

Consolidated Financial Statements and Information on Federal Awards

June 30, 2017

(With Independent Auditors' Reports Thereon)

# **Table of Contents**

|  | Page |
|--|------|
| Independent Auditors' Report   | 1    |
| Consolidated Statement of Financial Position, June 30, 2017 (with comparative financial information for the year ended June 30, 2016)  | 3    |
| Consolidated Statement of Activities, Year ended June 30, 2017 (with comparative financial information for the year ended June 30, 2016)   | 4    |
| Consolidated Statement of Cash Flows, Year ended June 30, 2017 (with comparative financial information for the year ended June 30, 2016)   | 5    |
| Notes to Consolidated Financial Statements   | 6    |
| Schedule of Expenditures of Federal Awards, Year ended June 30, 2017   | 31   |
| Notes to Schedule of Expenditures of Federal Awards  | 34   |
| Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards | 36   |
| Independent Auditors' Report on Compliance for the Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance    | 38   |
| Schedule of Findings and Questioned Costs, Year ended June 30, 2017  | 40   |



KPMG LLP 1601 Market Street Philadelphia, PA 19103-2499

# **Independent Auditors' Report**

The Board of Trustees Lehigh University:

#### **Report on the Financial Statements**

We have audited the accompanying consolidated financial statements of Lehigh University (the University), which comprise the consolidated statement of financial position as of June 30, 2017, and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements.

# Management's Responsibility for the Consolidated Financial Statements

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

# Auditors' Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity'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 entity'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 consolidated financial position of Lehigh University as of June 30, 2017, and the changes in its net assets and its cash flows for the year then ended in accordance with U.S. generally accepted accounting principles.

# Report on Summarized Comparative Information

We have previously audited Lehigh University's 2016 consolidated financial statements, and we expressed an unmodified audit opinion on those audited consolidated financial statements in our report dated October 24, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016 is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

# Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 23, 2017 on our consideration of Lehigh University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Lehigh University's internal control over financial reporting and compliance.



Philadelphia, Pennsylvania October 23, 2017

# Consolidated Statement of Financial Position

June 30, 2017 (with comparative financial information for June 30, 2016)

(In thousands)

| Assets                                       |    | 2017      | 2016      |
|--|----|-----------|-----------|
| Cash and cash equivalents (note 1(c))        | \$ | 23,705    | 24,930    |
| Accounts receivable, net (note 5)            |    | 17,019    | 12,946    |
| Inventories                                  |    | 1,503     | 1,590     |
| Prepaid expenses and other assets            |    | 6,017     | 5,584     |
| Contributions receivable, net (note 8)       |    | 33,901    | 37,030    |
| Notes receivable, net (note 6)               |    | 11,758    | 12,767    |
| Investments (notes 2 and 4)                  |    | 1,871,799 | 1,554,579 |
| Funds held in trust by others                |    | 4,553     | 4,332     |
| Land, buildings, and equipment, net (note 7) |    | 413,192   | 401,190   |
| Total assets                                 | \$ | 2,383,447 | 2,054,948 |
| Liabilities and Net Assets                   |    |           |           |
| Accounts payable and accrued expenses        | \$ | 42,308    | 37,888    |
| Deferred revenues                            |    | 25,354    | 23,837    |
| Annuity payment liability                    |    | 18,431    | 19,443    |
| Other liabilities (notes 10, 11, and 13)     |    | 52,257    | 55,982    |
| Deposits held for others                     |    | 1,346     | 1,385     |
| Refundable federal student loan funds        |    | 2,018     | 2,194     |
| Bonds, loans, and notes payable (note 10)    |    | 395,972   | 240,025   |
| Total liabilities                            | _  | 537,686   | 380,754   |
| Net assets (notes 3 and 9):                  |    |           |           |
| Unrestricted                                 |    | 932,232   | 839,051   |
| Temporarily restricted                       |    | 364,188   | 309,160   |
| Permanently restricted                       |    | 549,341   | 525,983   |
| Total net assets                             | _  | 1,845,761 | 1,674,194 |
| Total liabilities and net assets             | \$ | 2,383,447 | 2,054,948 |

See accompanying notes to consolidated financial statements.

# Consolidated Statement of Activities

Year ended June 30, 2017 (with summarized comparative financial information for year ended June 30, 2016)

(In thousands)

|   |              | 20          | 17          |           |           |
|---|--------------|-------------|-------------|-----------|-----------|
|   |              | Temporarily | Permanently |           |           |
|   | Unrestricted | restricted  | restricted  | Total     | 2016      |
| Support and revenues:                       |              |             |             |           |           |
| Tuition and fees, net (note 1(i))           | \$ 191,329   | _           | _           | 191,329   | 185,644   |
| Federal grants and contracts                | 27,433       | _           | _           | 27,433    | 23,597    |
| State and local grants and contracts        | 6,380        | _           | _           | 6,380     | 6,314     |
| Private grants and contracts                | 7,360        | _           | _           | 7,360     | 5,807     |
| Contributions                               | 12,163       | _           | _           | 12,163    | 15,090    |
| Investment return (note 2)                  | 83,515       | _           | _           | 83,515    | 82,527    |
| Auxiliary enterprises                       | 42,930       | _           | _           | 42,930    | 43,492    |
| Independent operations (note 1(a))          | 15,305       | _           | _           | 15,305    | 11,123    |
| Other sources                               | 10,161       | _           | _           | 10,161    | 9,543     |
| Net assets released from restrictions       | 2,816        | (2,816)     |             |           |           |
| Total support and revenues                  | 399,392      | (2,816)     |             | 396,576   | 383,137   |
| Expenses:                                   |              |             |             |           |           |
| Instruction                                 | 150,480      | _           | _           | 150,480   | 144,281   |
| Research                                    | 43,348       | _           | _           | 43,348    | 39,285    |
| Public service                              | 2,595        | _           | _           | 2,595     | 3,258     |
| Academic support                            | 35,175       | _           | _           | 35,175    | 32,460    |
| Student services                            | 36,190       | _           | _           | 36,190    | 36,216    |
| Institutional support (note 16)             | 70,348       | _           | _           | 70,348    | 69,522    |
| Auxiliary enterprises                       | 38,702       | _           | _           | 38,702    | 37,757    |
| Independent operations (note 1(a))          | 10,882       |             |             | 10,882    | 11,240    |
| Total expenses (note 12)                    | 387,720      |             |             | 387,720   | 374,019   |
| Operating income (loss)                     | 11,672       | (2,816)     |             | 8,856     | 9,118     |
| Nonoperating activity:                      |              |             |             |           |           |
| Investment return (note 2):                 |              |             |             |           |           |
| University                                  | 70,631       | 51,079      | 2,977       | 124,687   | (116,764) |
| Independent operations                      | 2,792        | _           | _           | 2,792     | 387       |
| Gifts and trusts                            | 8,442        | 4,360       | 18,597      | 31,399    | 21,531    |
| Net assets released from restrictions and   |              |             |             |           |           |
| changes in donor intent                     | (2,552)      | 2,469       | 83          | _         | _         |
| Change in fair value of interest rate swaps |              |             |             |           |           |
| (note 11)                                   | 12,499       | _           | _           | 12,499    | (3,189)   |
| Postretirement plan changes other than      |              |             |             |           |           |
| net periodic benefit costs (note 13):       |              |             |             |           |           |
| University                                  | 1,039        | _           | _           | 1,039     | (2,559)   |
| Independent operations                      | 30           | _           | _           | 30        | (63)      |
| Other                                       | (11,372)     | (64)        | 1,701       | (9,735)   | 2,691     |
| Nonoperating income                         | 81,509       | 57,844      | 23,358      | 162,711   | (97,966)  |
| Change in net assets                        | 93,181       | 55,028      | 23,358      | 171,567   | (88,848)  |
| Net assets, beginning of year               | 839,051      | 309,160     | 525,983     | 1,674,194 | 1,763,042 |
| Net assets, end of year                     | \$ 932,232   | 364,188     | 549,341     | 1,845,761 | 1,674,194 |

See accompanying notes to consolidated financial statements.

# Consolidated Statement of Cash Flows

# Year ended June 30, 2017 (with comparative financial information for year ended June 30, 2016)

(In thousands)

|  | -  | 2017  | 2016              |
|--|----|---|-------------------|
| Cash flows from operating activities:  |    |   |                   |
| Change in net assets   | \$ | 171,567                                       | (88,848)          |
| Adjustments to reconcile change in net assets to net cash used in operating activities:              |    | (00.000)                                      | (47.000)          |
| Gifts and trusts restricted for long-term investment   |    | (30,369)                                      | (17,393)          |
| Noncash contributions  |    | (2,124)<br>(353)                              | (2,132)<br>281    |
| Investment earnings restricted for long-term investment  Net realized gains on investments           |    | (64,790)                                      | (24,912)          |
| Net unrealized (gains) losses on investments   |    | (136,192)                                     | 69,008            |
| Change in fair value of rate swap liabilities  |    | (5,108)                                       | 2,786             |
| Payment of annuity obligations   |    | 1,320   | 1,336             |
| Other nonoperating activity  |    | 73  | 417               |
| Depreciation and amortization  |    | 33,113  | 27,903            |
| Loss on defeasance and refunding of tax-exempt bonds   |    | 10,063  | _                 |
| Independent operations provision for bad debts   |    | 2,637   | 1,841             |
| University provision for bad debts   |    | 45  | 381               |
| Change in operating assets and liabilities:  |    | (5.005)                                       | 0.400             |
| (Increase) decrease in accounts receivable   |    | (5,035)                                       | 2,420             |
| Decrease in inventories  |    | 87  | 162               |
| Decrease in contributions receivable<br>Increase (decrease) in accounts payable and accrued expenses |    | 3,129<br>4,420                                | 19,658<br>(4,511) |
| Increase in deferred revenues  |    | 1,517   | 1,287             |
| (Decrease) increase in annuity payment liability   |    | (1,012)                                       | 657               |
| (Decrease) increase in deposits held for others  |    | (39)  | 37                |
| Increase in accrued postretirement benefit cost  |    | 1,255   | 4,867             |
| Increase in other assets   |    | (433)   | (1,146)           |
| Decrease in other liabilities  | _  | (20)  | (53)              |
| Net cash used in operating activities  | -  | (16,249)                                      | (5,954)           |
| Cash flows from investing activities:  |    |   |                   |
| Proceeds from sale and maturity of investments   |    | 1,343,364                                     | 1,279,981         |
| Purchases of investments   |    | (1,460,021)                                   | (1,216,218)       |
| Student loans and other notes advanced   |    | (982)   | (1,272)           |
| Independent operations loans advanced  |    | (2,031)                                       | (1,607)           |
| Student loans and other notes collected  |    | 2,082   | 1,339             |
| Independent operations loans collected   |    | 196<br>(38,851)                               | 270<br>(34,895)   |
| Purchase of land, buildings, and equipment   | -  | <u>, , , , , , , , , , , , , , , , , , , </u> |                   |
| Net cash (used in) provided by investing activities  | -  | (156,243)                                     | 27,598            |
| Cash flows from financing activities:  Proceeds from issuance of indebtedness                        |    | 253,474                                       | _                 |
| Repayments of principal of indebtedness  |    | (5,895)                                       | (41,021)          |
| Defeasance and refunding of tax-exempt bonds   |    | (95,475)                                      | ( , = . /         |
| Loss on defeasance and refunding of tax-exempt bonds   |    | (10,063)                                      | _                 |
| Gifts and trusts restricted for long-term investment   |    | 30,369  | 17,393            |
| Investment earnings restricted for long-term investment  |    | 353   | (281)             |
| Decrease in refundable loan funds  |    | (176)   | (95)              |
| Payment of annuity obligations   | -  | (1,320)                                       | (1,336)           |
| Net cash provided by (used in) financing activities  | _  | 171,267                                       | (25,340)          |
| Net decrease in cash and cash equivalents  |    | (1,225)                                       | (3,696)           |
| Cash and cash equivalents at beginning of year   | _  | 24,930  | 28,626            |
| Cash and cash equivalents at end of year   | \$ | 23,705  | 24,930            |
| Supplemental data:<br>Interest paid  | \$ | 10,520  | 9,829             |

