

CASE WESTERN RESERVE UNIVERSITY

**Report on Federal Financial Assistance Programs
in Accordance with the Uniform Guidance
For the Year Ended June 30, 2018**

**Federal Entity Identification
Number 1-341018992-A1**



CASE WESTERN RESERVE UNIVERSITY
REPORT ON FEDERAL FINANCIAL ASSISTANCE PROGRAMS
IN ACCORDANCE WITH THE UNIFORM GUIDANCE

June 30, 2018

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FINANCIAL



Report of Independent Auditors

To the Board of Trustees
Case Western Reserve University:

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of Case Western Reserve University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2018 and 2017, and the related consolidated statements of activities for the year ended June 30, 2018 and of cash flows for the years ended June 30, 2018 and 2017, and the related notes to the financial statements.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America 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 our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Case Western Reserve University as of June 30, 2018 and 2017, and the changes in its net assets for the year ended June 30, 2018 and its cash flows for the years



ended June 30, 2018 and 2017 in accordance with accounting principles generally accepted in the United States of America.

Other Matters

We previously audited the University's consolidated statement of financial position as of June 30, 2017, and the related consolidated statements of activities and of cash flows for the year then ended (not presented herein), and in our report dated October 14, 2017, we expressed an unmodified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying summarized financial information as of June 30, 2017 and for the year then ended is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

Other Information

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 for the year ended June 30, 2018 is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 20, 2018 on our consideration of the 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 for the year ended June 30, 2018. 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 the University's internal control over financial reporting and compliance.

PricewaterhouseCoopers LLP

October 20, 2018

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

<i>In thousands of dollars</i>	June 30	
	2018	2017
ASSETS		
Cash and cash equivalents	\$ 105,409	\$ 143,589
Operating investments	238,988	187,904
Accounts and loans receivable, net	116,725	106,965
Pledges receivable, net	146,801	145,177
Prepaid expenses and other assets	41,899	35,013
Investments, held for long-term purposes	1,463,671	1,395,449
Funds held in trust by others	347,459	337,553
Property, plant, equipment and books, net	742,416	757,082
TOTAL ASSETS	\$ 3,203,368	\$ 3,108,732
LIABILITIES AND NET ASSETS		
LIABILITIES		
Accounts payable and accrued expenses	\$ 63,221	\$ 61,267
Deferred income and other liabilities	52,311	59,713
Annuities payable	35,141	34,241
Refundable advances	7,528	6,127
Accrued pension liability	89,893	101,817
Notes and bonds payable	531,244	531,184
Refundable federal student loans	26,728	28,223
TOTAL LIABILITIES	\$ 806,066	\$ 822,572
NET ASSETS		
Unrestricted	\$ 228,685	\$ 205,826
Temporarily restricted	1,067,412	1,012,836
Permanently restricted	1,101,205	1,067,498
TOTAL NET ASSETS	\$ 2,397,302	\$ 2,286,160
TOTAL LIABILITIES AND NET ASSETS	\$ 3,203,368	\$ 3,108,732

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

CONSOLIDATED STATEMENT OF ACTIVITIES

with summarized financial information for the year ended June 30, 2017

				For the year ended June 30	
<i>In thousands of dollars</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	2018	2017
OPERATING REVENUES					
Student tuition and fees	\$ 470,870			\$ 470,870	\$ 451,874
Less: Student aid	(181,592)			(181,592)	(173,616)
	289,278			289,278	278,258
Investment returns distributed for operations	67,157			67,157	62,044
FHBO returns distributed	14,692	\$ 1,266		15,958	15,817
Investment returns on operating investments	16,239			16,239	19,676
Grants and contracts	261,210			261,210	253,861
CCLCM grants and contracts	99,967			99,967	96,310
Gifts and pledges	20,692	22,864	\$ 25,122	68,678	95,779
State of Ohio appropriation	2,575			2,575	2,734
Facilities and administrative cost recovery	76,642			76,642	74,557
Organized activities	12,659			12,659	11,960
Other sources	33,125		164	33,289	39,239
Auxiliary services - students	62,795			62,795	62,681
Auxiliary services - other	9,850			9,850	9,700
Net assets released from restrictions	47,482	(46,579)	(903)	-	
TOTAL OPERATING REVENUES	\$ 1,014,363	\$ (22,449)	\$ 24,383	\$ 1,016,297	\$ 1,022,616
OPERATING EXPENSES					
Instructional	331,878			331,878	322,242
Sponsored research and training	261,605			261,605	252,592
Other sponsored projects	24,499			24,499	25,769
CCLCM research and training	99,967			99,967	96,310
Libraries	22,815			22,815	22,500
Student services	33,120			33,120	30,802
University services	124,633			124,633	122,928
Auxiliary services - students	70,412			70,412	69,506
Auxiliary services - other	12,958			12,958	15,805
TOTAL OPERATING EXPENSES	\$ 981,887	\$ -	\$ -	\$ 981,887	\$ 958,454
NET OPERATING ACTIVITY	\$ 32,476	\$ (22,449)	\$ 24,383	\$ 34,410	\$ 64,162
NON-OPERATING ACTIVITIES					
Long-term investment activities					
Investment income	\$ 7,041	\$ 59,250	\$ 3,523	\$ 69,814	\$ 19,943
Net appreciation	9,902	48,196	9,340	67,438	170,433
Total long-term investment activities	16,943	107,446	12,863	137,252	190,376
Investment returns distributed for operations	(67,157)			(67,157)	(62,044)
Change in liabilities due under life-income agreements	(19)		(3,539)	(3,558)	2,020
Loss on disposal of plant assets	(1,827)			(1,827)	(2,382)
Pension plan changes other than periodic benefit costs	12,022			12,022	16,100
Net assets released from restrictions	30,421	(30,421)		-	
NET NON-OPERATING ACTIVITY	\$ (9,617)	\$ 77,025	\$ 9,324	\$ 76,732	\$ 144,070
CHANGE IN NET ASSETS					
Beginning Net Assets	205,826	1,012,836	1,067,498	2,286,160	2,077,928
ENDING NET ASSETS	\$ 228,685	\$ 1,067,412	\$ 1,101,205	\$ 2,397,302	\$ 2,286,160

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>In thousands of dollars</i>	For the year ended June 30	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in net assets	\$ 111,142	\$ 208,232
<i>Adjustments to reconcile change in net assets to net cash (used for) provided by operating activities:</i>		
Depreciation	67,880	68,344
Amortization of bond issuance costs	235	208
Amortization of bond premiums	(4,132)	(3,184)
Loss on debt refunding and defeasance		601
Realized and unrealized net gains on investments	(138,577)	(178,438)
Increase (decrease) to annuities payable resulting from actuarial adjustments	3,558	(2,020)
Gifts of property and equipment	(123)	(49)
Loss on disposal of plant assets	1,827	2,382
Contributions restricted for long-term investment	(18,163)	(19,931)
(Increase) decrease in accounts and loans receivable, net	(11,323)	5,692
Increase in pledges receivable, net	(1,624)	(30,623)
Increase in prepaid expenses and other assets	(6,886)	(2,313)
Increase in funds held in trust by others	(9,906)	(24,918)
Increase in accounts payable and accrued expenses	4,294	3,108
(Decrease) increase in deferred income and other liabilities	(7,402)	3,671
Increase in refundable advances	1,400	1,372
Decrease in accrued pension liability	(11,924)	(11,699)
NET CASH (USED FOR) PROVIDED BY OPERATING ACTIVITIES	\$ (19,724)	\$ 20,435
CASH FLOWS FROM INVESTING ACTIVITIES		
Student loans		
Collected	\$ 7,683	\$ 7,834
Issued	(6,120)	(5,887)
Decrease (increase) in donor-restricted cash for long-term investment	22,978	(3,019)
Proceeds from the sale of investments	1,477,316	2,924,537
Purchase of investments	(1,458,045)	(2,870,749)
Proceeds from the sale of plant assets	560	415
Purchases of property, plant, equipment and books	(57,817)	(49,162)
NET CASH (USED FOR) PROVIDED BY INVESTING ACTIVITIES	\$ (13,445)	\$ 3,969
CASH FLOWS FROM FINANCING ACTIVITIES		
Decrease in federal advances for student loans	\$ (1,496)	\$ (588)
Contributions restricted for long-term investment	10,077	15,690
Distributions restricted for long-term investment	(22,978)	
Proceeds from the sale of investments received as gifts	8,086	7,260
Proceeds from short-term debt	213,000	157,600
Repayment of short-term debt	(191,000)	(176,600)
Repayment of commercial paper	(30,000)	(38,110)
Proceeds from notes and bonds payable	102,682	182,919
Repayment of notes and bonds payable	(90,725)	(165,268)
Increase to annuities payable resulting from new gifts	114	270
Decrease to annuities payable resulting from payments	(2,771)	(3,332)
NET CASH USED FOR FINANCING ACTIVITIES	\$ (5,011)	\$ (20,159)
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	\$ (38,180)	\$ 4,245
Cash and cash equivalents, beginning of year	143,589	139,344
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 105,409	\$ 143,589
SUPPLEMENTAL DATA:		
Interest paid in cash	\$ 17,126	\$ 17,728
Construction-in-progress payments included in accounts payable	4,499	6,838

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

Basis of Presentation

Case Western Reserve University ("the University") is an Ohio not-for-profit corporation that operates a private research university in Cleveland, Ohio. The consolidated financial statements of the University as of June 30, 2018, and for the year then ended, as well as summarized information for the year ended June 30, 2017, have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Accordingly, the accompanying consolidated financial statements have been prepared on the accrual basis of accounting and include the accounts of the University and all wholly-owned subsidiaries.

