Dollars in thousands)

During fiscal 2011, the University entered into an agreement with third-party investors to effectively avail itself of certain Federal New Market Tax Credit (NMTC) incentives. By enabling these third parties to capture the NMTC benefits associated with the acquisition and construction of the University's new medical school facility, the University was able to reduce its all-in cost of the facility. Under the arrangement, the University loaned $58,501 to Providence Richmond Street Investment Fund, LLC (LLC) capitalized by the investors. The LLC in turn provided capital to various community development entities, which then collectively issued $72,249 of loans to KARING, a special-purpose, wholly owned 501(c) (3) not-for-profit entity consolidated by the University. KARING owns the facility and leased it back to the University during the seven-year period required for the NMTC structure to be effective. As part of the unwind of the NMTC transaction, the University bought the sole member interest in the LLC on October 31, 2017. The sole member interest included a $72,249 note receivable from KARING. The transaction resulted in a gain of $13,748, which is reflected in other changes on the statement of activities.

### *(c) Interest Rate Swaps*

At June 30, 2018 and 2017, the University had two interest-rate swap agreements in place to effectively convert a portion of its variable-rate debt to fixed rates until maturity of the associated bonds. The notional amounts for the JPMorgan swap and the $85,500 Goldman Sachs swap match the par amounts of the bonds and amortize at the same rate as the associated debt.

As of June 30, the following interest-rate swap agreements were outstanding:

| Counterparty | Associated debt | Expiration date | June 30, 2018 remaining notional value | Swap fixed rate | Fair value of liability at June 30 2018 | Fair value of liability at June 30 2017 |
|---|---|---|---|---|---|---|
| JP Morgan | Series 2003B | 9/1/2043 | $ 40,680 | 3.732 % | $ (11,043) | (13,949) |
| Goldman Sachs | Series 2005A | 5/1/2035 | 85,500 | 3.979 | (19,008) | (24,520) |
| Goldman Sachs | None | 9/1/2032 | 14,237 | 3.891 | (1,706) | (2,413) |
| | | | | | $ (31,757) | (40,882) |

The variable rate on the two Goldman Sachs swaps is based on the USD-BMA Municipal Swap Index. The variable rate on the JPMorgan swap is based on 67% of one-month LIBOR-BBA. The Goldman Sachs swaps require posting of collateral by either party at thresholds based on their respective credit ratings. Cash collateral must be posted by the University if the aggregate mark-to-market liability payable by the University exceeds $25,000. The JPMorgan swap stipulates that if the University meets a minimum credit rating there are no collateral posting requirements. At June 30, 2018, the University had no collateral posting requirements under the agreements.

(Dollars in thousands)

Interest rate volatility, remaining outstanding notional value and time to maturity will affect each swap's fair value at subsequent reporting dates. To the extent the University holds a swap through its expiration date, the swap's fair value will reach zero. Because the swap fair values are based predominantly on observable inputs corroborated by market data, they are classified in Level 2 in the GAAP fair value hierarchy.

## (7) Retirement Benefits

The University participates in two contributory retirement plans. The expense to the University, representing its contributions to the accounts of faculty and staff, was $26,288 and $26,519 for the years ended June 30, 2018 and 2017, respectively.

The Brown University Food Services and Plant Operations Employees' Pension Plan is a qualified, noncontributory defined benefit plan which provides pensions for certain full-time weekly paid employees. The policy of the University is to fund pension costs in accordance with the Employee Retirement Income Security Act of 1974, as amended.