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

June 30, 2017
(with comparative financial information for June 30, 2016)

# (1) Summary of Significant Accounting Policies

# (a) Organization

Lehigh University (the University), an independent, nondenominational, coeducational university, is incorporated in the Commonwealth of Pennsylvania as a nonprofit corporation and is a tax-exempt organization as described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended. The University is accredited by the Middle States Association of Colleges and Schools.

Founded in 1865, the University has approximately 5,100 undergraduates within its three major units – the College of Arts and Sciences, the College of Business and Economics, and the P.C. Rossin College of Engineering and Applied Science – and approximately 2,000 students enrolled in graduate programs offered through these colleges and in the College of Education.

The University's subsidiary organization, LU Properties, LLC (LU Properties), a Pennsylvania limited liability company, serves as Manager for twenty-three limited liability companies that were established as a result of a real estate gift. The University is the sole member of all of the limited liability companies. As Manager, LU Properties is responsible for the strategic and operational aspects of the real estate investment. The results of their operations are shown as nonoperating investment return in the University's consolidated statement of activities.

LU Properties also serves as Manager for South River Investments LLC (South River) and So-Beth Funding LLC (So-Beth Funding). South River, a Pennsylvania limited liability company, was formed to own and develop certain real estate properties in the local community. The results of South River's operations appear as public service in the University's consolidated statement of activities.

So-Beth Funding was formed to improve the condition of residential properties and quality of property management in the South Bethlehem community in order to create a more attractive and safe neighborhood for University students and the greater community. The results of So-Beth Funding's operations appear primarily as investment return in the University's consolidated statement of activities.

The Ben Franklin Technology Partners of Northeastern PA (BFTP), Manufacturers Resource Center (MRC), and Lehigh and Northampton Counties Revolving Loan Fund (RLF) are also wholly owned subsidiaries of the University. The results of their operations are shown as independent operations in the University's consolidated statement of activities.

BFTP is an entity that encourages public and private sector cooperation in stimulating economic growth. BFTP provides funds to its clients under the terms of its early state loan programs and manufacturer grants. Considering the nature of the loans and collection history, BFTP has recorded an estimated allowance for doubtful collections.

MRC provides resources to help small and medium-sized regional manufacturing companies enhance their ability to compete successfully by providing consulting, education, and strategic partnering services. RLF's principal activity is to provide capital (in the form of loans) to new and existing businesses for the purpose of creating and retaining permanent private-sector jobs.

Notes to Consolidated Financial Statements

June 30, 2017
(with comparative financial information for June 30, 2016)

The majority of the independent operations revenue reported in the University's consolidated statement of activities relates to BFTP and MRC revenue received in the form of federal and state grants and client fees for services.

The assets and liabilities of all subsidiary organizations appear in the appropriate line items of the consolidated statement of financial position.

# (b) Basis of Presentation

The accompanying consolidated financial statements of the University include all subsidiary organizations and have been prepared on the accrual basis of accounting and in conformity with U.S. generally accepted accounting principles (GAAP). All significant inter-organizational balances and transactions have been eliminated.

The University's consolidated financial statements are presented in accordance with the external financial reporting requirements for not-for-profit organizations, which include three basic financial statements and the classification of resources into three separate classes of net assets, as follows:

Unrestricted – Net assets that are free of donor-imposed restrictions; all revenues, expenses, gains, and losses that are not changes in permanently or temporarily restricted net assets. Unrestricted net assets may be designated for specific purposes by action of the Board of Trustees or management.

Temporarily Restricted – Net assets whose use by the University is limited by donor-imposed stipulations that either expire by passage of time or that can be fulfilled or removed by actions of the University pursuant to those stipulations.

Permanently Restricted – Net assets whose use by the University is limited by donor-imposed stipulations that neither expire with the passage of time nor can be fulfilled or otherwise removed by actions of the University. Generally, the donors of these assets permit the University to use all or part of the investment income on related investments for general or specific purposes. Such assets primarily include the University's permanent endowment fund.

Nonoperating activities reflect transactions of a long-term investment or capital nature, including contributions restricted for acquisitions of facilities and equipment, contributions restricted with donor-imposed stipulations, gains and losses on investments net of the University's spending policy, and certain postretirement benefits-related changes in net assets.

# (c) Cash Equivalents

All highly liquid investments with an original maturity of three months or less, except those held for long-term investment purposes, are considered to be cash equivalents.

# (d) Inventories

Inventories are stated at the lower of cost or net realizable value.

Notes to Consolidated Financial Statements

June 30, 2017
(with comparative financial information for June 30, 2016)

# (e) Investments

Investments are stated at fair value or net asset value (NAV) as a practical expedient to fair value (see note 4).

Unrealized gains and losses on investments are included in nonoperating investment return in the consolidated statement of activities.

The University's investments are exposed to various risks such as interest rate, market, and credit risks. Such risks, and the resulting investment security values, may be influenced by changes in economic conditions and market perceptions and expectations. Accordingly, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the consolidated statement of financial position.

# (f) Contributions

Contributions received, including unconditional promises to give, are recognized as revenues when the donor's commitment is received. Unconditional promises to give are recognized at the estimated present value of the future cash flows, net of allowances. Allowances for uncollectible amounts are recorded based on management's estimate of realizability of the underlying pledges.

Contributions made towards long-lived assets are held as temporarily restricted until the asset is completed and available for use. At such time, the contribution is considered to be released from restriction and reclassified to unrestricted net assets. Contributions that are released from restriction within the year received are classified as unrestricted gifts. Gifts of noncash assets are recorded at their fair value. Conditional promises are recorded when donor stipulations are substantially met.

# (g) Split-Interest Agreements and Annuities Payable

The University's split-interest agreements with donors consist primarily of annuity, life income, and charitable trusts for which the University serves as trustee. A majority of the assets held in these trusts are included in investments. Contribution revenues are recognized at the date the trusts are established after recording liabilities for the present value of the estimated future payments to be made to the donors and/or other beneficiaries. The liabilities are adjusted during the term of the trusts for changes in the value of the assets and changes in the estimated present value of future cash outflows and other changes in the estimates of future benefits.

The annuities payable represent the net present value of future cash outflows over the annuitant's life expectancy, as required by the annuity agreements. The net present value is calculated using a discount rate range of 1.57% to 7.5%. The University is required by the laws of certain states to register and maintain reserves against charitable gift annuities. Such reserves amounted to approximately \$11.2 million and \$11.8 million as of June 30, 2017 and 2016, respectively, and are reported within investments in the consolidated statement of financial position.

Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (h) Land, Buildings, and Equipment

Land, buildings, and equipment are carried at cost or at the fair market value at the date of the gift, less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the related asset. Depreciation is not recorded on land. Such assets and lives generally are as follows:

Buildings 50 to 60 years Equipment 5 to 10 years Leasehold and other improvements 10 to 20 years

#### (i) Tuition and Fees

Tuition and fees are reported net of financial aid that effectively reduces the amount of tuition and fees collected from students. Financial aid amounts offset against gross tuition and fees for 2017 and 2016 were \$91.6 million and \$86.6 million, respectively.

# (j) Asset Retirement Liabilities

The University recognizes a liability for legal obligations associated with asset retirements in the period in which the obligation is incurred if a reasonable estimate of the fair value of the obligation can be made. When the liability is initially recorded, the University capitalizes the cost of the asset retirement obligation by increasing the carrying amount of the related long-lived asset. The liability is accreted to its present value each period, and the capitalized cost associated with the retirement obligation is depreciated over the useful life of the asset. Upon settlement of the obligation, any difference between the cost to settle the asset retirement obligation and the liability recorded is recognized as a gain or loss in the consolidated statement of activities.

#### (k) Deferred Revenues

Revenues received in exchange transactions for specific activities that have not yet taken place are recorded as deferred revenue. Significant components of deferred revenue include student tuition and educational fees received in advance of services to be rendered and unexpended advances of grant and contract revenues.

# (I) Use of Estimates

The preparation of the University's consolidated financial statements 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 statement of financial position and the reported amounts of revenue and expense included in the consolidated statement of activities. Actual results could differ from such estimates. Significant estimates include alternative investments that are measured at NAV per share as a practical expedient for fair value, the postretirement benefit liability, and contributions receivable that are recognized at the estimated present value of the future cash flows, net of allowances.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (m) Reclassifications

Certain 2016 amounts have been reclassified to conform to their presentation in the 2017 consolidated financial statements.

# (n) Prior Year Summarized Financial Information

The consolidated financial statements include certain prior year summarized comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the University's consolidated financial statements for the year ended June 30, 2016, from which the summarized information was derived.