Net Asset Categories

Standards for external financial reporting by not-for-profit organizations require that resources be classified for reporting purposes into three net asset categories according to donor-imposed restrictions:

UNRESTRICTED net assets are available for any purpose consistent with the University's mission. Unrestricted net assets and related activity include the following:

- All revenues traditionally classified as unrestricted resources of the University, including tuition and fees, unrestricted gifts, investment returns on unrestricted funds designated to function as endowment, recovery of facility and administrative costs from grants and contracts, and auxiliary services revenues
- Revenues related to sponsored research and other sponsored program agreements which are considered exchange transactions
- Unrestricted funds functioning similar to endowment
- Gifts with donor-imposed restrictions, if the restriction is anticipated to be met within the current fiscal year of the University
- Investments in plant assets
- All expenses of the University

TEMPORARILY RESTRICTED net assets include investment returns from endowments and gifts for which donor-imposed restrictions have not been met. This restriction on temporarily restricted endowment returns (income and realized and unrealized gains and losses) is released when appropriations are distributed for use and the funds have been spent for intended purposes. The

category also includes pledges receivable and life-income gifts for which the ultimate purpose of the proceeds is not permanently restricted.

PERMANENTLY RESTRICTED net assets include gifts, trusts and pledges on which donors have imposed the restriction that the corpus is maintained in perpetuity and only the investment returns be made available for program operations. In the case of trusts, gains and losses are added to the gift amount. Gifts restricted by donors to provide loans to students are also included in permanently restricted net assets.

Expirations of temporary restrictions on net assets are reported as reclassifications between the applicable classes of net assets. Donor required matching from University funds and donor release or clarification of restrictions are also included in this category.

Accounting Standards Codification ("ASC") 958, "Not for Profit Entities," provides guidance on the net asset classification of donor-restricted endowment funds for a not-for-profit organization that is subject to an enacted version of the Uniform Prudent Management of Institutional Funds Act ("UPMIFA"), and expanded disclosures about an organization's endowment (both donor-restricted and board-designated funds). The University's Board of Trustees ("the Board") has interpreted UPMIFA as requiring the preservation of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulation to the contrary. As a result of this interpretation, the University classifies as permanently restricted net assets, (a) the original value of initial gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified as permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated and expended by the University in a manner consistent with the standard of prudence prescribed by UPMIFA.

Contributions

Contributions, including unconditional pledges to give and irrevocable trusts held by others with the University

as the beneficiary, are recognized as revenues in the period received or promised. They are classified as unrestricted, temporarily restricted, or permanently restricted net assets depending upon the donor's intent.

Contributions restricted for the acquisition of land, buildings and equipment are reported as temporarily restricted revenues. These contributions are reclassified to unrestricted net assets when the assets are placed in service. Promises to give that are subject to donor-imposed stipulations that the corpus be maintained in perpetuity are recognized as increases in permanently restricted net assets.

Conditional promises to give are not recognized until the conditions on which they depend are substantially met. Gifts whose restrictions are met in the same fiscal year in which they are received are reported with unrestricted contribution revenues. Contributions of assets other than cash are reported at their estimated fair value at the date of gift. Contributions scheduled to be received after one year are discounted using a market rate (Note 3).

Grants and Contracts (Government and Private)

Revenues from government and private grants and contracts are recognized as earned in accordance with the terms of the grant or contract. Any government payment received before it has been expended is recorded as a refundable advance. Projects funded by government grants that incur expenses prior to payment receipt are recorded as revenue with a corresponding receivable.

Investment Returns on Operating Investments

The University has invested excess operating funds and certain Board-designated funds with the University's investment pool. The operating funds are invested alongside other funds and receive a pro-rata portion of income, expenses, gains, and losses of the pool.

Cash and Cash Equivalents

The University considers all highly liquid investments with an original maturity of 90 days or fewer when purchased as cash and cash equivalents, except those amounts managed by investment managers as part of the investment pool that do not belong to operations, or unspent bond proceeds, which are classified as investments. The University maintains operating cash and reserves for replacement balances in financial

institutions which, from time to time, may exceed federally insured limits. The University periodically assesses the financial condition of these institutions and believes that the risk of loss is minimal.

Operating Investments

Operating investments are stated at fair value and include all other current investments with original maturities greater than 90 days that are used to support operations. These investments may include obligations of triple A-rated banks, various United States Government agencies, other investments, and internal operating funds invested in the University's investment pool. Although the pool primarily invests in mid- to long-term investments, the pool maintains a sufficient investment mix that allows operating assets to be liquidated upon demand.

Prepaid Expenses and Other Assets

Within other assets, the University has cash of \$5,188 and \$28,167 as of June 30, 2018 and 2017, respectively, restricted by donors for investment in property and equipment. Also included as of June 30, 2018 is an earnest deposit of \$29,953 to the Cleveland Clinic Foundation ("CCF") on the University's investment in the Health Education Campus ("HEC") (Note 10).

Investments

Investments are made within guidelines authorized by the Board. Investments are initially recorded at cost at date of acquisition or fair value at date of donation in the case of gifts.

Ownership of marketable securities is recognized as of the trade date. Endowment returns are calculated net of internal and external investment management expenses.

Investments are stated at fair value as defined by ASC 820, "Fair Value Measurements and Disclosures." Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability, i.e., an exit price, in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The fair value of all debt and equity securities with readily determinable fair values are based on quotations obtained from national securities exchanges. The alternative investments, which are not readily

marketable, are carried at estimated fair values as provided by the investment managers. The University reviews and evaluates the values provided by the investment managers and agrees with the valuation methods and assumptions used in determining the fair value of the alternative investments. Those estimated fair values may differ significantly from the values that would have been used had a ready market for these securities existed.

Realized gains and losses on investments are included in *Investment income*. Average cost is generally used to determine gains or losses on securities sold. Unrealized changes in the fair value of investments are shown as net unrealized appreciation or depreciation.

The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used by the University for financial instruments measured at fair value on a recurring basis (Note 6). The three levels of inputs are as follows:

Level 1 — Quoted unadjusted prices in active markets for identical assets or liabilities. An active market is one in which transactions occur with sufficient frequency and volume to produce pricing information on an ongoing basis. Market price data are generally obtained from exchange or dealer markets.

Level 2 — Pricing inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the same term of the assets or liabilities. Inputs are obtained from various sources including market participants, dealers and brokers.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Collections

The University's collections of historically significant artifacts, scientific specimens, and art objects are held for education, research, scientific inquiry, and public exhibition. They are neither disposed of for financial gain nor encumbered in any manner. Accordingly, their value is not reflected in the University's consolidated financial statements.

Funds Held in Trust by Others

Funds held in trust by others are assets held and administered by outside trustees from which the University derives income or residual interest. Funds held in trust by others are reported at their fair value as of June 30, 2018 and 2017.

Income received from funds held in trust by others is classified as temporarily restricted net assets until those amounts are appropriated and expended by the University. Income appropriated within the same year earned/received is classified as unrestricted. Unrealized changes in the fair value of investments are shown as net unrealized appreciation or depreciation in permanently restricted net assets.

Fixed Assets

When capital assets are sold or disposed, the carrying value of such assets and any accumulated depreciation are removed from the asset accounts. Any resulting gain or loss on disposal is recognized in the non-operating portion of the consolidated statement of activities.

Expenditures for construction-in-progress are capitalized as incurred and depreciated over the estimated life of the asset when placed into service. All identifiable direct costs including other costs incurred to ready the asset for its intended use are included in the cost of the project. The University capitalizes interest on borrowings to finance facilities, net of any investment income earned through the temporary investment of project borrowings, during construction until the project has been substantially completed.

Split-Interest Agreements

The University has split-interest agreements consisting primarily of pooled income funds, charitable gift annuities and charitable remainder unitrusts and annuities. Contributions are recognized at the date the trusts and annuities are established, net of a liability for the present value of the estimated future cash outflows to beneficiaries, using a discount rate of 2.9% and 2.6% for June 30, 2018 and 2017, respectively. These assets are invested and payments are made to donors and beneficiaries in accordance with the respective agreements.

Allocation of Certain Expenses

The consolidated statement of activities presents expenses by function. Some expenses — such as depreciation, amortization, and expenses related to the operation of the physical plant — are allocated by square footage. Interest expense is allocated to the functions that derive the greatest benefit from the facilities financed.

Retirement Plans

The University accounts for its defined benefit postretirement plan in accordance with ASC 715, “Compensation - Retirement Benefits.” The University recognizes the overfunded or underfunded status of a defined benefit postretirement plan as an asset or liability in its consolidated statements of financial position in the year in which the change occurs, with an offsetting impact to unrestricted net assets.

Use of Estimates

Financial statements using U.S. GAAP rely on estimates. At June 30, management makes certain estimates and assumptions, which affect assets and liabilities, disclosures of contingent assets and liabilities, and reported revenues and expenses during the period. Actual results may differ from these estimates.

Comparative Information

The consolidated statement of activities includes prior year summarized comparative information in total, but not by net asset category. Such information does not include enough detail to constitute a presentation in conformity with U.S. GAAP. Accordingly, such information should be read in conjunction with the University's consolidated financial statements for the year ended June 30, 2017, from which it was derived.

Income Taxes

The University is exempt from federal income tax to the extent provided under section 501(c)(3) of the Internal Revenue Code (“IRC”). The University is classified as an organization that is not a private foundation under section 509(a) of the IRC, and as such, gifts to the University qualify for deduction as charitable contributions. The University is exempt from federal income tax; however, it is required to pay federal income tax on unrelated business income. The University did

not have any material income tax liabilities for the years ended June 30, 2018 and 2017. ASC 740, “Income Taxes,” prescribes a recognition threshold and measurement requirements for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. In addition, ASC 740 provides guidance on recognition, classification and disclosure requirements for uncertain tax provisions. The University has no financial reporting requirements associated with ASC 740 for the years ended June 30, 2018 and 2017.