Information regarding the defined benefit pension plan for the years ended June 30 is as follows:

| | | 2018 | 2017 |
|---|---|---|---|
| Change in projected benefit obligation: | | | |
| Projected benefit obligation at beginning of year | $ | 100,398 | 104,293 |
| Service cost | | 4,185 | 4,477 |
| Interest cost | | 3,741 | 3,488 |
| Benefits paid | | (2,478) | (2,310) |
| Actuarial gain | | (6,088) | (9,550) |
| Projected benefit obligation at end of year | $ | 99,758 | 100,398 |

The projected benefit obligation was determined using the following assumptions as of June 30:

| | 2018 | 2017 |
|---|---|---|
| Discount rate | 4.09 % | 3.79 % |
| Rate of compensation increase | 3.00 | 3.00 |



(Continued)

(Dollars in thousands)

The following is a summary of activity under the plan for the years ended June 30:

| | | 2018 | 2017 |
|---|---|---|---|
| Change in plan assets: | | | |
| Fair value of plan assets at beginning of year | $ | 74,036 | 65,072 |
| Actual return on plan assets | | 5,871 | 8,774 |
| Contributions | | 2,500 | 2,500 |
| Benefits paid | | (2,478) | (2,310) |
| Fair value of plan assets at end of year | | 79,929 | 74,036 |
| Projected benefit obligation at end of year | | (99,758) | (100,398) |
| Funded status included in other long-term obligations | $ | (19,829) | (26,362) |

| | | 2018 | 2017 |
|---|---|---|---|
| Net periodic pension cost: | | | |
| Service cost | $ | 4,185 | 4,477 |
| Interest cost | | 3,741 | 3,487 |
| Expected return on assets | | (4,819) | (4,211) |
| Amortization of unrecognized loss and prior service cost | | 958 | 1,994 |
| Net periodic pension cost | $ | 4,065 | 5,747 |

Net periodic pension cost was determined using the following assumptions for the years ended June 30:

| | 2018 | 2017 |
|---|---|---|
| Discount rate | 3.79 % | 3.48 % |
| Rate of compensation increase | 3.00 | 3.00 |
| Expected long-term rate of return | 6.50 | 6.50 |

The expected rate of return on plan assets was derived based upon assumptions of inflation, real returns, anticipated value added by the investment manager and expected asset class allocations.

Net periodic pension cost is reflected in operating activities on the statements of activities. As of June 30, 2018 and 2017, items not yet recognized as components of net periodic pension cost are unrecognized prior service cost of $873 and $1,014, respectively, and a net unrecognized actuarial loss of $12,562 and $20,519, respectively. These changes affecting the funded status of the plan are included in other changes, net in nonoperating activities in the statements of activities.

(Dollars in thousands)

The plan assets at June 30, 2018 and 2017 consist of variable annuity investments with various equity and fixed income focuses, which are classified as Level 1 in the GAAP fair value hierarchy.

The investment strategy for the Plan takes into account several factors consistent with the characteristics of an employee pension plan. As such, the strategy recognizes a long-term time horizon where a substantial allocation to equities is appropriate and will help to maximize returns; broad diversification in order to increase return and reduce risk; and investment in institutional retirement annuities that serves to reduce administrative costs.

The actual asset allocation for the pension plan as of June 30, 2018 and 2017, and the weighted average asset targeted allocation are as follows:

| | | Actual | |
|---|---|---|---|
| | **Target** | **2018** | **2017** |
| Equity funds | 75 % | 77 % | 75 % |
| Fixed income funds | 25 | 23 | 25 |
| Total | 100 % | 100 % | 100 % |

The University's estimated contribution for 2019 is $2,500.

Estimated future benefit payments as of June 30, 2018 are as follows:

| | |
|---|---|
| Fiscal year: | |
| 2019 | $ 3,187 |
| 2020 | 3,365 |
| 2021 | 3,616 |
| 2022 | 3,890 |
| 2023 | 4,177 |
| 2024–2028 | 26,013 |



(Continued)

(Dollars in thousands)