# (2) Investments

Investments by major category at June 30, 2017 and 2016 are as follows (in thousands):

|                                      | <br>2017        | 2016      |
|--------------------------------------|-----------------|-----------|
| Short-term investments               | \$<br>82,212    | 69,021    |
| Fixed income investments:            |                 |           |
| U.S. government                      | 195,072         | 146,084   |
| Corporate                            | 230,542         | 90,590    |
| Other                                | 2,845           | 3,300     |
| Corporate stocks                     | 12,000          | 22,248    |
| Mutual and exchange-traded funds     | 245,862         | 191,661   |
| Real estate                          | 18,653          | 17,626    |
| Alternative investments:             |                 |           |
| Public equity                        | 460,418         | 423,830   |
| Absolute return                      | 297,745         | 284,009   |
| Private investments                  | 323,238         | 303,054   |
| Life insurance and other investments | <br>3,212       | 3,156     |
| Total investments                    | \$<br>1,871,799 | 1,554,579 |

The University's investments are comprised of the assets of the University's endowment, assets supporting certain split interest agreements, and other investments for general operating purposes. Fixed income investments include the proceeds from the 2016 taxable bond issue. Investments are reported at fair value or NAV as a practical expedient to fair value. Note 4, Fair Value Measurements, provides additional information about inputs used to determine fair value and about investments reported at NAV.

The majority of endowment and annuity fund investments are combined in investment pools with each individual account subscribing to or disposing of shares on the basis of the fair value per share. The investment objective is to maximize long-term total return through a combination of income and capital appreciation in a manner consistent with sound investment practices.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

The University is obligated under certain investment agreements to periodically advance additional funding up to contractual levels. At June 30, 2017 and 2016, the University had unfunded commitments of \$172 million and \$156 million, respectively. While it is uncertain as to when these commitments will be called since the agreements do not specify exact funding dates, it is likely that funding will occur over the next several years. Funds to meet these commitments will be generated from rebalancing the investment pool asset allocation, as well as donor gifts and existing cash.

The components of total investment return are reflected below (in thousands). Investment earnings at June 30, 2017 and 2016 are net of investment expenses of approximately \$8.2 million and \$10.2 million, respectively.

|   | 2017                    | 2016                |
|---|-------------------------|---------------------|
| Investment earnings Net realized and unrealized gains (losses)  | \$<br>10,577<br>197,625 | 10,421<br>(44,658)_ |
|   | 208,202                 | (34,237)            |
| Independent operations – net realized and unrealized gains Independent operations – other investment earnings | 3,357<br>660            | 562<br>344          |
| Total   | \$<br>212,219           | (33,331)            |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

Investment return, as reflected in the consolidated statement of activities, consists of the following components (in thousands):

|  | <br>2017      | 2016      |
|--|---------------|-----------|
| Operating:   |               |           |
| Endowment spending distribution                            | \$<br>65,105  | 65,457    |
| Spending distribution – other                              | 11,748        | 9,821     |
| Other investment earnings                                  | <br>6,662     | 7,249     |
|  | 83,515        | 82,527    |
| Independent operations – realized gains                    | 565           | 175       |
| Independent operations – other investment earnings         | <br>660       | 344       |
| Total operating  | <br>84,740    | 83,046    |
| Nonoperating:  |               |           |
| Endowment spending distribution                            | 573           | 167       |
| Other investment losses                                    | (220)         | (447)     |
| Net realized and unrealized gains (losses) net of spending |               |           |
| distribution   | <br>124,334   | (116,484) |
|  | 124,687       | (116,764) |
| Independent operations - net unrealized gains              | <br>2,792     | 387       |
| Total nonoperating   | <br>127,479   | (116,377) |
| Total investment return                                    | \$<br>212,219 | (33,331)  |

# (3) Endowment Net Assets

The University's endowment consists of approximately 2,700 individual funds established for a variety of purposes. Its endowment includes both donor-restricted funds and funds designated by the Board of Trustees to function as endowments (board-designated). Net assets associated with endowment funds are classified and reported based upon the existence or absence of donor-imposed restrictions.

The University has interpreted relevant law as requiring the preservation of the original fair value of permanently restricted endowment funds as of the gift date, absent explicit donor stipulations to the contrary. From time to time, the fair value of assets associated with these funds may fall below the original fair value amount. Deficiencies of this nature at June 30, 2017 and 2016 were \$10.7 million and \$27.1 million, respectively. Such deficiencies are recorded as a decrease to unrestricted net assets and an increase to temporarily restricted net assets. These deficiencies resulted from unfavorable market fluctuations that occurred after the investment of the new permanently restricted contributions.

Endowment funds include funds actively managed by the University as part of a single commingled investment pool as well as a limited number of individual funds that are separately invested or held in trust by others. The principal financial objective of the endowment pool is that the real purchasing power of the

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

endowment principal should be preserved and, if possible, enhanced, to help ensure the University's financial future. The productivity of the endowment pool must strike a balance between the preservation of principal in real terms for perpetuity and supporting a spending policy that sustains the educational mission of the University.

The Prudent Investor Rule of the Commonwealth of Pennsylvania views investment prudence on the part of the fiduciary from the standpoint of the total portfolio. Therefore, any reasonable investment may be considered for endowment pool assets as long as the risk and return tradeoff of the entire portfolio is prudent. The University's investment policy includes a target asset allocation, well diversified among suitable asset classes that is expected to generate, on average, the level of expected return necessary to meet endowment objectives at a responsible level of volatility consistent with achieving that return. To monitor the effectiveness of the investment strategy of the endowment pool, performance goals are established to exceed the expected real rate of return, established benchmark indices, and the median return of comparable endowment funds.

Commonwealth of Pennsylvania law permits the University to allocate to operating income a minimum of 2% and a maximum of 7% of a three-year moving average of the market value of the endowed assets. Unless the terms of the gift instrument state otherwise, accumulated endowment gains may be spent over time by the University. Therefore, in accordance with Commonwealth of Pennsylvania law regarding the investment of trust funds, gains on permanently restricted funds are classified as temporarily restricted net assets until appropriated under the spending policy. Net gains in excess of the spending policy are reflected as nonoperating investment return activity.

The University has an endowment spending policy based on 5% of a three-year moving average market value with a minimum increase of 0% per year and a maximum increase of 10% per year over the prior year's spending rate.

Any income earned in excess of the spending limit is reinvested while funds may be withdrawn from investment return earned in prior years if income is less than the spending policy provision. This is designed to insulate investment policy from budgetary pressures, and to insulate program spending from fluctuations in capital markets. Average annual spending rates per share were 5.4% and 5.6% for fiscal years 2017 and 2016, respectively.

Endowment net asset composition as of June 30, 2017 (in thousands):

|   | Unrestricted | Temporarily restricted | Permanently restricted | Total     |
|---|--------------|------------------------|------------------------|-----------|
| Donor-restricted endowment funds (corpus) \$ Board-designated endowment funds | (10,687)     | 15,847                 | 502,475                | 507,635   |
| (corpus)  | 220,364      | _                      | _                      | 220,364   |
| Accumulated gains on endowment funds  | 176,081      | 323,906                |                        | 499,987   |
| Total endowment net assets \$   | 385,758      | 339,753                | 502,475                | 1,227,986 |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

Endowment net asset composition as of June 30, 2016 (in thousands):

|   | Unrestricted | Temporarily restricted | Permanently restricted | Total     |
|---|--------------|------------------------|------------------------|-----------|
| Donor-restricted endowment funds (corpus) \$ Board-designated endowment funds | (27,131)     | 32,101                 | 476,063                | 481,033   |
| (corpus)  | 214,064      | _                      | _                      | 214,064   |
| Accumulated gains on endowment funds  | 155,747      | 257,348                |                        | 413,095   |
| Total endowment net assets \$   | 342,680      | 289,449                | 476,063                | 1,108,192 |

Changes in endowment net assets for the year ended June 30, 2017 (in thousands):

|  |    | Unrestricted | Temporarily restricted | Permanently restricted | Total     |
|--|----|--------------|------------------------|------------------------|-----------|
| Net assets, June 30, 2016                  | \$ | 342,680      | 289,449                | 476,063                | 1,108,192 |
| Investment return:                         |    |              |                        |                        |           |
| Investment income                          |    | 10,577       | 24                     | 174                    | 10,775    |
| Net appreciation                           |    | 78,841       | 90,372                 | 450                    | 169,663   |
| Total investment return                    |    | 89,418       | 90,396                 | 624                    | 180,438   |
| Contributions                              |    | 1,088        | 9                      | 25,788                 | 26,885    |
| Board designations/changes in donor intent |    | (14,151)     | (60)                   | _                      | (14,211)  |
| Amounts appropriated for expenditure:      |    |              |                        |                        |           |
| Endowment spending distribution            |    | (29,204)     | (36,474)               | _                      | (65,678)  |
| Endowment operating expense                | _  | (2,856)      | (3,567)                |                        | (6,423)   |
| Total amounts appropriated                 |    |              |                        |                        |           |
| for expenditure                            |    | (32,060)     | (40,041)               | _                      | (72,101)  |
| Change in other endowment liabilities      | _  | (1,217)      |                        |                        | (1,217)   |
| Total change in endowment                  |    |              |                        |                        |           |
| funds                                      |    | 43,078       | 50,304                 | 26,412                 | 119,794   |
| Net assets, June 30, 2017                  | \$ | 385,758      | 339,753                | 502,475                | 1,227,986 |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

Changes in endowment net assets for the year ended June 30, 2016 (in thousands):

|  | Unrestricted  | Temporarily restricted | Permanently restricted | Total     |
|--|---------------|------------------------|------------------------|-----------|
| Net assets, June 30, 2015                  | \$<br>395,260 | 337,687                | 435,221                | 1,168,168 |
| Investment return: Investment income       | 12,627        | 24                     | 145                    | 12,796    |
| Net (depreciation) appreciation            | (28,328)      | (8,772)                | 1,586                  | (35,514)  |
| Total investment return                    | (15,701)      | (8,748)                | 1,731                  | (22,718)  |
| Contributions                              | 4,905         | 5                      | 39,111                 | 44,021    |
| Board designations/changes in donor intent | (2,892)       | _                      | _                      | (2,892)   |
| Amounts appropriated for expenditure:      | (00, 400)     | (05.404)               |                        | (05.004)  |
| Endowment spending distribution            | (30,433)      | (35,191)               | _                      | (65,624)  |
| Endowment operating expense                | (3,722)       | (4,304)                |                        | (8,026)   |
| Total amounts appropriated                 |               |                        |                        |           |
| for expenditure                            | (34, 155)     | (39,495)               | _                      | (73,650)  |
| Change in other endowment liabilities      | (4,737)       |                        |                        | (4,737)   |
| Total change in endowment                  |               |                        |                        |           |
| funds                                      | (52,580)      | (48,238)               | 40,842                 | (59,976)  |
| Net assets, June 30, 2016                  | \$<br>342,680 | 289,449                | 476,063                | 1,108,192 |

# (4) Fair Value Measurements

The three levels of the fair value hierarchy are described below. The hierarchy gives the highest priority to unadjusted quoted or published prices in active markets for identical assets or liabilities (Level 1 measurements) and lowest priority to unobservable inputs (Level 3 measurements):

- Level 1 Unadjusted quoted or published prices in active markets that are accessible at the measurement date for identical assets or liabilities.
- Level 2 Quoted prices for instruments that are identical or similar in markets that are not active and model-derived valuations for which all significant inputs are observable, either directly or indirectly in active markets.
- Level 3 Prices or valuations that require inputs that are both significant to the fair value measurement and are unobservable.