New Pronouncements

In May 2014, the FASB issued Accounting Standard Update (“ASU”) 2014-09: “Revenue from Contracts with Customers (Topic 606)” at the conclusion of a joint effort with the International Accounting Standards Board to create common revenue recognition guidance for U.S. GAAP and international accounting standards. This framework ensures that entities appropriately reflect the consideration to which they expect to be entitled in exchange for goods and services by allocating transaction price to identified performance obligations and recognizing revenue as performance obligations are satisfied. Qualitative and quantitative disclosures are required to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The standard is effective for fiscal years beginning after December 15, 2017. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2019, the first year in which the standard is effective.

In February 2016, the FASB issued ASU 2016-02: “Leases (Topic 842),” which increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the consolidated statements of financial position and disclosing key information about leasing arrangements. This standard requires the recognition of lease assets and lease liabilities by lessees for those leases previously classified as operating leases. The standard is effective for fiscal years beginning after December 15, 2018. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2020, the first year in which the standard is effective.

In August 2016, the FASB issued ASU 2016-14: “Presentation of Financial Statements of Not-for-Profit Entities,” which simplifies and improves how a not-for-profit entity classifies net assets and presents and

discloses information related to liquidity, financial performance, and cash flows in financial statements. The standard is effective for fiscal years beginning after December 15, 2017. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2019, the first year in which the standard is effective.

In August 2016, the FASB issued ASU 2016-15: "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," which attempts to eliminate the diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. This includes debt prepayment or debt extinguishment costs, certain contingent consideration payments and proceeds from the settlement of insurance claims, among others. The standard is effective for fiscal years beginning after December 15, 2018. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2020, the first year in which the standard is effective.

In November 2016, the FASB issued ASU 2016-18: "Statement of Cash Flows (Topic 230): Restricted Cash," which requires amounts generally described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The standard is effective for fiscal years beginning after December 15, 2018. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2020, the first year in which the standard is effective.

In March 2017, the FASB issued ASU 2017-07: "Compensation – Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which requires an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered

by the pertinent employees during the period, among other improvements to benefit cost presentation. The standard is effective for fiscal years beginning after December 15, 2018. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2020, the first year in which the standard is effective.

In March 2017, the FASB issued ASU 2017-08: "Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities," which shortens the amortization period of premiums on certain purchased callable debt securities to the earliest call date. The standard is effective for fiscal years beginning after December 15, 2019. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2021, the first year in which the standard is effective.

In August 2017, the FASB issued ASU 2017-12: "Targeted Improvements to Accounting for Hedging Activities," which improves the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. The standard is effective for fiscal years beginning after December 15, 2019. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2021, the first year in which the standard is effective.

In June 2018, the FASB issued ASU 2018-08: "Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made," which will assist entities in evaluating whether transactions should be accounted for as contributions or as exchange transactions as well as determining whether a contribution is conditional. The standard is effective for fiscal years beginning after June 15, 2018. The University is evaluating the impact this will have on the consolidated financial statements for fiscal year ending June 30, 2019, the first year in which the standard is effective.

2. ACCOUNTS AND LOANS RECEIVABLE

Accounts and loans receivable of the University at June 30, 2018 and 2017 were as follows:

	2018	2017
ACCOUNTS RECEIVABLE, NET		
Grants, contracts and others	\$ 64,110	\$ 52,362
Students	2,096	2,890
STUDENT LOANS, NET	50,519	51,713
ACCOUNTS AND LOANS RECEIVABLE, NET	\$ 116,725	\$ 106,965

Allowance for doubtful accounts:

Accounts receivable	\$ 4,945	\$ 3,857
Loans receivable	\$ 2,067	\$ 2,419

Management regularly assesses the adequacy of the allowance for doubtful accounts by performing ongoing evaluations of the various components of the accounts receivable and student loan portfolios, including such factors as the differing economic risks associated with each category, the financial condition of specific

borrowers, the economic environment in which the borrowers operate, the level of delinquent loans, and the past history of the various borrowers and the University.

Factors also considered by management when performing its assessment, in addition to general economic conditions and the other factors described above, included, but were not limited to, a detailed review of the aging of the various receivables and loans, and a review of the default rate by loan category in comparison to prior years. The level of the allowance is adjusted based on the results of management's analysis.

Management considers the allowance for doubtful accounts to be prudent and reasonable. Furthermore, the University's allowance is general in nature and is available to absorb losses from any loan category. Management believes that the allowance for doubtful accounts at June 30, 2018 is adequate to absorb credit losses inherent in the portfolio as of that date.

3. PLEDGES RECEIVABLE

Unconditional promises to give are included in the consolidated financial statements as pledges receivable and revenue of the appropriate net asset category. Multi-year pledges are recorded after discounting based on the market rate to the present value of expected future cash flows. The discount rate utilized for fiscal 2018 and 2017 was 5%.

Unconditional promises to give at June 30, 2018 and 2017 are expected to be realized in the following periods:

	2018	2017
Less than one year	\$ 49,046	\$ 46,979
Between one year and five years	103,958	101,849
More than five years	17,696	17,500
	170,700	166,328
Less: Discount	(10,994)	(11,819)
Less: Allowance	(12,905)	(9,332)
TOTAL PLEDGES RECEIVABLE, NET	\$ 146,801	\$ 145,177

Management follows a similar approach as described in Note 2 for accounts and loans receivable in evaluating the adequacy of the allowance for doubtful accounts

for pledges receivable. Management considers the allowance for doubtful accounts to be prudent and reasonable. Management believes that the allowance for doubtful accounts at June 30, 2018 is adequate to absorb any uncollectible pledges as of that date.

Pledges receivable at June 30, 2018 and 2017 had the following restrictions:

	2018	2017
Department programs and activities	\$ 44,748	\$ 35,418
Endowments for scholarships and		
department programs and activities	39,946	29,948
Building construction	62,107	79,811
TOTAL PLEDGES RECEIVABLE, NET	\$ 146,801	\$ 145,177

Uncollectible pledges totaling \$6,141 (2018) and \$6,113 (2017) were written off against the allowance for uncollectible pledges. The University had conditional pledge commitments totaling \$19,321 (2018) and \$10,568 (2017).

4. LONG-TERM INVESTMENTS

The University holds long-term investments for permanently restricted endowment funds, donor-restricted funds, annuity assets, Board-designated funds and excess operating assets that are able to be invested in longer term investments.

The University invests through traditional investments as well as operating an investment pool that works similar to a mutual fund (Note 5). The University's long-term investments at June 30, 2018 and 2017 were as follows:

	2018	2017
Cash and cash equivalents	\$	50,423
Domestic stocks	\$ 83,685	66,094
International securities	104,657	92,480
Global securities	320,568	252,175
Bonds		
Government and municipal	29,860	19,088
Corporate	91,226	19,509
Mutual funds	166,525	272,173
Derivatives	94,816	27,280
Limited partnerships and Other		
Venture capital	115,416	116,624
Private equity	255,038	231,050
Real estate	69,090	77,815
Absolute return	335,300	322,125
Other	36,397	36,436
Equity real estate	81	81
TOTAL INVESTMENTS	\$ 1,702,659	\$ 1,583,353

	2018	2017
Operating investments	\$ 238,988	\$ 187,904
Investments, held for long-term purposes	1,463,671	1,395,449
TOTAL INVESTMENTS	\$ 1,702,659	\$ 1,583,353

Investment returns shown on the consolidated statement of activities are netted against investment management fees of \$11,245 (2018) and \$9,548 (2017). The investments were held for the following purposes:

	2018	2017
Endowment	\$ 1,173,633	\$ 1,118,540
Donor-restricted funds	304,850	298,486
University investments	171,296	111,748
Annuities	41,985	44,294
Funds held for the benefit of others	10,895	10,285
TOTAL INVESTMENTS	\$ 1,702,659	\$ 1,583,353

University investments include unspent bond proceeds of \$0 (2018) and \$24 (2017) (Note 8).

5. ENDOWMENT AND SIMILAR FUNDS

Endowment Funds

The purpose of endowment funds is to generate in perpetuity revenue to support specific activities or for general institutional use. Endowments represent only those net assets that are under the control of the University. Gift annuities, interests in funds held in trust by others, and pledges designated for the endowment but not yet received are not considered components of the endowment.

The state of Ohio has enacted legislation that incorporates the provisions outlined in the Uniform Prudent Management of Institutional Funds Act ("UPMIFA"). UPMIFA stipulates that unless directed otherwise in the gift instrument, donor-restricted assets in an endowment fund are restricted assets until appropriated for expenditure by the institution. Accordingly, the following items are recorded as permanently restricted net assets:

- The original value of initial gifts donated to the permanent endowment
- The original value of subsequent gifts to the permanent endowment
- For those endowment funds with donor-specified reinvestment provisions, accumulations to the

permanent endowment made in accordance with the gift instrument at the time the accumulation is added to the fund

The remaining portion of donor-restricted endowment funds that are not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated and spent in accordance with the endowment purpose by the University.

Similar Funds

The University has designated certain funds to function as endowments and has co-invested as such. Donor purpose-restricted funds were not given to the University with the understanding that the gift amount would be maintained in perpetuity; these funds are classified in temporarily restricted net assets. All other Board-designated funds are classified in unrestricted net assets. Even though the Board has elected to treat these funds in the same fashion as an endowment fund, at its option, the Board may elect to change that treatment and spend these funds in accordance with the intentions of the donor, if any, without the constraints of the University endowment spending formula.