## (8) Restricted Net Assets

The University's restricted net assets as of June 30 are as follows:

| | | 2018 | | 2017 | |
|---|---|---|---|---|---|
| | | Temporarily restricted | Permanently restricted | Temporarily restricted | Permanently restricted |
| Endowment | $ | 1,581,647 | 1,496,235 | 1,368,418 | 1,394,885 |
| Contributions receivable | | 136,759 | 80,875 | 84,137 | 74,087 |
| Donor-restricted purposes | | 114,351 | 47,165 | 107,443 | 45,105 |
| Donor-restricted for plant-purposes | | 88,288 | — | 135,362 | — |
| Student loans | | 13,245 | — | 13,189 | — |
| Total | $ | 1,934,290 | 1,624,275 | 1,708,549 | 1,514,077 |

## (9) Functional Classification of Expenses

Functional categories are reported after allocating, on a square footage basis, expenses for operation and maintenance of plant, interest on indebtedness, and depreciation. Operating expenses incurred in the fiscal years ended June 30 were as follows:

| | | 2018 | 2017 |
|---|---|---|---|
| Instruction and departmental research | $ | 355,006 | 335,115 |
| Sponsored programs | | 144,020 | 128,405 |
| Academic and student support | | 232,829 | 215,949 |
| Auxiliary services | | 114,914 | 100,361 |
| Institutional support | | 100,454 | 102,070 |
| | $ | 947,223 | 881,900 |

## (10) Commitments and Contingencies

All funds expended in conjunction with government grants and contracts are subject to audit by governmental agencies. In the opinion of management, any potential liability resulting from these audits will not have a material effect on the University's financial position.

The University is a defendant in various legal actions arising in the normal course of its operations. Although the final outcome of such actions cannot currently be determined, the University believes that the ultimate unrecognized liability, if any, will not have a material effect on the University's financial position.

(Dollars in thousands)

## (11) Related-Party Transactions

Members of the Corporation and senior management may, from time to time, be associated either directly or indirectly with companies doing business with the University. The University has a written conflict of interest policy that requires annual reporting by each Corporation member and University senior management. When such relationships exist, measures are taken to mitigate any actual or perceived conflict, including requiring that such transactions be conducted at arms' length, based on terms that are fair and reasonable to and in the best interest of the University.

Effective July 1, 2017, the University, along with The Neurology Foundation, Inc.; University Emergency Medicine Foundation; University Medicine Foundation; University Surgical Associates, Inc.; Brown Urology, Inc.; and Brown Dermatology, Inc. (collectively the Foundations), joined to create the nonprofit Brown Physicians, Inc. (BPI). BPI is an affiliated clinical practice that will enhance the partnership between the Foundations and the Warren Alpert Medical School. Under the formation and support agreement, the University is obligated to pay BPI $25,000 over a 10-year period. In 2018, the University paid $5,000 to BPI, with the remaining $20,000 included in accounts payable and other liabilities at June 30, 2018. In addition, the University authorized a line of credit agreement with BPI, up to $30,000. There was no amount outstanding under the line of credit at June 30, 2018.

## (12) Supplemental Disclosure of Cash Flow Information

Following is information intended to supplement the statements of cash flows for the years ended June 30:

| | | 2018 | 2017 |
|---|---|---|---|
| Cash paid for interest, including recurring swap settlements, net of capitalized interest of $1,682 and $480 | $ | 23,050 | 32,439 |
| Noncash investing activities: | | | |
| Increase (decrease) in accounts payable for land, buildings and equipment | $ | 12,441 | (1,595) |
| (Decrease) increase in payables for purchases of investments | | (97,826) | 83,204 |

## (13) Subsequent Events

In July 2018, the University borrowed $75,000 through a commercial bank term loan at a variable rate of one-month LIBOR plus 25 basis points, maturing in 2021. The proceeds were used to repay a maturing $47,800 commercial bank loan, and the remaining proceeds were used to pay down $27,200 of the Series 2009 Taxable Bond. University capital was used to retire the remaining 2009 Taxable Bond. The transaction resulted in a make whole redemption expense of $1,005.

The University considers events or transactions that occur after the balance sheet date, but before the financial statements are issued, to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. These financial statements were issued October 29, 2018, and subsequent events have been evaluated through that date.