The hierarchy requires the use of observable market data when available. The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest level input that is significant to the measurement.

Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

The following discussion describes the valuation methodologies used for assets and liabilities measured at fair value:

# (a) Short-Term Assets and Liabilities

The carrying amount of student accounts receivable, accounts payable and accrued expenses, and the commercial paper component of the University's debt approximates fair value due to the short maturity of these financial instruments.

# (b) Notes Receivable

Notes receivable are carried at face value less an allowance for doubtful accounts. A reasonable estimate of the fair value of loans receivable under student loan programs is not practical to determine because the federally sponsored loans are subject to significant government restrictions as to marketability, interest rates, and repayment terms. Because of the early stage nature of the companies to which program loans are provided by BFTP and the lack of a secondary market for such securities, it is not practical to determine their fair value.

# (c) Contributions Receivable

The University values contributions receivable at fair value on the date the pledge is received using the present value of future cash flows. Contributions receivable are not measured at fair value subsequent to this initial measurement, because the discount rate selected for each contribution remains constant over time.

# (d) Funds Held in Trust by Others

Funds held in trust by others are held and administered by outside trustees, with the University deriving income or a residual interest from the assets of such funds. 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. As of June 30, 2017 and 2016, the inputs to fair value of these funds are classified as Level 2 or Level 3, depending on whether the assets will ultimately be distributed to the University.

#### (e) Split-Interest Agreements

Depending on the type of agreement, fair value measurements for split-interest agreements are performed either at inception or on a recurring basis. Fair value of the residual gift is generally based on the present value of expected future cash flows including payments to beneficiaries and investment return, and Level 3 inputs include the life expectancy of the donor and other beneficiaries as well as financial assumptions.

# (f) Interest Rate Swaps

The fair value of the University's rate swap liability is based on valuations provided by an independent party, taking into account current interest rates and the current creditworthiness of the swap counterparties, which are considered Level 2 inputs to fair value.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (g) Investments

Fair value of equity securities has been determined from observable market or published quotations, when available. Fair value for fixed maturity securities is based upon prices provided by the University's investment managers and custodian banks. Both the investment managers and the custodian banks use a variety of pricing sources to determine fixed maturity market valuations.

Estimated fair value of alternative investments that are not readily marketable is recorded at the NAV as provided by external investment managers as a practical expedient for fair value. The University reviews and evaluates the values provided by external investment managers and agrees with the valuation methods and assumptions used in determining the NAV of those investments.

Certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in the tables below are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of financial position.

The following table presents the University's fair value hierarchy for investments at June 30, 2017 (in thousands):

|                                  | pul | Quoted or<br>blished prices<br>in active<br>markets<br>(Level 1) | Significant<br>other<br>observable<br>inputs<br>(Level 2) | Significant<br>unobservable<br>inputs<br>(Level 3) | Measured<br>at NAV per<br>share (or its<br>equivalent) | Total     |
|----------------------------------|-----|--|---|--|--|-----------|
| Short-term investments           | \$  | 82,212   | _   | _  | _  | 82,212    |
| Fixed income investments:        |     | 151 770  | 40.200  |  |  | 105.070   |
| U.S. government                  |     | 154,773  | 40,299  | _  | _  | 195,072   |
| Corporate<br>Other               |     | _  | 230,542   | _  | _  | 230,542   |
|                                  |     | 40.000   | 2,845   | _  | _  | 2,845     |
| Corporate stocks                 |     | 12,000   | _   | _  | _  | 12,000    |
| Mutual and exchange-traded funds |     | 245,862  |   | _  | _  | 245,862   |
| Real estate                      |     | _  | 18,653  | _  | _  | 18,653    |
| Alternative investments:         |     |  |   |  |  |           |
| Public equity                    |     | _  | 30,568  | _  | 429,850  | 460,418   |
| Absolute return                  |     | _  | _   | _  | 297,745  | 297,745   |
| Private investments              |     | _  | _   | _  | 323,238  | 323,238   |
| Life insurance and other         |     |  |   |  |  |           |
| investments                      | _   | 3,203  | 9   |  |  | 3,212     |
| Total investments                | \$_ | 498,050  | 322,916   |  | 1,050,833  | 1,871,799 |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

The following table presents the University's fair value hierarchy for investments at June 30, 2016 (in thousands):

|                                  |                         |  | ılue measuren   |  |  |           |
|----------------------------------|-------------------------|--|---|--|--|-----------|
|                                  | at reporting date using |  |   |  |  |           |
|                                  |                         | Quoted or<br>blished prices<br>in active<br>markets<br>(Level 1) | Significant<br>other<br>observable<br>inputs<br>(Level 2) | Significant<br>unobservable<br>inputs<br>(Level 3) | Measured<br>at NAV per<br>share (or its<br>equivalent) | Total     |
| Short-term investments           | \$                      | 69,021   | _   | _  | _  | 69,021    |
| Fixed income investments:        |                         |  |   |  |  |           |
| U.S. government                  |                         | 103,210  | 42,874  | _  | _  | 146,084   |
| Corporate                        |                         | _  | 90,042  | 548  | _  | 90,590    |
| Other                            |                         | _  | 3,300   | _  | _  | 3,300     |
| Corporate stocks                 |                         | 22,248   | _   | _  | _  | 22,248    |
| Mutual and exchange-traded funds |                         | 191,661  | _   | _  | _  | 191,661   |
| Real estate                      |                         | _  | 17,626  | _  | _  | 17,626    |
| Alternative investments:         |                         |  |   |  |  |           |
| Public equity                    |                         | _  | 29,929  | _  | 393,901  | 423,830   |
| Absolute return                  |                         | _  | _   | _  | 284,009  | 284,009   |
| Private investments              |                         | _  | _   | _  | 303,054  | 303,054   |
| Life insurance and other         |                         |  |   |  |  |           |
| investments                      | _                       | 3,142  | 14  |  |  | 3,156     |
| Total investments                | \$                      | 389,282  | 183,785   | 548  | 980,964  | 1,554,579 |

The following redemption table clarifies the nature, risk, and liquidity of the University's investments in alternative investment vehicles that are reported at NAV per share (or its equivalent) at June 30, 2017 (in thousands):

|                         | -  | Fair value | Estimated remaining lives | _ ( | Unfunded<br>commitments | Redemption<br>frequency after<br>end of initial<br>restriction<br>period | Redemption<br>notice<br>period |
|-------------------------|----|------------|---------------------------|-----|-------------------------|--|--------------------------------|
| Public equity (1)       | \$ | 429,850    | N/A                       | \$  | _                       | weekly-annually  | 3–90 days                      |
| Absolute return (2)     |    | 297,745    | 1–4 years                 |     | 20,337                  | various or not<br>eligible   | 45–180 days                    |
| Private investments (3) | _  | 323,238    | 1–12 years                | _   | 151,826                 | generally not<br>eligible  | _                              |
| Total                   | \$ | 1,050,833  |                           | \$  | 172,163                 |  |                                |

Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

- (1) This category's primary objective is to capture the returns of publicly traded equities on a global market basis in order to provide long-term growth to the endowment. Investments representing approximately 8% of the total value in this category have restrictions that prevent full redemption at June 30, 2017.
- (2) The primary objective of this category is to capture the returns associated with skill-based active management by exploiting the inefficiencies associated with marketable securities, thus providing a diversifying return stream with low correlation to returns of stocks. These funds should also provide principal protection in equity sell-offs. Investments representing approximately 21% of the total value in this category have restrictions that prevent full redemption at June 30, 2017.
- (3) This category includes investments in private equity and real estate funds. The primary objective of these funds is to provide long-term returns in excess of publicly traded equity markets, portfolio diversification relative to global equities and bonds, and long-term returns between that of stocks and bonds while carrying relatively lower risk than equities. These funds will also potentially offer some protection for the endowment in the event of inflation. Private investments typically have commitment periods up to 12 years.

# (5) Accounts Receivable

Accounts receivable at June 30, 2017 and 2016 (net of allowances for doubtful accounts) are as follows (in thousands):

|                           | <br>2017     | 2016   |
|---------------------------|--------------|--------|
| Accounts receivable, net: |              |        |
| Student accounts          | \$<br>581    | 816    |
| Grants and contracts      | 8,918        | 6,040  |
| Investment income         | 2,902        | 1,788  |
| Other                     | <br>4,618    | 4,302  |
|                           | \$<br>17,019 | 12,946 |

Allowances for doubtful accounts were \$3.5 million and \$2.6 million in 2017 and 2016, respectively.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (6) Notes Receivable

Notes receivable at June 30, 2017 and 2016 are as follows (in thousands):

| <br>2017     | 2016   |
|--------------|--|
|              |  |
|              |  |
| \$<br>7,879  | 8,350  |
| 2,224        | 2,903  |
| <br>(271)    | (285)  |
| <br>9,832    | 10,968   |
|              |  |
| 12,710       | 11,563   |
| <br>(10,784) | (9,764)  |
| <br>1,926    | 1,799  |
| \$<br>11,758 | 12,767   |
| _            | \$ 7,879<br>2,224<br>(271)<br>9,832<br>12,710<br>(10,784)<br>1,926 |

Independent operations notes receivable primarily consist of loans provided by BFTP to early stage firms. The majority of these loans are fully reserved.

# (7) Land, Buildings, and Equipment, Net

Land, buildings, and equipment are summarized as follows at June 30, 2017 and 2016 (in thousands):

|  | <br>2017       | 2016      |
|--|----------------|-----------|
| Land and improvements                        | \$<br>64,082   | 62,560    |
| Buildings and improvements                   | 643,052        | 631,388   |
| Furniture, equipment, books, and collections | 206,093        | 198,986   |
| Construction in progress                     | <br>26,128     | 7,479     |
|  | 939,355        | 900,413   |
| Less accumulated depreciation                | <br>(526, 163) | (499,223) |
| Total  | \$<br>413,192  | 401,190   |

Depreciation expense totaled \$29.1 million and \$27.7 million for the years ended June 30, 2017 and 2016, respectively. Capitalized interest totaled \$0.6 million and \$0.4 million for the years ended June 30, 2017 and 2016, respectively.

Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (8) Contributions

Unconditional promises to give are included in the consolidated financial statements as contributions receivable and revenue of the appropriate net asset category. Contributions arising from unconditional promises to give are recorded at fair value determined based on the present value of estimated future cash flows. Contributions receivable also include charitable remainder trusts where the University is not the trustee of the assets of the trust, but will receive a distribution upon its termination. The net present value of contributions receivable is calculated using a discount rate range of 1.76% to 5.05%. Outstanding pledges that were conditional amounted to \$13.1 million and \$16.7 million as of June 30, 2017 and 2016, respectively. Unconditional promises are expected to be realized in the following periods (in thousands):

|                                      | <br>2017     | 2016    |
|--------------------------------------|--------------|---------|
| In one year or less                  | \$<br>16,532 | 16,682  |
| Between one year and five years      | 16,332       | 17,468  |
| More than five years                 | <br>4,328    | 6,831   |
|                                      | 37,192       | 40,981  |
| Less:                                |              |         |
| Unamortized discount                 | (884)        | (1,325) |
| Allowance for uncollectible accounts | <br>(2,407)  | (2,626) |
|                                      | \$<br>33,901 | 37,030  |

# (9) Net Assets

Temporarily restricted net assets include the following at June 30, 2017 and 2016 (in thousands):

|  | <br>2017      | 2016    |
|--|---------------|---------|
| Contributions receivable                         | \$<br>13,994  | 12,480  |
| Temporarily restricted endowment funds           | 15,466        | 31,492  |
| Life income funds                                | 3,055         | 3,096   |
| Accumulated gains on permanent endowment funds   | 324,287       | 257,957 |
| Other – related to time and purpose restrictions | <br>7,386     | 4,135   |
|  | \$<br>364,188 | 309,160 |

Based upon spending restrictions in effect as of June 30, 2017, accumulated gains on permanent endowment funds are designated for the following future spending purposes: scholarships and fellowships 34%, professorships and chairs 12%, student loans 1%, other restrictions 13%, and no purpose restrictions 40%.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

Permanently restricted net assets include the following at June 30, 2017 and 2016 (in thousands):

|                               | _   | 2017    | 2016    |
|-------------------------------|-----|---------|---------|
| Contributions receivable      | \$  | 16,894  | 21,636  |
| Permanent loan funds          |     | 2,371   | 2,226   |
| Annuity and life income funds |     | 27,601  | 26,058  |
| Permanent endowment funds     | _   | 502,475 | 476,063 |
|                               | \$_ | 549,341 | 525,983 |

Included in life income funds are \$1.1 million (temporarily restricted) and \$1.9 million (permanently restricted) net assets classified as contributions receivable on the consolidated statement of financial position.

# (10) Bonds, Loans, and Notes Payable

Bonds, loans, and notes payable are reported net of any unamortized premiums, discounts, or issuance costs. Net unamortized premiums were \$3.3 million at June 30, 2017. Net unamortized discounts were (\$0.9) million at June 30, 2016. Net unamortized bond issuance costs were \$1.8 million and \$1.5 million at June 30, 2017 and 2016, respectively. The following table presents bonds, loans, and notes payable at June 30, 2017 and 2016 (in thousands):

|   | <br>2017     | 2016   |
|---|--------------|--------|
| Taxable Commercial Paper Series A, up to \$75 million, weighted average interest rate of 1.30% and 0.48% on June 30, 2017 and 2016, respectively; average duration of 122 days and 28 days for the years ended June 30, 2017 and 2016, respectively   | \$<br>20,000 | 20,000 |
| Northampton County General Purpose Authority (NCGPA): Series 2000B bonds; tax-exempt variable rate revenue bonds, \$25,000 due serially from December 1, 2003 to December 1, 2030, variable rates of 0.88% and 0.43% on June 30, 2017 and 2016, respectively; bonds are supported with a standby bond purchase agreement, which expires on September 16, 2018 | 16,472       | 17,271 |
| Series 2001 bonds; tax-exempt variable rate revenue bonds, \$21,780 due serially from October 15, 2006 to October 15, 2019, variable rates of 0.88% and 0.43% on June 30, 2017 and 2016, respectively; bonds are supported with a standby bond purchase agreement, which expires on September 16, 2018  | 7,980        | 10,791 |

# Notes to Consolidated Financial Statements

# June 30, 2017 (with comparative financial information for June 30, 2016)

|  | <br>2017     | 2016   |
|--|--------------|--------|
| Series 2004 bonds; tax-exempt index rate revenue bonds, \$50,000 due serially from May 15, 2025 to May 15, 2034, rates of 1.40% and 0.96% on June 30, 2017 and 2016, respectively  | \$<br>49,758 | 49,739 |
| Series 2006A bonds; tax-exempt variable rate revenue bonds, \$16,820 due serially from November 15, 2007 to November 15, 2021, variable rates of 0.85% and 0.40% on June 30, 2017 and 2016, respectively   | 8,833        | 10,414 |
| Series 2007 bonds; tax-exempt revenue bonds,<br>\$24,615 variable rate CPI bonds due serially from<br>November 15, 2019 to November 15, 2025, variable rates<br>of 3.56% and 2.03% on June 30, 2017 and 2016<br>respectively; term bonds in the amount of \$29,310<br>were refunded on October 6, 2016 | 24,526       | 53,488 |
| Series 2009 bonds; 5.00% to 5.50% tax-exempt fixed rate revenue bonds, legally defeased on October 6, 2016   | _            | 64,674 |
| Series 2016A bonds; 4.00% to 5.00% tax-exempt fixed rate revenue bonds, \$26,715 due serially from November 15, 2026 to November 15, 2036  | 29,823       | _      |
| Series 2016B bonds; tax-exempt variable rate revenue bonds, \$74,950 due serially from November 15, 2017 to November 15, 2039, variable rate of 1.50% on June 30, 2017   | 74,680       | _      |
| Taxable fixed rate term loan issued by Bank of America, N.A., \$15,000 due serially from February 1, 2012 to December 23, 2018, 2.61%  | 12,543       | 13,025 |
| Series 2016 taxable bonds; \$150,000 due serially from November 15, 2044 to November 15, 2046, fixed rate 3.48%  | 149,118      | _      |
| Fixed rate term loan (converted from September 10, 2012 construction loan) issued by Wells Fargo Bank, N.A. as agent for Lehigh Valley Economic Development Corporation Loan Pool to Lehigh University subsidiary BFTP, paid in full on December 14, 2016  | _            | 176    |
| •  |              |        |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

|  | <br>2017      | 2016    |
|--|---------------|---------|
| Mortgage issued by First Keystone National Bank assumed by Lehigh University subsidiary BFTP, \$528 due serially from June 23, 2010 to September 23, 2025; variable rate of 3.75% on both June 30, 2017 and 2016 | \$<br>430     | 447     |
| Construction loan issued by BB&T to Lehigh University subsidiary BFTP, up to \$5,000 due serially from February 17, 2018 to October 12, 2025; 30 day LIBOR Rate plus 2.50%; will convert to fixed rate loan      |               |         |
| following termination of construction period   | <br>1,809     |         |
|  | \$<br>395,972 | 240,025 |

On October 6, 2016, the University issued \$150,000,000 aggregate principal amount of its Series 2016 taxable bonds (the 2016 Taxable Bonds). The 2016 Taxable Bonds are secured by a pledge of and security interest in the University's gross revenues. The proceeds of the 2016 Taxable Bonds will be used to finance current and future capital projects consistent with the University's capital plan, to pay the costs of issuance, and any other purpose duly authorized by the University.

Concurrently, the Northampton County General Purpose Authority (NCGPA) issued \$26,715,000 Higher Education Fixed Rate Revenue Bonds, Series A of 2016 (the 2016A Bonds) and \$74,950,000 Higher Education Variable Rate Revenue Bonds, Series B of 2016 (the 2016B Bonds). The 2016A Bonds are tax-exempt bonds for the purpose of refunding, on a current basis, the University's 2007 term bonds, as well as paying certain issuance costs. The 2016B Bonds are tax-exempt bonds for the purpose of the legal defeasance of all of the University's 2009 Bonds. Loss on defeasance and refunding of the bonds totaled \$10.1 million and is included in nonoperating other in the consolidated statement of activities. The University also entered into an interest rate swap agreement to effectively convert the 2016B Bonds to fixed rates and reduce the University's effective interest rate.

Proceeds from all other tax-exempt bonds, loans, and notes were used by the University to purchase land and buildings, construct or renovate facilities, upgrade computing and information service facilities, purchase equipment, and finance certain completed facilities.

Payment of all outstanding tax-exempt bonds is secured by separate loan agreements between the University and the Northampton County General Purpose Authority (NCGPA). Each loan agreement is a general obligation of the University for which it has pledged its full faith and credit. In addition, the University has granted NCGPA a security interest in the University's gross revenues as defined in each loan agreement. In accordance with the NCGPA loan agreements, the University established rates and charges sufficient to provide, in each fiscal year, for the payment of the University's operating expenses and debt service on its long-term indebtedness. The University may incur additional indebtedness under certain conditions described in the loan agreements and the bond indentures.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

BFTP debt was used for a building purchase and to finance the construction of a building addition. The BB&T loan is subject to a security agreement against business assets, liquidity and equity commitments, and additional collateral assignments. Upon completion of the construction and receipt of additional grant funding, the maximum loan value will reduce from \$5.0 million to \$3.3 million.

At June 30, 2017, the aggregate annual maturities of long-term bonds, loans, and notes payable for the next five years and, thereafter, are as follows (in thousands):

| 2018       | \$<br>6,637 |
|------------|-------------|
| 2019       | 18,513      |
| 2020       | 6,342       |
| 2021       | 6,537       |
| 2022       | 6,778       |
| Thereafter | 329,654     |

The Series of 2000B, 2001, and 2006A bonds bear interest at a weekly rate determined by the remarketing agent. The Series 2004 bonds bear interest based upon a LIBOR Index Rate set by the calculation agent on a monthly basis. The University may elect to convert to another variable rate mode or to a fixed mode as determined by the remarketing agent.

Bondholders have a right to tender variable rate bonds at interest rate reset dates.

The University entered into separate standby bond purchase agreements with banks to provide liquidity in case of tender of the 2000B or 2001 bonds. These agreements expire prior to the maturity of the bonds and may be extended at the University's request. However, the banks have no obligation to agree to the extended purchase period.