The breakdown of these classifications are:

June 30, 2018	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	\$ (8,392)	\$ 538,176	\$ 643,849	\$ 1,173,633
Donor purpose-restricted funds		296,604		296,604
Board-designated funds	69,065			69,065
TOTAL ENDOWMENT AND SIMILAR FUNDS	\$ 60,673	\$ 834,780	\$ 643,849	\$ 1,539,302

June 30, 2017	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds	\$ (11,234)	\$ 501,891	\$ 627,883	\$ 1,118,540
Donor purpose-restricted funds		288,060		288,060
Board-designated funds	54,637			54,637
TOTAL ENDOWMENT AND SIMILAR FUNDS	\$ 43,403	\$ 789,951	\$ 627,883	\$ 1,461,237

Investment Pool

The Board's interpretation of its fiduciary responsibilities for endowment and similar funds is to preserve intergenerational equity to the extent possible. This principle holds that future beneficiaries should receive at least the same level of economic support that the current generation enjoys. To that end, investment goals are formulated to earn returns over the long term that equal

or exceed the Board-approved distribution rates plus the impacts of inflation. The University's endowment and similar funds are invested in a broadly diversified portfolio designed to produce long-term rates of return that sustain or increase the real spending contribution from endowed and similar assets and to mitigate downturns in a single sector.

Unless otherwise directed in the gift instrument, both endowment and similar funds are pooled for efficient investment purposes.

The pool is accounted for on a dollarized method of accounting similar to a money market fund and accounted for on an account basis. The total investment return for the pooled investments, net of external manager fees, approximated 9.15% (2018) and 12.43% (2017).

Spending Policy

The Board has approved an endowment spending policy for pooled investments based on a hybrid formula. The objective of this two-pronged approach is to provide support for operations, preserve intergenerational equity, and insulate programming supported by endowment and similar funds from short-term fluctuations in the investment markets. The two components are:

- A constant growth component which seeks to provide growth in annual spending equal to the rate of academic inflation as measured by the Higher Education Price Index
- A market value component based on 4.5% of the average of the three previous calendar year-end market values

Specific appropriation for expenditure of funds under the policy occurs each spring when the Board approves the operating budget for the following year. The fiscal year 2018 and 2017 pooled endowment and similar funds spending allocation approved by the Investment Committee of the Board were \$58,900 and \$61,300, respectively. The approved spending rate for fiscal year

2018 and 2017 were 4.75% and 4.91% of beginning market value, respectively. The total amount allocated was \$59,422 and \$63,439, respectively.

While the policy provides guidance for the level of spending permitted (allocation), the actual spending will vary from the spending allocation based on the timing of actual expenditures. Funds are transferred from the investment pool to the University's operating account after they have been spent in accordance with the endowment and similar funds requirements. The actual movement of cash and investments between the investment pool and operating accounts occurs on a periodic basis as determined by the University and its processes to maintain the proper balance between liquidity and the remaining invested.

For years where actual investment return exceeds actual approved spending, the difference remains in temporarily restricted net assets; years in which the actual endowment and similar funds return is less than distributions under the policy, the shortfall is covered by realized returns from prior years. Both fiscal years 2018 and 2017 pooled endowment and similar funds distribution were funded from a combination of current year investment income and prior year accumulated realized gains.

In addition to the general distribution described above, the Board has authorized a supplemental distribution of previously reinvested income and realized appreciation to support certain development-related activities. This distribution totaled \$6,000 in 2018 and \$6,000 in 2017.

Changes in endowment and similar funds net assets for fiscal year 2018 and 2017 are as follows:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
ENDOWMENT AND SIMILAR FUNDS NET ASSETS, JUNE 30, 2016	\$ 22,689	\$ 721,151	\$ 606,264	\$ 1,350,104
Investment income	1,878	41,439		43,317
Realized and unrealized gains	4,398	96,656		101,054
TOTAL INVESTMENT RETURN	6,276	138,095		144,371
Contributions	6,012	1,175	21,797	28,984
Current year withdrawals			(178)	(178)
Current year expenditures	(2,460)	(59,584)		(62,044)
Reclassification of deficits in donor-designated funds	10,886	(10,886)		-
ENDOWMENT AND SIMILAR FUNDS NET ASSETS, JUNE 30, 2017	\$ 43,403	\$ 789,951	\$ 627,883	\$ 1,461,237
Investment income	3,171	59,341		62,512
Realized and unrealized gains	3,272	52,178		55,450
TOTAL INVESTMENT RETURN	6,443	111,519		117,962
Contributions	10,465	829	16,165	27,459
Current year withdrawals			(199)	(199)
Current year expenditures	(2,480)	(64,677)		(67,157)
Reclassification of deficits in donor-designated funds	2,842	(2,842)		-
ENDOWMENT AND SIMILAR FUNDS NET ASSETS, JUNE 30, 2018	\$ 60,673	\$ 834,780	\$ 643,849	\$ 1,539,302

Occasionally, the fair market value of assets associated with individual donor-restricted endowment funds falls below the value of the original gift amounts. When deficits exist in these funds, they are classified as a reduction of unrestricted net assets. Deficits of this nature reported in unrestricted net assets were \$8,392 (2018) and \$11,234 (2017). These deficits resulted from unfavorable market fluctuations that occurred after

the investment of recently established endowments and additions, and authorized appropriation that was deemed prudent.

Of the amount classified as temporarily restricted endowment net assets, \$538,176 (2018) and \$501,891 (2017) represented the investment returns on perpetual endowment funds subject to time and purpose restrictions under Ohio's enacted version of UPMIFA.

6. FAIR VALUE MEASUREMENTS

Financial instruments carried at fair market value as of June 30, 2018 and 2017 by the ASC 820 valuation hierarchy are as follows:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value	Total
June 30, 2018					
INVESTMENTS					
Domestic stocks	\$ 43,323	\$ 980		\$ 39,382	\$ 83,685
International securities		44,119		60,538	104,657
Global securities				320,568	320,568
Bonds					
Government and municipal		29,860			29,860
Corporate		91,226			91,226
Mutual funds	159,933	6,592			166,525
Derivatives		94,816			94,816
Limited partnerships and Other					
Venture capital			\$ 16,745	98,671	115,416
Private equity			4,332	250,706	255,038
Real estate				69,090	69,090
Absolute return		6,286		329,014	335,300
Other		42	36,355		36,397
Equity real estate			81		81
TOTAL INVESTMENTS	\$ 203,256	\$ 273,921	\$ 57,513	\$ 1,167,969	\$ 1,702,659
FUNDS HELD IN TRUST BY OTHERS	\$ -	\$ -	\$ 347,459	\$ -	\$ 347,459
PENSION PLAN ASSETS					
Cash and cash equivalents	\$ 4,394				\$ 4,394
Mutual funds	94,476	\$ 8,947			103,423
Limited partnerships and Other					
Absolute return				\$ 42,854	42,854
Other				8,540	8,540
Equity real estate				9,031	9,031
TOTAL PENSION PLAN ASSETS (Note 9)	\$ 98,870	\$ 8,947	\$ -	\$ 60,425	\$ 168,242
ASSETS AT FAIR VALUE	\$ 302,126	\$ 282,868	\$ 404,972	\$ 1,228,394	\$ 2,218,360
Interest rate swaps payable (Note 12)	\$ -	\$ 10,671	\$ -	\$ -	\$ 10,671
LIABILITIES AT FAIR VALUE	\$ -	\$ 10,671	\$ -	\$ -	\$ 10,671

June 30, 2017	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value	Total
INVESTMENTS					
Cash and cash equivalents	\$ 36,092	\$ 14,331			\$ 50,423
Domestic stocks	29,586	980		\$ 35,528	66,094
International securities		33,615		58,865	92,480
Global securities				252,175	252,175
Bonds					
Government and municipal		19,088			19,088
Corporate		19,509			19,509
Mutual funds	266,151	6,022			272,173
Derivatives		27,280			27,280
Limited partnerships and Other					
Venture capital			\$ 15,952	100,672	116,624
Private equity			4,127	226,923	231,050
Real estate				77,815	77,815
Absolute return		6,175		315,950	322,125
Other		42	36,394		36,436
Equity real estate			81		81
TOTAL INVESTMENTS	\$ 331,829	\$ 127,042	\$ 56,554	\$ 1,067,928	\$ 1,583,353
FUNDS HELD IN TRUST BY OTHERS	\$ -	\$ -	\$ 337,553	\$ -	\$ 337,553
PENSION PLAN ASSETS					
Cash and cash equivalents	\$ 5,455				\$ 5,455
Mutual funds	82,056	\$ 9,273			91,329
Limited partnerships and Other					
Absolute Return				\$ 44,954	44,954
Other				4,073	4,073
Equity real estate				8,597	8,597
TOTAL PENSION PLAN ASSETS (Note 9)	\$ 87,511	\$ 9,273	\$ -	\$ 57,624	\$ 154,408
ASSETS AT FAIR VALUE	\$ 419,340	\$ 136,315	\$ 394,107	\$ 1,125,552	\$ 2,075,314
Interest rate swaps payable (Note 12)	\$ -	\$ 14,690	\$ -	\$ -	\$ 14,690
LIABILITIES AT FAIR VALUE	\$ -	\$ 14,690	\$ -	\$ -	\$ 14,690

Level 3 Investment Information

Investments included in Level 3 consist primarily of the University's ownership in alternative investments (principally limited partnership interests in venture capital, private equity, equity real estate, real assets and other similar funds), beneficial interests in funds held in trust by others, and portions of investments in the pension assets. Level 3 investments are more difficult to value due to the following:

- The fair values of the securities held by limited partnerships that do not have readily determinable fair values are determined by the general partner based on appraisals or other estimates that require varying degrees of judgment.
- If no public market consideration exists, the fair value is determined by the general partner taking

into consideration, among other things, the cost of the securities, prices of recent significant placements of securities of the same issuer, subsequent developments concerning the companies to which the securities relate, or other estimates requiring varying degrees of judgment. The University regularly reviews, evaluates and performs significant due diligence around these investments to ensure that the values provided by the investment managers are appropriate measures of fair value. The University agrees with the valuations and assumptions used in determining the fair value of these investments.