The University serves as the liquidity facility for its 2006A bonds and the Commercial Paper program. As of June 30, 2017, Lehigh estimates that \$76 million of liquid assets were available on a same day basis and an additional \$91 million was available within 30 days.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

As a component of the tax-exempt debt portfolio, the University entered into interest rate swap agreements that effectively convert certain variable rate revenue bond obligations to fixed rates or reduce the University's effective interest rate. Significant terms of each of the swap agreements are as follows (in thousands):

| Series         | Counterparty                 | Effective<br>date | Current<br>notional<br>amount | University<br>pays | University receives                 | Expiration date                  |
|----------------|------------------------------|-------------------|-------------------------------|--------------------|-------------------------------------|----------------------------------|
| 2000B bonds    | JPMorgan Chase<br>Bank, N.A. | 12/7/2000         | \$ 16,555                     | 4.530 %            | 67% of USD-<br>1 month<br>LIBOR-BBA | 12/1/2030                        |
| 2001 bonds     | JPMorgan Chase<br>Bank, N.A. | 9/4/2001          | 7,990                         | 4.400              | 67% of USD-<br>1 month<br>LIBOR-BBA | 10/15/2019                       |
| 2004 bonds     | Wells Fargo<br>Bank, N.A.    | 12/18/2008        | 50,000                        | 1.953              | 67% of USD-<br>3 month<br>LIBOR-BBA | 5/15/2034                        |
| 2006A bonds    | JPMorgan Chase<br>Bank, N.A. | 8/24/2006         | 8,855                         | 3.392              | 67% of USD-<br>1 month<br>LIBOR-BBA | 11/15/2021                       |
| 2007 CPI bonds | JPMorgan Chase<br>Bank, N.A. | 2/1/2007          | 24,615                        | 3.980 to<br>4.100  | Variable rate<br>based on<br>CPI-U  | various<br>through<br>11/15/2025 |
| 2016B bonds    | Wells Fargo<br>Bank, N.A.    | 10/6/2016         | 74,950                        | 1.148              | 70% of USD-<br>1 month<br>LIBOR-BBA | 11/15/2039                       |
|                |                              | :                 | \$ 182,965                    |                    |                                     |                                  |

# (11) Derivative Instruments

The University employs derivatives, primarily interest rate swap agreements, to manage interest rate risk associated with outstanding debt. The endowment fund also includes a swap position as part of its portfolio. The fair value of the University's swap agreements is included in other liabilities in the statement of financial position, and was \$1.0 million and \$6.1 million at June 30, 2017 and 2016, respectively. The change in fair value of the interest rate swaps is reflected in nonoperating activity on the statement of activities and was \$12.5 million and \$(3.2) million for the years ended June 30, 2017 and 2016, respectively.

Certain of the University's interest rate swap agreements contain provisions that require the University's debt to maintain an investment grade credit rating from each of the major credit rating agencies. If the University's debt were to fall below investment grade, it would be a violation of these provisions, and the counterparties to the rate swap agreement could request next-day full collateralization on all rate swaps in net liability positions. To date, the University has not posted collateral for any rate swap agreements. If the credit-risk related contingent features underlying these agreements were triggered on June 30, 2017, the University would be required to post an additional \$7.8 million of collateral to its counterparties.

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

# (12) Natural Expense Classification

The following table compares operating expenses by type for the years ended June 30, 2017 and 2016, respectively, (in thousands):

|                                  | _   | 2017    | 2016    |
|----------------------------------|-----|---------|---------|
| Salaries and wages               | \$  | 174,714 | 167,519 |
| Employee benefits                |     | 55,953  | 52,264  |
| Utilities                        |     | 7,993   | 7,802   |
| Purchased services               |     | 34,054  | 34,680  |
| Building and grounds maintenance |     | 22,246  | 22,108  |
| Depreciation                     |     | 29,072  | 27,742  |
| Interest                         |     | 11,579  | 9,580   |
| All other business expenses      |     | 52,109  | 52,324  |
| Total                            | \$_ | 387,720 | 374,019 |

# (13) Postretirement and Postemployment Benefits Other than Pensions

The University pays for a portion of the cost of medical insurance for retired employees and their eligible dependents. During fiscal year 2017, the University reimbursed retirees a maximum of \$96.50 per month for premium expenses. The maximum monthly reimbursement amount will increase each year at the lesser of medical Consumer Price Index (CPI) or 8%. These postretirement medical benefits accrue from the later of date of hire or age 30. The University uses a July 1 measurement date for its plan. Summarized plan information is stated below (in thousands):

The following shows the reconciliation of the beginning and ending balances of the benefit obligation (in thousands):

|   | <br>2017     | 2016   |
|---|--------------|--------|
| Benefit obligation at beginning of year | \$<br>43,735 | 38,868 |
| Operating:                              |              |        |
| Service cost                            | 1,532        | 1,302  |
| Interest cost                           | 1,795        | 1,846  |
| Benefits paid                           | <br>(1,003)  | (903)  |
| Total operating                         | <br>2,324    | 2,245  |
| Nonoperating:                           |              |        |
| Actuarial gain                          | _            | (455)  |
| Assumption changes                      | <br>(1,069)  | 3,077  |
| Total nonoperating (gain)/loss          | <br>(1,069)  | 2,622  |
| Benefit obligation at end of year       | \$<br>44,990 | 43,735 |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

The following table sets forth the status of the plan, which is unfunded, at June 30, 2017 and 2016:

|  | <br>2017     | 2016   |
|--|--------------|--------|
| Accumulated postretirement benefit obligation: |              |        |
| Retirees                                       | \$<br>14,545 | 14,140 |
| Fully eligible active plan participants        | 15,933       | 15,489 |
| Other active plan participants                 | 14,512       | 14,106 |
| Total  | 44,990       | 43,735 |
| Plan assets at fair value                      | <br>         |        |
| Accumulated postretirement benefit liability   | \$<br>44,990 | 43,735 |

Weighted average assumptions for the years ended June 30, 2017 and 2016 are as follows:

|   | 2017        | 2016        |
|---|-------------|-------------|
| Discount rate for net periodic postretirement benefit cost      | 4.15 %      | 4.80 %      |
| Discount rate for accumulated postretirement benefit obligation | 4.16        | 4.15        |
| Maximum increase in reimbursement rate                          | lesser of   | lesser of   |
|   | medical CPI | medical CPI |
|   | or 8%       | or 8%       |

Assumed healthcare cost trend rate at June 30, 2017 and 2016 is as follows:

|   | 2017   | 2016   |
|---|--------|--------|
| Healthcare cost trend rate assumed for next year        | 4.00 % | 4.00 % |
| Rate to which the cost trend rate is assumed to decline |        |        |
| (ultimate rate)   | 4.00   | 4.00   |
| Year that ultimate rate is reached                      | N/A    | N/A    |

Impact of 1% increase in assumed healthcare cost trend rate at June 30, 2017 and 2016 is as follows (in thousands):

|   | <br>2017    | 2016  |
|---|-------------|-------|
| Increase in accumulated postretirement benefit obligation | \$<br>9,186 | 8,930 |
| Increase in net periodic postretirement benefit cost      | 889         | 804   |

# Notes to Consolidated Financial Statements

June 30, 2017 (with comparative financial information for June 30, 2016)

Estimated future University contributions reflecting expected future service are as follows (in thousands):

| 2018 \$ 1         | 1,046 |
|-------------------|-------|
| 2010 ψ            | .,    |
| 2019              | 1,162 |
| 2020              | 1,268 |
| 2021              | 1,373 |
| 2022              | 1,482 |
| 2023 through 2027 | 9,134 |

# (14) Retirement Plans

The University provides pensions to substantially all salaried faculty and staff through a defined contribution plan administered by Teacher's Insurance and Annuity Association / College Retirement Equities Fund. The plan features base contributions from the University and voluntary employee contributions with a University match. Total expense for this plan was \$14.3 million and \$14.5 million in 2017 and 2016, respectively.

# (15) Grants and Contracts

The University receives grant and contract revenue from various government agencies and private sources for the support of research, training, and other sponsored programs. Revenues associated with the direct costs of these programs are recognized as the related costs are incurred. Indirect cost reimbursements from federal agencies are based on predetermined rates negotiated with the University's cognizant agency, the Office of Naval Research, and are in effect through fiscal year 2020. These rates are also used for other sponsored programs except where separately negotiated. Indirect cost reimbursements from all sources totaled \$8.9 million and \$7.9 million in 2017 and 2016, respectively.

# (16) Fund-Raising Costs

Fund-raising costs were approximately \$11.4 million and \$13.5 million in 2017 and 2016, respectively, and are included in institutional support in the consolidated statement of activities.

# (17) Commitments and Contingencies

Open commitments for contracts with general contractors amounted to approximately \$11.1 million and \$0.7 million as of June 30, 2017 and 2016, respectively.

The University leases certain equipment and real property. These leases are classified as operating leases and have lease terms ranging from one to seven years. Total lease expense for both fiscal 2017 and 2016 was approximately \$1.1 million.

Notes to Consolidated Financial Statements

June 30, 2017
(with comparative financial information for June 30, 2016)

# (18) Income Taxes

The University has been recognized by the Internal Revenue Service (IRS) as exempt from federal income tax under Section 501(c)(3) of the U.S. Internal Revenue Code, except for taxes on income from activities unrelated to its exempt purpose. Accordingly, no provisions for income taxes have been made in the accompanying consolidated financial statements. Accounting principles generally accepted in the United States of America require management to evaluate tax positions taken by the University and recognize a tax liability (or asset) if the University has taken an uncertain tax position that more likely than not would not be sustained upon examination by the IRS. Management has analyzed the tax positions taken by the University, and has concluded that as of June 30, 2017 there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The University is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

# (19) Subsequent Events

The University has evaluated subsequent events through October 23, 2017, the date the financial statements were issued, and concluded that there are no items requiring disclosure.