A roll forward of the consolidated statements of financial position amounts for financial instruments classified by the University within Level 3 of the fair value hierarchy is as follows:

	Venture Capital	Private Equity	Equity Real Estate	Other & Funds Held by Others	Total
June 30, 2016	\$ 14,852	\$ 3,820	\$ 143	\$ 361,390	\$ 380,205
Investment income	15	4		9,169	9,188
Unrealized gains	1,785	462		17,684	19,931
Purchases	169	44			213
Settlements	(869)	(203)	(62)	(14,296)	(15,430)
June 30, 2017	\$ 15,952	\$ 4,127	\$ 81	\$ 373,947	\$ 394,107
Investment loss	(3)	(1)		(12)	(16)
Unrealized gains	1,524	395		10,232	12,151
Purchases	82	21			103
Settlements	(810)	(210)		(353)	(1,373)
June 30, 2018	\$ 16,745	\$ 4,332	\$ 81	\$ 383,814	\$ 404,972

The net realized and unrealized gains and losses in the table above are included in the University's consolidated statement of activities in one of two financial statement lines: *Investment income* or *Net appreciation*. In the case of pension assets, net realized and unrealized gains and losses are recognized in the financial statement line *Pension plan changes other than periodic benefit costs*.

The pricing inputs and methods described above could produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the University believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

The University is permitted under U.S. GAAP to estimate the fair value of an investment at the measurement date using the reported net asset value ("NAV") without further adjustment unless the entity expects to sell the investment at a value other than NAV or if the NAV is not calculated in accordance with U.S. GAAP. The University's investments in domestic stocks, international securities, global securities, venture capital, private equity, real estate, and certain hedge funds in the absolute return portfolio are fair valued based on the most current NAV.

The University performs additional procedures including due diligence reviews on its investments in investment companies and other procedures with respect to the capital account or NAV provided to ensure conformity with U.S. GAAP. The University has assessed factors including, but not limited to, managers' compliance with

the Fair Value Measurement standard, price transparency at NAV at the measurement date, and existence of certain redemption restrictions at the measurement date.

The guidance also requires additional disclosures to enable users of the financial statements to understand

the nature and risk of the University's investments.

The table below illustrates the fair value of the University's investments measured at NAV and the commitments that have been made for future purchases:

Category	Redemption Frequency	Redemption Notice Period	Fair Value	Unfunded Commitments
Domestic stocks (a)	monthly, quarterly, annually	30 - 90 days	\$ 39,382	
International securities (b)	monthly, quarterly	30 - 90 days	60,538	
Global securities (c)	monthly, quarterly	30 - 90 days	320,567	
Limited partnerships and Other				
Venture capital (d)			98,671	\$ 30,819
Private equity (e)			250,706	148,178
Real estate (f)			69,090	48,283
Absolute return (g)	monthly, quarterly, annually	30 - 90 days	371,868	64,746
Other (h)			8,540	
Equity real estate (i)			9,031	
TOTAL			\$ 1,228,393	\$ 292,026

(a) **Domestic stocks** include funds invested in equity securities domiciled in the United States. Fund liquidity is daily, monthly, quarterly, semi-annual, annual, and up to a maximum period of three years. Approximately 100% of the net asset value is accessible within one year.

(b) **International securities** include funds invested in equity securities domiciled in countries outside of the United States including developed and emerging markets. Approximately 100% of the net asset value is accessible within one year or less.

(c) **Global securities** include funds invested in equity securities domiciled in both Domestic stocks and International securities. Investments in this asset class have a mandate for global securities worldwide. Approximately 100% of the net asset value is accessible within one year or less.

(d) **Venture capital** includes several private equity funds that invest primarily in technology, health care or clean technology industries. While the portfolio is U.S. centric, there are small allocations to companies in foreign markets. The funds typically provide money and resources to entrepreneurs to finance a start-up company or product, with the hope that the company experiences exceptional growth and therefore would produce a successful investment. The funds invest at different stages of a company's growth, some very early and others at a later stage where the company may already produce revenues. The valuations for these investments have been estimated using the managers'

fair market values, which have been vetted to make sure they meet the ASC 820 guidelines. These investments can never be redeemed with the funds. As these investments age in duration, distributions will be received from these funds as the underlying portfolio companies are sold in the market. It is estimated that the underlying investments within the funds would be fully liquidated over the next 7-12 years.

(e) **Private equity** includes several private equity funds that invest across all industries. While the portfolio is U.S. centric, there has been an increasingly larger allocation to companies in foreign markets. The funds typically invest capital into more mature companies for a minority or majority of ownership and through operational and financial expertise, generate a return of capital greater than the original amount invested. The valuations for these investments have been estimated using the managers' fair market values, which have been vetted to make sure they meet the ASC 820 guidelines. These investments can never be redeemed with the funds. As these investments age in duration, distributions will be received from these funds as the underlying portfolio companies are sold in the market. It is estimated that the underlying investments within the funds would be fully liquidated over the next 7-12 years.

(f) **Real estate** includes private real estate funds that invest primarily in the United States. Some of these private partnerships also make investments internationally, primarily in Europe, India and Brazil. The private funds make investments in various real

estate types, such as office, industrial, retail and multi-family properties. The valuations for these investments have been estimated using the managers' fair market values, which have been vetted to make sure they meet the ASC 820 guidelines. These investments can never be redeemed with the funds. As these investments age in duration, distributions will be received from these funds as the underlying properties are sold at the market. It is estimated that the underlying investments within the funds would be fully liquidated over the next 5-7 years.

(g) **Absolute return** includes hedge fund investments across a multitude of strategies including long/short equity, long/short commodity, global macro, multi-strategy, event-driven, credit, fund of hedge funds, and emerging markets. The vast majority of these investments are U.S. based, but some may invest internationally. Investment managers may make investment decisions based on top down macro-economic analysis or bottom up company or theme specific analysis; managers may shift portfolios from net long to net short positioning but on balance tend to carry a net long exposure within their portfolios. The estimated fair values of the investments are received on a monthly basis from the fund administrators. Final valuations are typically received around mid-month for most funds, but in some instances funds will report final valuations on a quarterly basis in accordance with the reporting period specified in the fund legal documents. Fund liquidity varies across the absolute return category from monthly, quarterly, annually, and up to a maximum of three years for traditional hedge fund vehicles and 5-10 years for private credit vehicles. Approximately 92% of the net asset value in this asset class is accessible within one year or less and 94% within three years. Over the course of the last twelve months less liquid, private credit funds with 5-10 year hold periods have been added to the portfolio for diversification purposes. This has marginally reduced liquidity in the absolute return asset class but as the private credit funds begin to call more capital portfolio liquidity will be further reduced but still maintained at manageable levels.

(h) **Other** includes various investments that do not fall within the other categories listed. Examples would include liquid multi-asset strategy investments.

(i) **Equity real estate** includes liquid real estate securities and indices domiciled in both the United States and countries outside of the United States including developed and emerging markets.

Derivative Information

The use of financial derivative instruments is governed by the University's Investment Policy Statement, which is approved and overseen by the Investment Committee of the Board. The University assumes many risks as a result of its investment decisions and investment holdings. Many risks are discussed in the Investment Policy Statement:

Manager risk – the risk that a manager underperforms similar managers, benchmarks, or appropriate indices.

Benchmark risk – the risk of harm caused by constructing, selecting, or managing to an inappropriate benchmark.

Peer risk – the risk that one's peers generate better investment performance, thereby boosting the relative size of their endowments and enhancing their competitive advantage.

Market risk – the risk that the value of an investment will decrease due to market moves.

Interest rate risk – the risk that an investment's value will change due to a change in the absolute level of interest rates, the spread between two rates, the shape of the yield curve, or any other interest rate relationships.

Concentration risk – the risk of being too concentrated in one particular security, manager, strategy, sector or asset class, thus being vulnerable to poor performance stemming from lack of diversification.

Absolute return risk – the ability to generate positive absolute returns, not just in favorable markets, but also in uncertain and negative phases measured over a business cycle.

Currency risk – the risk that currency fluctuations or trends reduce the value of investments in non-U.S. markets.

Commodity risk – refers to the uncertainties of future market values and the size of future income caused by fluctuation in the prices of commodities (energy, agricultural, precious and industrial metals) due to demand/supply imbalances.

Leverage risk – the risk that significant volatility or losses will be generated by the use of debt designed to magnify returns.

Counterparty risk – the risk that one party to a transaction does not make complete or timely payment of margin,

swap cash flow, bond proceeds, or other similar payments.

Credit risk – the possibility that a bond issuer will default by failing to pay interest or repay principal in a timely manner.

Tail risk – a form of portfolio risk that arises when the possibility that an investment will move more than three standard deviations from the mean is greater than what is shown by a normal distribution.

Liquidity risk – the inability to sell or trade securities at fair market value within a short period of time; also, the risk that sufficient cash is not maintained, or cannot be accessed, to meet short-term obligations.

Inflation risk – the risk that rising prices significantly erode the effective purchasing power of the portfolio, as measured by the University's cost inflation.