# Schedule of Expenditures of Federal Awards

Year ended June 30, 2017

| Program: Federal sponsor/project title   | CFDA#            | Pass-through entity<br>Identifying number | Pass-through Entity                             | Passed through to subrecipients | Total Expenditures |
|--|------------------|---|---|---------------------------------|--------------------|
| Student Financial Assistance Cluster:  |                  |   |   |                                 |                    |
| U.S. Department of Education:  |                  |   |   |                                 |                    |
| Federal Supplemental Education Opportunity Grant                                   | 84.007           |   |   | \$ —                            | 354,000            |
| Federal Perkins Loan Program   | 84.038           |   |   | <del>_</del>                    | 2,484,251          |
| Federal Work Study Program   | 84.033           |   |   | <del>_</del>                    | 468,659            |
| Federal Pell Grant Program   | 84.063           |   |   | _                               | 3,127,680          |
| Federal Direct Loan Program  | 84.268           |   |   |                                 | 21,161,898         |
| Total Student Financial Assistance Cluster   |                  |   |   |                                 | 27,596,488         |
| Research and Development Cluster:  |                  |   |   |                                 |                    |
| Department of Commerce:  |                  |   |   |                                 |                    |
| Climate and Atmospheric Research   | 11.431           | NA16OAR4310253                            | University Corporation for Atmospheric Research | _                               | 16,385             |
| Golf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology  | 11.451           |   |   | <del>-</del>                    | 12,335             |
| Science, Technology, Business and/or Education Research                            | 11.620           |   |   | <del>-</del>                    | 2,893              |
| DOD – Office of Economic Adjustment:   |                  |   |   |                                 |                    |
| Economic Adjustment Assistance for State Governments                               | 12.617           | HQ00051410034                             | Philadelphia Works                              | <del>-</del>                    | 9,376              |
| DOD – Defense Threat Reduction Agency:   |                  |   |   |                                 |                    |
| Scientific Research - Combating Weapons of Mass Destruction                        | 12.351           |   |   | _                               | 9,732              |
| DOD – U.S. Air Force:  |                  |   |   |                                 |                    |
| Air Force Defense Research Sciences Program  | 12.800           |   |   | <del>_</del>                    | 684,603            |
| Air Force Defense Research Sciences Program  | 12.800           | FA8650-15-C-1855                          | MEMtronics, Inc.                                | _                               | 41,023             |
| DOD – U.S. Army – Research Laboratory:   |                  |   |   |                                 |                    |
| Basic Scientific Research  | 12.431           |   |   | 79,345                          | 452,690            |
| DOD – U.S. Navy:   |                  |   |   |                                 |                    |
| Basic and Applied Scientific Research  | 12.300           |   |   | 415,211                         | 2,126,840          |
| Basic and Applied Scientific Research  | 12.300           | N00014-14-1-0510                          | University of Pennsylvania                      |                                 | 26,672             |
| Basic and Applied Scientific Research  | 12.300           | N00014-14-1-0533                          | University of Virginia                          | _                               | 201,397            |
| Basic and Applied Scientific Research  | 12.300           | N00014-15-1-2080                          | Wright State University                         | _                               | 61,613             |
| DOD – Defense Logistics Agency:  |                  |   |   |                                 |                    |
| Defense Logistics Agency   | 12.000           | SP4701-11-D-0025                          | Advanced Technology Institute                   | _                               | 101,063            |
| DOD – Defense Advanced Research Projects Agency:                                   |                  |   | ,   |                                 | ,                  |
| Research and Technology Development  | 12.910           | HR0011-12-C-0035                          | The Boeing Company                              | _                               | 98,264             |
|  | 12.510           | 1110011 12 0 0000                         | The Boeing Gompany                              |                                 | 30,204             |
| DOD – National Security Agency:  | 40.004           |   |   |                                 | C 444              |
| Mathematical Sciences Grants Program   | 12.901           |   |   | _                               | 6,411              |
| U.S. Dept of Energy:   | 04.000           | DE 4050 00NA05000                         |   |                                 | 404.000            |
| General Area   | 81.000           | DE-AC52-06NA25396                         | Los Alamos National Laboratory                  | _                               | 131,366            |
| General Area   | 81.000           | Membership Agreement                      | Los Alamos National Laboratory                  | _                               | 40,962             |
| General Area<br>General Area   | 81.000<br>81.000 | DE-AC02-05CH11231<br>DE-AC52-07NA27344    | Lawrence Berkeley National Laboratory           | <del>_</del>                    | 1,408<br>2,443     |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-AC32-07NA27344                         | Lawrence Livermore National Laboratory          |                                 | 1,723,397          |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-SC0001057                              | Carnegie Institute of Washington                |                                 | 151,526            |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-SC0001037                              | Georgia Institute of Technology                 | <u> </u>                        | 137,269            |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-AC52-07NA27344                         | Lawrence Livermore National Laboratory          | <u> </u>                        | 73,531             |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-AC02-09CH11466                         | Princeton Plasma Physics Laboratory             | _                               | 38,950             |
| Office of Science Financial Assistance Program                                     | 81.049           | DE-SC0009651                              | UHV Technologies, Inc.                          | _                               | 6,166              |
| Stewardship Science Grant Program  | 81.112           |   |   | _                               | 161,897            |
| Energy Efficiency and Renewable Energy Information Dissemination,                  |                  |   |   |                                 |                    |
| Outreach, Training and Technical Analysis/Assistance (B)                           | 81.117           |   |   | _                               | 301,857            |
| Nuclear Energy Research, Development and Demonstration                             | 81.121           |   |   | 66,738                          | 167,183            |
| Electricity Delivery and Energy Reliability, Research Development and Analysis (B) | 81.122           | DE-OE0000779                              | University of Arkansas                          | _                               | 608,399            |
| Advanced Research Projects Agency – Energy   | 81.135           | DE-AR0000582                              | Advanced Cooling Technologies, Inc.             | _                               | 261,065            |

# Schedule of Expenditures of Federal Awards

Year ended June 30, 2017

| Program: Federal sponsor/project title                                       | CFDA#  | Pass-through entity Identifying number | Pass-through Entity                              | Passed through to subrecipients | Total Expenditures |
|--|--------|--|--|---------------------------------|--------------------|
| Graduate Assistance in Areas of National Need                                | 84.200 |  | -  |                                 | 153,036            |
| Education Research, Development and Dissemination                            | 84.305 | R305A140356                            | Ohio University                                  | <del>_</del>                    | 379,963            |
| Education Research, Development and Dissemination                            | 84.305 | R305A160080                            | University of Minnesota                          | <del>-</del>                    | 10,326             |
| Research in Special Education  | 84.324 |  |  | 216,820                         | 685,952            |
| Research in Special Education  | 84.324 | R324A130066                            | Ohio State University                            | _                               | 38,492             |
| National Institutes of Health:   |        |  |  |                                 |                    |
| General Area   | 93.000 |  |  | <del>-</del>                    | 18,920             |
| Oral Diseases and Disorders Research   | 93.121 |  |  | <del>-</del>                    | 368,048            |
| Mental Health Research Grants  | 93.242 | 5R01MH094435-05                        | University of North Carolina at Greensboro       | <del>-</del>                    | 120,507            |
| Mental Health Research Grants  | 93.242 | 7R01MH099557-05                        | Wayne State University                           | <del>-</del>                    | 39,425             |
| Drug Abuse and Addiction Research Programs                                   | 93.279 | 2R44DA032464                           | Ophidion, Inc.                                   | _                               | 111,032            |
| Discovery and Applied Resh for Tech Innovations to Improve Human Health      | 93.286 |  |  | 38,301                          | 121,356            |
| Minority Health and Health Disparities Research                              | 93.307 |  |  | 92,392                          | 135,085            |
| Minority Health and Health Disparities Research                              | 93.307 | 1R01MD011573-01                        | Medical College of Wisconsin                     | _                               | 40,423             |
| Minority Health and Health Disparities Research                              | 93.307 | 1R01MD008940                           | University of Arizona                            | _                               | 74,603             |
| Cancer Treatment Research  | 93.395 |  |  | 19,515                          | 98,230             |
| Cancer Biology Research  | 93.396 |  |  | 25,338                          | 92,855             |
| Maternal, Infant, and Early Childhood Home Visiting Research Programs        | 93.615 |  |  | 1,426                           | 55,317             |
| Cardiovascular Diseases Research   | 93.837 |  |  | _                               | 114,725            |
| Blood Diseases and Resources Research  | 93.839 |  |  | 3,175                           | 17,502             |
| Blood Diseases and Resources Research  | 93.839 | 5R01HL082808-12                        | Emory University                                 | _                               | 91,403             |
| Blood Diseases and Resources Research  | 93.839 | 5P01HL040387-29                        | University of Pennsylvania                       | _                               | 79,999             |
| Arthritis Musculoskeletal and Skin Diseases Research                         | 93.846 | 2U54AR055073-11                        | University of Medicine & Dentistry of New Jersey | _                               | 383,985            |
| Extramural Research Programs in the Neurosciences and Neurological Disorders | 93.853 |  |  | <del>_</del>                    | 223,837            |
| Biomedical Research and Research Training                                    | 93.859 |  |  | 121,224                         | 1,078,003          |
| Biomedical Research and Research Training                                    | 93.859 | 1R01GM118530-01                        | Brown University                                 | <del>_</del>                    | 74,909             |
| Biomedical Research and Research Training                                    | 93.859 | U54GM087519                            | University of Chicago                            | _                               | 143,274            |
| Biomedical Research and Research Training                                    | 93.859 | 2R01GM103695-10                        | University of Michigan                           | <del>_</del>                    | 49,688             |
| Child Health and Human Development Extramural Research                       | 93.865 |  |  | 59,873                          | 596,565            |
| Vision Research  | 93.867 |  |  | <del>_</del>                    | 283,097            |
| Medical Library Assistance   | 93.879 |  |  | _                               | 44,976             |
| U.S. Department of Interior:   |        |  |  |                                 |                    |
| Secure Water Act Research Agreements   | 15.560 |  |  | <del>-</del>                    | 29,489             |
| Earthquake Hazards Research and Monitoring Assistance                        | 15.807 |  |  | _                               | 16,573             |
| U.S. Department of Transportation:   |        |  |  |                                 |                    |
| General Area   | 20.000 |  |  | _                               | 5,207              |
| Highway Research and Development Program (B)                                 | 20.200 |  |  | 87,997                          | 209,988            |
| Highway Planning and Construction  | 20.205 |  |  | _                               | 30,497             |
| Recreational Trails Program  | 20.219 |  |  | 108,860                         | 108,860            |
| Public Transportation Research   | 20.514 | HR 24-36                               | University Of Minnesota                          | _                               | 23,861             |
| Transportation Planning, Research and Education (B)                          | 20.931 | 69A3551747118                          | Colorado School of Mines                         | _                               | 40,323             |
| National Aeronautics and Space Administration:                               |        |  |  |                                 |                    |
| General Area   | 43.000 | NNX11CB8OC                             | Arklight, Inc.                                   | _                               | (17,868)           |
| Education  | 43.008 | NNX16AM18G                             | Nurture Nature Center, Inc.                      | _                               | 39,289             |
| Education  | 43.008 | NNX15AK06H                             | PA Space Grant Consortium                        | _                               | 12,660             |
| Education  | 43.008 | NNX15AK06H                             | Penn State University                            | _                               | 6,560              |
| National Science Foundation:   |        |  |  |                                 |                    |
| Engineering Grants   | 47.041 |  |  | 216,044                         | 5,726,467          |
| Engineering Grants   | 47.041 | IIP-1622917                            | Dynalene, Inc.                                   | _                               | 76,190             |
| Engineering Grants   | 47.041 | EFMA-1433459                           | Purdue University                                | _                               | 181,975            |
| Mathematical and Physical Sciences   | 47.049 |  |  | _                               | 1,781,250          |
| Geosciences  | 47.050 |  |  | <del>-</del>                    | 545,537            |
| Geosciences  | 47.050 | EAR-1360446                            | Columbia University                              | <del>-</del>                    | 59,432             |