Shortfall risk – the risk that investment returns will be lower than expected, causing a failure to accomplish investment or financial objectives.

The University seeks to mitigate these risks by using derivative transactions. At the macro level of the investment portfolio, derivative transactions also create cost-effective beta exposure that may replace a fund or investment manager, add alpha, support liquidity management, and reduce the impact of extreme negative market conditions. The derivative instruments used include futures, total return swaps, and over-the-counter options.

Futures: An Equity Index Future is a standardized obligation to buy or sell a market index, at a certain date in the future (settlement date), at a specified price (futures price). Equity Index Futures are typically cash-settled. Trading Medium: Exchange A single clearing house (e.g., Options Clearing Corporation, for the Chicago Board Options Exchange) is the counterparty to both parties involved in the contract. Futures trade a premium or discount to the cash index level based on the following theoretical formula: $\text{Futures Fair Value} = \text{Cash Index Value} + \text{Expected Interest Income prior to contract expiry} - \text{Expected Dividend Income prior to contract expiry} - \text{Expected Lending Income prior to contract expiration}$. The value of a futures contract converges to that of the underlying index at expiration. The investor posts an initial margin and a maintenance margin which represents a small portion of the overall notional value (usually 12%-18% of the notional value). Collateral

between the counterparties is exchanged daily based on the mark to market performance of the futures contract. Used primarily as a manager replacement strategy to gain beta exposure to an index on the long side and to hedge out beta exposure on the short side.

Total Return Swaps ("TRS"): A TRS is a non-standardized agreement whereby one party makes periodic cash payments based on a set rate (e.g., London Interbank Offered Rate ("LIBOR")) while another party makes periodic cash payments based on the total return of an underlying index. The total return payer agrees to pay the total return of the underlying index to the total return receiver. The total return receiver agrees to receive future total return, and pay periodic payments to the total return payer. Trading Medium: Over-The-Counter ("OTC"). TRS offer synthetic exposure to beta returns while avoiding the transaction and administrative costs of owning the actual underlying equity shares. TRS are subject to counterparty credit risk; if collateral is posted between parties, counterparty credit risk can be mitigated. Transacted via agreement between counterparties. There is no initial or maintenance margin posting. Collateral between the counterparties is exchanged daily based on the mark to market performance of the swap. Used to gain beta exposure to an index on the long side and to hedge out beta exposure on the short side. The swap resets on a periodic basis (monthly, quarterly, or annually), at which point the LIBOR rate is reset and the gains/losses cash settled. A new notional value reflecting the settled gains/losses is established at this point. The next measurement begins with the new notional value. There may be a breakup fee if the swap is terminated earlier than its expiration date. Used primarily as a manager replacement strategy.

Options: Options or Option Structures are non-standardized agreements whereby one party makes or receives one payment at the time of initial transaction to/from a counterparty and may make or receive a second payment to/from the counterparty at the expiration date of the agreement based on an individual option or a combination of individual options. Trading Medium: OTC. Transacted via ISDA/CSA agreement between counterparties. Options are subject to counterparty credit risk; if collateral is posted between parties, counterparty credit risk can be mitigated. Options/Option Structures allow investors to customize the risk/return profile of existing portfolios. For example: Investors who are underweight equities and have a moderately positive outlook can obtain enhanced equity exposure by capping returns with or without a leveraged

payoff. More bearish investors can opt for downside protection to reduce risk. Collateral between the counterparties is exchanged daily based on the mark to market performance of the Option or Option Structure. At maturity the Option or Option Structure is cash settled. Prior to maturity, Options/Option Structures may trade above or below their intrinsic value due to various factors such as time, volatility, interest rates, skew, delta, gamma, etc. The value eventually converges to intrinsic value at maturity. Used for beta replacement strategies, alpha strategies or hedging strategies.

Swaptions: Swaptions are a specific type of Option which gives the buyer the right, but not the obligation, to enter into a specified swap agreement with the counterparty on a specified future day.

Forward contracts: A forward contract is an agreement to buy or sell an asset at a certain future time for a certain price. A forward contract is traded in the OTC market – usually between two financial institutions or a

financial institution and a client. One party assumes a long position and agrees to buy the underlying asset on a certain date for a certain price. The other party assumes a short position and agrees to sell the underlying asset on a certain date for a certain price. The price in a forward contract is known as the delivery price. Forward contracts are commonly used to hedge foreign currency risk. Payoff for a long position on a forward contract is $S_t - K$ where K is the delivery price and S_t is the spot price at maturity of the contract. Similarly the payoff on a short position in a forward contract is $K - S_t$. Settlement of forward contracts can be made with delivery of the underlying or cash settlement. Since the contract is OTC, margin and collateral are determined by individual agreements and sometimes fall under the agreement.

The following table provides detailed information on the derivatives included in the investment portfolio as of June 30 and where they are located in the consolidated statements of financial position:

Location	Derivative Type	Notional Amount	2018		
			Level 1 Fair Value	Level 2 Fair Value	Level 3 Fair Value
Investments, held for long-term purposes					
	Total return swaps	\$ 100,721		\$ 94,736	
	Options (over-the-counter)			80	
TOTAL DERIVATIVES, 2018			\$ -	\$ 94,816	\$ -

Location	Derivative Type	Notional Amount	2017		
			Level 1 Fair Value	Level 2 Fair Value	Level 3 Fair Value
Investments, held for long-term purposes					
	Total return swaps	\$ 207,681		\$ 27,799	
	Options (over-the-counter)			(519)	
TOTAL DERIVATIVES, 2017			\$ -	\$ 27,280	\$ -

The following table provides detailed information on the effect the derivatives had on the overall performance

of the investment portfolio which is reflected in the consolidated statement of activities:

Location	Derivative Type	2018	2017
Net effect on investment income (loss)			
	Total return swaps	\$ 39,072	\$ 6,031
	Options (over-the-counter)		601
	Futures contracts		330
	Interest rate hedges		(2,121)
	Yield curve hedges		(1,306)
		\$ 39,072	\$ 3,535
Net appreciation			
	Total return swaps	2,596	21,299
		\$ 2,596	\$ 21,299
NET EFFECT OF DERIVATIVES		\$ 41,668	\$ 24,834

7. PROPERTY, PLANT, EQUIPMENT AND BOOKS

Property, plant, equipment and books are stated at cost, less accumulated depreciation. Depreciation is computed on the straight-line method over the estimated useful life of 10 to 30 years for land improvements, 10

to 50 years for building and building improvements, 5 to 15 years for equipment, and 10 years for books. Components of property, plant, equipment and books are as follows:

	2018	2017
Land and land improvements	\$ 72,483	\$ 61,035
Building and building improvements	1,355,525	1,337,187
Equipment and software	304,173	290,629
Library books	46,645	44,920
Construction-in-progress	42,453	41,380
	1,821,279	1,775,151
Less: Accumulated depreciation	(1,078,863)	(1,018,069)
TOTAL PROPERTY, PLANT, EQUIPMENT AND BOOKS, NET	\$ 742,416	\$ 757,082

The above assets include \$571,015 leased from the Ohio Higher Educational Facility Commission ("OHEFC"). The University may purchase each of the leased assets for a nominal amount at the end of the lease period. Therefore, these assets have been capitalized and are included in the above listing. The corresponding liability is included in *Notes and bonds payable* on the consolidated statements of financial position.

Capitalized interest added to construction-in-progress was \$0 (2018) and \$152 (2017). The expected cost to complete construction-in-progress is approximately \$38,306.

Depreciation expense included in the consolidated statement of activities is \$67,880 (2018) and \$68,344 (2017).

8. NOTES AND BONDS PAYABLE

Notes and bonds payable are as follows:

		Interest Rate(s)	Maturity	2018	2017
OHEFC revenue notes and bonds:	Series 1990	6.50%	2018-2021	\$ 6,300	\$ 8,045
	Series 1994	6.25%	2019	4,745	9,085
	Series 2006	4.00 - 5.25%	2018-2027	40,525	42,260
	Series 2008C	5.00%	2018		1,595
	Series 2012A	4.00 - 5.00%	2018-2024	18,880	22,415
	Series 2013A	4.00 - 5.00%	2018-2024	20,435	22,510
	Series 2014A	1.42%	2030-2045	67,500	67,500
	Series 2015A	4.00 - 5.38%	2018-2035	47,095	48,765
	Series 2015B	1.51%	2018		73,730
	Series 2016	3.00 - 5.00%	2018-2041	166,450	166,450
	Series 2018	3.00 - 5.00%	2018-2031	88,780	
OHEFC commercial paper		1.24%	2018		30,000
Compass Group USA, Inc.		-n/a-	2018-2019	263	563
TOTAL LIABILITY				\$ 460,973	\$ 492,918
Line of credit				36,000	14,000
Unamortized bond premium				37,705	27,264
Unamortized bond issuance cost				(3,434)	(2,998)
TOTAL NOTES AND BONDS PAYABLE				\$ 531,244	\$ 531,184

In November 2016, the OHEFC Series 2016 bonds were issued to refinance the balance of the OHEFC Series 2008A bonds in the amount of \$60,000, a portion of the OHEFC Series 2006 bonds in the amount of \$32,805, and OHEFC tax-exempt Commercial Paper in the amount of \$33,000. The OHEFC Series 2016 bonds were also issued to defease a portion of the OHEFC Series 2008C in the amount of \$43,662, and a portion of the OHEFC Series 2013A in the amount of \$13,416 and included a University cash contribution of \$2,197. Deferred financing fees of \$1,370 were paid and the unamortized balance is a reduction to *Notes and bonds payable*. The total amount of the bond proceeds were \$186,450.

In May 2018, the OHEFC Series 2018 bonds were issued to refinance the balance of the OHEFC Series 2015B bonds in the amount of \$72,630 and OHEFC tax-exempt Commercial Paper in the amount \$30,000. Deferred financing fees of \$724 were paid and the unamortized balance is a reduction to *Notes and bonds payable*. The total amount of the bond issue was \$103,354.

The amount outstanding under the OHEFC tax-exempt commercial paper program to provide construction funds for several approved capital projects was \$0 (2018) and \$30,000 (2017). Principal was paid down in the amount of \$30,000 (2018) and \$38,110 (2017). The commercial

paper program was terminated in May 2018. The annualized interest cost and credit facility expense for this program was 1.61% (2018) and 1.20% (2017).

The University has revolving lines of credit with two financial institutions in the amount of \$100,000 to finance working capital. Each \$50,000 line is subject to annual review, one in September 2018 and the other in February 2019. The amount outstanding was \$36,000 (2018) and \$14,000 (2017).

Principal payment requirements for bonds, notes, and capital lease obligations for the next five fiscal years and thereafter are as follows:

Year	Total Scheduled Principal Payments
2019	\$ 14,868
2020	15,595
2021	15,375
2022	18,335
2023	45,925
Thereafter	350,875
TOTAL	\$ 460,973

Interest expense, including those amounts for interest rate swap agreements (Note 12), was \$19,283 (2018) and

\$19,721 (2017).

9. RETIREMENT PLANS

The University has both defined benefit and defined contribution pension plans for its employees. In accordance with provisions of the Employee Retirement Income Security Act of 1974, the University has established a trust to hold plan assets for its defined benefit plan. The funded status of the University's defined benefit plan is as follows:

	2018	2017
Funded status at June 30 of prior fiscal year	\$ (101,817)	\$ (113,516)
Service cost	(10,424)	(10,287)
Interest cost	(10,682)	(10,098)
Expected return on assets	12,868	12,236
Actuarial gain	5,939	9,316
Employer contributions	14,223	10,532
FUNDED STATUS AT JUNE 30	\$ (89,893)	\$ (101,817)
Accumulated benefit obligation	\$ 256,998	\$ 254,593

Benefit plan costs for the defined benefit plan are as follows:

	2018	2017
Net periodic benefit cost	\$ 14,321	\$ 14,933
Employer contributions	14,223	10,532
Benefits paid	6,998	6,138

Estimated benefits expected to be paid under the defined benefit plan for the next five fiscal years are as follows:

2019	\$ 6,634
2020	7,224
2021	7,658
2022	8,490
2023	9,176

Amounts expected to be paid between 2024 and 2028 total \$59,179. The University's estimated employer contribution for the defined benefit plan in fiscal 2019 will depend on the results of the July 1, 2018 actuarial valuation and is estimated to be \$16,972.

Weighted-average assumptions used to determine the benefit obligation and benefit plan costs are as follows:

	2018	2017
BENEFIT OBLIGATION		
Discount rate	4.35%	4.10%
Rate of compensation increase	2.25%	2.25%
Measurement date	6/30/18	6/30/17
Census date	7/1/17	7/1/16

NET PERIODIC BENEFIT COST		
Discount rate	4.10%	3.90%
Expected return on plan assets	7.50%	7.50%
Rate of compensation increase	2.25%	2.25%

The expected long-term rate of return for the defined benefit plan was estimated using market benchmarks for equities and bonds applied to the plan's target asset allocation. Management estimated the rate by which the plan assets would outperform the market in the future based on historical experience adjusted for changes in asset allocation and expectations compared to past periods.

The investment objective for the defined benefit plan is to maximize total return with tolerance for slightly above average risk, in order to meet the obligations that the University has to its plan beneficiaries. To accomplish this objective, the University has established a broadly-diversified asset allocation strategy that includes absolute return strategies (combination of fixed income and equity securities) (50%), equity investments (30%), bonds and cash (16%), and real estate (4%). The weightings of the investments relative to each other in the total portfolio fluctuate as market conditions vary; they are adjusted regularly to remain within acceptable ranges.

The weighted-average asset allocation for the defined benefit plan is as follows:

	2018	2017
Equity securities	42%	39%
Fixed income securities	22%	23%
Real estate	5%	6%
Other	31%	32%
TOTAL ASSET ALLOCATION	100%	100%

The amounts recognized in the University's consolidated statements of financial position and in unrestricted net assets related to the defined benefit plan are as follows:

	2018	2017
Benefit obligation at June 30	\$ 258,135	\$ 256,225
Fair value of plan assets at June 30	168,242	154,408
NET LIABILITY	\$ (89,893)	\$ (101,817)
UNRESTRICTED NET ASSETS		
Actuarial losses	92,676	104,698
AMOUNT RECOGNIZED AS REDUCTION OF UNRESTRICTED NET ASSETS	\$ 92,676	\$ 104,698

The estimated amortization of net loss expected in fiscal 2019 totals \$5,211. Components of the net periodic benefit cost and other changes in plan assets that are recognized in the consolidated statement of activities are as follows:

	2018	2017
Change in actuarial gains	\$ (12,022)	\$ (16,100)
TOTAL GAIN RECOGNIZED, UNRESTRICTED NET ASSETS	(12,022)	(16,100)
Service cost	10,424	10,287
Interest cost	10,682	10,098
Expected return on assets	(12,868)	(12,236)
Net loss amortization	6,083	6,784
Net periodic benefit cost	14,321	14,933
TOTAL LOSS (GAIN) RECOGNIZED, STATEMENT OF ACTIVITIES	\$ 2,299	\$ (1,167)

Benefit plan costs for the defined contribution plan are \$22,884 (2018) and \$21,940 (2017).

10. COMMITMENTS AND CONTINGENCIES

In its normal operations, the University is subject to various claims and lawsuits. In management's opinion, the resolution of these contingencies will not have a significant adverse effect on the University's financial position, operations, or cash flows.

In May 2002, the University entered into an agreement with CCF to form a new medical education and research program, the Cleveland Clinic Lerner College of Medicine ("CCLCM"). Beginning in 2004, research grants from the National Institutes of Health to support work by CCF-based investigators were awarded to and administered through the University by CCLCM, which operates as an academic unit of the School of Medicine. Expenditures for research conducted under this joint agreement totaled \$99,967 (2018) and \$96,310 (2017).

In April 2006, the Boards of University Hospitals Health System and the University approved an affiliation agreement between the School of Medicine and University Hospitals of Cleveland ("UHC"). This agreement created the Case Medical Center, a virtual entity that encompasses certain teaching, research, and clinical activities of the School of Medicine and UHC. In September 2016, the affiliation agreement was renewed with the exception of the Case Medical Center designation. Even though the virtual entity will

be dissolved, there will be continued collaboration in education and research.

The University and CCF have entered into an agreement with a perpetual term to provide for the development, operation and joint use of a new state-of-the-art Health Education Campus ("HEC"), which includes an academic building and a separate dental clinic. The HEC will provide a unified educational space for programs of the School of Medicine, including CCLCM, the School of Dental Medicine and the Frances Payne Bolton School of Nursing. Occupancy is scheduled to be in spring of 2019. CCF is providing interim funding of construction costs as needed, while the University and CCF are collaborating on fundraising to cover the capital costs of HEC. In the event that amounts raised by 2020 do not cover the total costs of the HEC, the University has agreed to provide up to \$50,000 over a five-year period beginning in 2021.

The University is self-insured for workers compensation and employee and student medical coverage. Property is commercially insured with an aggregate deductible of \$700. The University also carries general liability insurance with a deductible of \$100 per occurrence. The University believes its reserves for self-insured risks and the deductible portion of insured risks are sufficient.

11. RELATED PARTY TRANSACTIONS

In 1998, the University entered into a thirty-year agreement with the Medical Center Company (a cooperative utility company formed by and serving institutions in the University Circle area) to purchase steam, chilled water, and other utilities for several University buildings. The amounts purchased were \$22,624 (2018) and \$22,423 (2017). No obligation associated with this agreement is recorded in the accompanying consolidated financial statements.

In July 2012, the University received an energy efficiency grant from the Medical Center Company in the amount of \$998. The grant required a capital contribution of \$267 from the University and payback of a portion of projected energy cost savings. Payback terms are 36 months beginning January 2014. The obligation recorded in *Deferred income and other liabilities* is \$0 (2018) and \$23 (2017).

In August 2015, the Medical Center Company approved an additional energy efficiency grant in the amount of \$829. The project costs incurred totaled \$0 (2018) and \$169 (2017). The payback terms related to this project are 36 months beginning March 2016. The obligation related to this project recorded in *Deferred income and other liabilities* is \$155 (2018) and \$217 (2017).

In October 2017, the Medical Center Company approved an additional energy efficiency grant in the amount of \$1,084. The project costs incurred totaled \$1,084 (2018) and \$0 (2017). The payback terms related to this project are 36 months estimated to begin December 2018. The obligation related to this project recorded in *Deferred income and other liabilities* is \$1,084 (2018) and \$0 (2017).

12. DERIVATIVES

The University uses floating-to-fixed interest rate swap agreements of various durations to manage both its funding cost and the interest rate risk associated with variable rate debt. Under these swap agreements, the University pays a fixed rate and receives from its counterparty a variable rate payment, each calculated by reference to specified notional principal amounts during the agreement period. Operations are charged the variable rate interest on the corresponding bonds; the difference between the fixed and variable interest amounts under the swap agreements is recorded in non-operating revenues and expenses as *Investment income*.