# Schedule of Expenditures of Federal Awards

Year ended June 30, 2017

| Program: Federal sponsor/project title  | CFDA#  | Pass-through entity<br>Identifying number | Pass-through Entity                   | Passed through to subrecipients | Total Expenditures                      |
|---|--------|---|---------------------------------------|---------------------------------|---|
| Computer and Information Science and Engineering  | 47.070 |   |                                       | \$ 47,806                       | 1,073,467                               |
| Computer and Information Science and Engineering  | 47.070 | IIS-1421498                               | Cornell University                    | _                               | 12,256                                  |
| Biological Sciences   | 47.074 |   | ,                                     | 41,749                          | 561,368                                 |
| Biological Sciences   | 47.074 | EF#1137306                                | Massachusetts Institute of Technology | · <u> </u>                      | 83,279                                  |
| Social Behavioral and Economic Sciences   | 47.075 |   | <b>0</b> ,                            | _                               | 80,420                                  |
| Social Behavioral and Economic Sciences   | 47.075 | SMA-1416651                               | Yale University                       | _                               | 69,764                                  |
| Education and Human Resources   | 47.076 |   | ·                                     | 18,741                          | 602,583                                 |
| Polar Programs  | 47.078 |   |                                       | · <u> </u>                      | 19,086                                  |
| Office of International Science and Engineering   | 47.079 |   |                                       | _                               | 7,853                                   |
| Office of Integrative Activities  | 47.083 | OISE-1545903                              | Boise State University                | <del>_</del>                    | 49,769                                  |
| Environmental Protection Agency: Science to Achieve Results (STAR) Research Program                 | 66.509 | 835060201                                 | University of Massachusetts, Amherst  | _                               | 696                                     |
| Total Research And Development Cluster  |        |   |                                       | 1,660,555                       | 24,821,080                              |
| Other Clustered Programs:   |        |   |                                       |                                 | 24,021,000                              |
| -   |        |   |                                       |                                 |   |
| Public Works And Economic Development Cluster: Economic Adjustment Assistance (Revolving Loan Fund) | 11.307 |   |                                       |                                 | 357,363                                 |
| Total Public Works and Economic Development and Adjustment Assistance Cluster                       | 11.307 |   |                                       | _                               | 357,363                                 |
| Total Other Clustered Programs  |        |   |                                       |                                 | 357,363                                 |
| Other:  |        |   |                                       |                                 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
|   |        |   |                                       |                                 |   |
| Department of Agriculture:  | 40.240 |   |                                       | 25 022                          | 27.400                                  |
| Agriculture and Food Research Initiative (AFRI)   | 10.310 | 200 40 202 0                              | DA Department of Education            | 25,032                          | 37,468                                  |
| Child and Adult Care Food Program   | 10.558 | 300-48-383-0                              | PA Department of Education            | <del>-</del>                    | 5,705                                   |
| National Endowment for the Humanities:  |        |   |                                       |                                 |   |
| Promotion of the Humanities Challenge Grants  | 45.130 |   |                                       | <del>-</del>                    | 430,004                                 |
| DOD – Defense Logistics Agency:   |        |   |                                       |                                 |   |
| Procurement Technical Assistance  | 12.002 | SP4800-15-2-1536                          | University of Pennsylvania            | <del>_</del>                    | 2,046                                   |
| Procurement Technical Assistance  | 12.002 | SP4800-16-2-1636                          | University of Pennsylvania            | _                               | 65,336                                  |
| Department of State:  |        |   |                                       |                                 |   |
| Academic Exchange Programs – Undergraduate Programs   | 19.009 | S-ECAGD-16-CA-1146                        | IREX                                  | _                               | 26,661                                  |
| Academic Exchange Programs – Scholars   | 19.401 | S-ECAGD-13-CA-149                         | Institute of International Education  | 25,166                          | 74,181                                  |
| U.S. Securities and Exchange Commission:  |        |   |                                       |                                 |   |
| Securities Investigation of Complaints and SEC Information  | 58.001 |   |                                       | <del>_</del>                    | 227,869                                 |
| Small Business Administration:  |        |   |                                       |                                 |   |
| Small Business Development Centers  | 59.037 | SBAHQ-16-B-0043                           | University of Pennsylvania            | <u> </u>                        | 14,810                                  |
| Small Business Development Centers  | 59.037 | SBAHQ-17-B-0057                           | University of Pennsylvania            | _                               | 181,840                                 |
| Department of Education:  |        |   | . ,                                   |                                 | ·                                       |
| Special Education – Personnel Development to Improve Services and Results                           |        |   |                                       |                                 |   |
| for Children with Disabilities  | 84.325 |   |                                       | <u>_</u>                        | 235,413                                 |
| School Leader Recruitment and Support   | 84.363 |   |                                       | 54,000                          | 83,556                                  |
|   | 0000   |   |                                       | 2 1,000                         | 33,333                                  |
| Department of Health and Human Services:  Head Start  | 93.600 |   |                                       |                                 | 2,983                                   |
|   | 93.000 |   |                                       |                                 |   |
| Total Other   |        |   |                                       | 104,198                         | 1,387,872                               |
| Total Expenditures of Federal Awards  |        |   |                                       | \$1,764,753                     | 54,162,803                              |

Notes to Schedule of Expenditures of Federal Awards Year ended June 30, 2017

# (1) Basis of Presentation

The accompanying schedule of expenditures of federal awards (Schedule) includes the federal award activity of Lehigh University (the University) under programs of the federal government for the year ended June 30, 2017 in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the University, it is not intended to, and does not, present the financial position, changes in net assets, or cash flows of the University. The schedule of expenditures of federal awards does not present the activity for the University's subsidiaries Ben Franklin Technology Partners of Northeastern PA and Manufacturers Resource Center that expended \$1,004,842 and \$795,350 in federal awards, respectively, and submit separate audit reports in accordance with the Uniform Guidance.

# (2) Summary of Significant Accounting Policies

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in Office of Management and Budget Circular A-21, *Cost Principles for Educational Institutions*, or the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

#### (3) Indirect Cost Rate

The University has not elected to use the 10-percent de minimis indirect cost rate allowed under the Uniform Guidance.

# (4) Federal Perkins Loan Program

Perkins loans are administered directly by the University, and balances and transactions relating to Perkins loans are included in the University's consolidated financial statements. Perkins loan expenditures reported on the Schedule include the balance of outstanding loans at June 30, 2016, loans made during the year ended June 30, 2017 of \$115,430 and the administrative cost allowance claimed during the year ended June 30, 2017 of \$79,994. The outstanding balance of Federal Perkins Loans at June 30, 2017 was \$2.193.716.

There were no federal or institutional capital contributions to the Perkins revolving loan fund for the year ended June 30, 2017.

#### (5) Direct Loans

Direct Loans are made by the Secretary of Education, and therefore balances and transactions relating to Direct Loans are not included in the University's consolidated financial statements. The University is responsible for the performance of certain administrative duties under the Direct Loan program, including origination and disbursement of loans.

# Notes to Schedule of Expenditures of Federal Awards Year ended June 30, 2017

# (6) Revolving Loan Fund

The Lehigh and Northampton Counties Revolving Loan Fund (RLF) has as its principal activity to provide capital (in the form of loans) to new and existing businesses for the purpose of creating and retaining permanent private sector jobs. No new federal or other funding was received during the year ended June 30, 2017. At June 30, 2017, the assets of the fund were as follows:

| Cash and investments | \$<br>247,974 |
|----------------------|---------------|
| Loans receivable     | <br>277,764   |
| Total RLF assets     | \$<br>525,738 |

The RLF expended \$10,280 on administrative expenses for the year ended June 30, 2017. The federal portion of the RLF is 66.67%. The total expenditures reported on the schedule of expenditures of federal awards (SEFA) is \$357,363, which is 66.67% of both the RLF's assets at June 30, 2017 and the RLF's administrative expenses for the year ended June 30, 2017.



KPMG LLP 1601 Market Street Philadelphia, PA 19103-2499

# Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

The Board of Trustees Lehigh University:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the consolidated financial statements of Lehigh University (the University) which comprise the consolidated statement of financial position as of June 30, 2017, and the related consolidated statements of activities and cash flows for the year then ended and the related notes to the consolidated financial statements, and have issued our report thereon dated October 23, 2017.

# **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

#### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.



# **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Philadelphia, Pennsylvania October 23, 2017



KPMG LLP 1601 Market Street Philadelphia, PA 19103-2499

Independent Auditors' Report on Compliance for the Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

The Board of Trustees Lehigh University:

# Report on Compliance for the Major Federal Program

We have audited Lehigh University's (the University's) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on the University's major federal program for the year ended June 30, 2017. The University's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. The University's consolidated financial statements include the operations of Ben Franklin Technology Partners of Northeastern Pennsylvania and Manufacturers Resource Center (the subsidiaries), which received \$1,004,842 and \$795,350 in federal awards, respectively, which are not included in the schedule of expenditures of federal awards for the year ended June 30, 2017. Our audit, described below, did not include the operations of the subsidiaries because they separately engaged us to perform audits in accordance with the Uniform Guidance.

# Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal program.

# Auditors' Responsibility

Our responsibility is to express an opinion on compliance for Lehigh University's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of the University's compliance.

# Opinion on the Major Federal Program

In our opinion, Lehigh University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2017.



# **Report on Internal Control Over Compliance**

Management of Lehigh University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

# Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the consolidated financial statements of Lehigh University as of and for the year ended June 30, 2017, and have issued our report thereon dated October 23, 2017, which contained an unmodified opinion on those consolidated financial statements. Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

KPMG LLP

Philadelphia, Pennsylvania January 26, 2018

# Schedule of Findings and Questioned Costs Year ended June 30, 2017

# (1) Summary of Auditors' Results

- (a) Type of report issued on whether the consolidated financial statements were prepared in accordance with generally accepted accounting principles: **Unmodified**
- (b) Internal control deficiencies over financial reporting disclosed by the audit of the consolidated financial statements:
  - Material weaknesses: No
  - Significant deficiencies: None Reported
- (c) Noncompliance material to the financial statements: No
- (d) Internal control deficiencies over the major program disclosed by the audit:
  - Material weaknesses: No
  - Significant deficiencies: None reported
- (e) Type of report issued on compliance for the major program: Unmodified
- (f) Audit findings that are required to be reported in accordance with 2 CFR 200.516(a): No
- (g) Major program:
  - Student Financial Assistance Cluster (CFDA Nos. 84.007, 84.038, 84.033, 84.063, and 84.268)
- (h) Dollar threshold used to distinguish between Type A and Type B programs: \$1,624,884
- (i) Auditee qualified as a low-risk auditee: Yes
- (2) Findings Relating to the Financial Statements Reported in Accordance with Government Auditing Standards

None

(3) Findings and Questioned Costs Relating to Federal Awards

None