The University follows accounting guidance that defines fair value, establishes a framework for measuring fair value, and expands disclosure requirements about fair value measurements, including derivatives. The University's interest rate swaps are valued by an independent swap consultant that uses the mid-market levels, as of the close of business, to value

the agreements. The valuations provided are derived from proprietary models based upon well-recognized financial principles and reasonable estimates about relevant future market conditions and the University's credit worthiness. The University's interest rate swap arrangements have inputs that can generally be corroborated by market data and are classified as Level 2 in the fair value hierarchy. Under four agreements in effect at June 30, 2018, the counterparty pays a variable interest rate equal to a percentage of the one month LIBOR.

The following table provides detailed information on the interest rate swaps at June 30, 2018, with comparative fair values for June 30, 2017. Information related to the interest rate swap agreements and the liability recognized in the consolidated statements of financial position in *Deferred income and other liabilities* are as follows:

Notional Amount	Interest Rate	Commencement	Termination Date	Basis	2018 Level 2 Fair Market Value	2017 Level 2 Fair Market Value
\$ 8,405	4.34%	Aug. 12, 2004	Oct. 1, 2022	LIBOR	\$ (589)	\$ (1,005)
15,000	4.43%	Jun. 5, 2002	Jun. 5, 2022	LIBOR	(1,441)	(2,244)
15,000	3.60%	Sept. 25, 2002	Sept. 25, 2022	LIBOR	(1,035)	(1,732)
35,000	3.81%	Aug. 4, 2004	Aug. 1, 2034	LIBOR	(7,606)	(9,709)
TOTAL INTEREST RATE SWAP AGREEMENT LIABILITY					\$ (10,671)	\$ (14,690)

Changes in the fair value of derivative instruments are recorded in non-operating revenues and expenses as *Investment income*. The provisions of the swap agreements require that on a weekly basis the University place into an escrow fund collateral sufficient to limit the counter-party's financial exposure to the University to no

more than \$20,000. The University had placed \$0 (2018 and 2017) into such a fund.

Interest expense recorded for the swap agreements in the non-operating activities for the year ended June 30 was \$2,157 (2018) and \$4,236 (2017).

13. RESTRICTED NET ASSETS

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

	Temporarily Restricted	Permanently Restricted	Total
June 30, 2018			
Endowment			
True endowment	\$ 538,176	\$ 643,849	\$ 1,182,025
Funds functioning as endowment (FFE)	296,604		296,604
Total true endowment and FFE	834,780	643,849	1,478,629
Funds held in trust by others		347,459	347,459
TOTAL UNIVERSITY ENDOWMENT	\$ 834,780	\$ 991,308	\$ 1,826,088
Other net assets			
Pledges receivable	85,594	49,818	135,412
Funds held in trust by others, unused income	8,729		8,729
Student loan funds		37,316	37,316
Split-interest agreements	99	12,033	12,132
Purpose restricted gifts	138,210	10,730	148,940
TOTAL NET ASSETS	\$ 1,067,412	\$ 1,101,205	\$ 2,168,617

June 30, 2017	Temporarily Restricted	Permanently Restricted	Total
Endowment			
True endowment	\$ 501,891	\$ 627,883	\$ 1,129,774
Funds functioning as endowment (FFE)	288,060		288,060
Total true endowment and FFE	789,951	627,883	1,417,834
Funds held in trust by others		337,553	337,553
TOTAL UNIVERSITY ENDOWMENT	\$ 789,951	\$ 965,436	\$ 1,755,387
Other net assets			
Pledges receivable	94,343	38,665	133,008
Funds held in trust by others, unused income	7,463		7,463
Student loan funds		37,125	37,125
Split-interest agreements	143	18,396	18,539
Purpose restricted gifts	120,936	7,876	128,812
TOTAL NET ASSETS	\$ 1,012,836	\$ 1,067,498	\$ 2,080,334

14. SUBSEQUENT EVENTS

The University has performed an evaluation of subsequent events through October 20, 2018, the date

on which the consolidated financial statements were issued.

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Research and Development Cluster – University				
Research and Development – University				
Department of Agriculture				
<u>Pass Through Programs</u>				
Texas A&M University	10.219	06-S160607	\$ 21,997	\$ -
Wholesome Wave Foundation Charitable Ventures, Inc.	10.331	2015-70018-23350	17,588	-
Wholesome Wave Foundation Charitable Ventures, Inc.	10.331	2016 700 252522 (FINI-3)	10,554	-
Department of Agriculture Subtotal			50,139	-
Department of Commerce				
<u>Direct Programs</u>				
Patent and Trademark Technical Information Dissemination	11.900		117,041	-
Department of Commerce Subtotal			117,041	-
Department of Defense				
<u>Direct Programs</u>				
Basic and Applied Scientific Research	12.300		2,535,632	575,672
Basic Scientific Research - Combating Weapons of Mass Destruction	12.351		241,181	143,678
Military Medical Research and Development	12.420		4,180,673	838,076
Basic Scientific Research	12.431		120,948	104,984
Air Force Defense Research Sciences Program	12.800		1,137,862	235,892
Research & Technology Development	12.910		4,317,336	3,038,242
<u>Pass Through Programs</u>				
American Lightweight Materials Manufacturing Innovation Institute (ALMMII)	12.300	0003B-4	123,293	-
American Lightweight Materials Manufacturing Innovation Institute (ALMMII)	12.300	0005B-8	101,695	-
American Lightweight Materials Manufacturing Innovation Institute (ALMMII)	12.300	0006A-4	293,963	-
UES Inc.	12.300	S-111-044-001	7,803	-
Materials Resources, LLC	12.340	Work Order# 2016-MRL-T004	15,766	-
Cleveland Veteran's Administration Medical Research and Education Foundation	12.420	Bogie-Case-DOD002	35,381	-
Cleveland Veteran's Administration Medical Research and Education Foundation	12.420	Bogie-VA001DOD	(1)	-
Johns Hopkins University	12.420	W81XWH-15-2-0067	28,231	-
University of Kentucky	12.420	W81XWH(3200000830-17-056)	45,338	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
University of Pittsburgh	12.420	0027150 (408007-1)	87,335	-
Viamet Pharmaceuticals	12.420	Viamet Pharm (Ghannoum)	8	-
Wake Forest University	12.420	WFUHS 441073C CF-03	79,611	-
Johns Hopkins University	12.431	W81XWH1020090	42,277	-
PolymerPlus LLC	12.431	W911NF-17-2-0080	19,940	-
University of Michigan	12.431	3004177603	42,107	-
University of Notre Dame	12.431	202239	(243)	-
University of Notre Dame	12.431	203031CWRU	14,072	-
Pennsylvania State University	12.630	5436-CWRU-DMDII-1514	207,061	-
Azimuth Corporation	12.800	238-5404-CWRU	19,784	-
Lincoln Electric	12.800	FA8650-12-2-7230	38,912	-
RTI International Metals, Inc.	12.800	FA8650-15-2-5200 AO-43	97,176	-
UES Inc.	12.800	S-977-01H-001	68,171	-
University of Washington	12.800	UWSC7988	221,634	-
Virtual EM	12.800	VEM-CWRU-1	13,688	-
West Virginia University	12.800	15-906-CWRU	84,385	-
Youngstown State University	12.800	G00000862-5	124,275	-
Prixarc, LLC	12.910	SB1801-P01-1	6,575	-
Wright State Applied Research Corporation	12.910	11098-002	1,445	-
Department of Defense Subtotal			14,353,314	4,936,544
Department of Housing and Urban Development				
<u>Direct Programs</u>				
Healthy Homes Technical Studies Grants	14.906		307,567	215,616
<u>Pass Through Programs</u>				
MDRC	14.536	H-21668CA	80,227	-
Department of Housing and Urban Development Subtotal			387,794	215,616
Department of Justice				
<u>Direct Programs</u>				
National Insitute of Justice	16.560		106,979	-
<u>Pass Through Programs</u>				
Ohio Attorney General	16.320	2018-VOCA-109146995	369,856	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
University of California, Davis	16.560	A18-1255-S002	43,233	-
Ohio Attorney General	16.575	2018-SVAA-117751242	600	-
Frontline Services	16.582	OVC-2016-9441	17,158	-
Ohio Attorney General	16.582	2017-VF-GX-K003	15,402	-
Domestic Violence and Child Advocacy Center, Cuyahoga County, Ohio	16.590	DVCAC	86,505	-
Center for Court Innovations	16.738	2015-DP-BX-K007	7,479	-
Cuyahoga County of Ohio	16.812	016-SM-BX-0006	16,164	-
Ohio Department of Rehabilitation and Correction	16.812	403-18-2400	8,570	-
California State University	16.818	2015-CV-BX-0001/CWRU23123	35,655	-
Department of Justice Subtotal			707,601	-
National Aeronautics and Space Administration				
<u>Direct Programs</u>				
Research and Development	43.RD		18,454	-
Aerospace Education Services Program	43.001		666,365	278,004
Exploration	43.003		467,026	65,170
Space Operations	43.007		202,814	-
Education	43.008		4,500	-
Cross Agency Support	43.009		99,497	-
<u>Pass Through Programs</u>				
Krause & Associates	43.001	NNC17CC67P	51,992	-
Princeton University	43.001	00002045	187,143	-
Princeton University	43.001	NNX17AC55G	65,706	-
The Ohio State University	43.002	60061600	234,073	-
Universities Space Research Association	43.002	04555-004	1,825,442	-
Seacoast Science, Inc.	43.012	NNX16CJ26P	848	-
National Aeronautics and Space Administration Subtotal			3,823,860	343,174

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National Science Foundation				
<u>Direct Programs</u>				
Engineering Grants	47.041		2,303,752	76,028
Mathematical & Physical Sciences	47.049		3,549,651	214,043
Geosciences	47.050		187,481	-
Computer and Information Science & Engineering	47.070		1,850,587	75,855
Biological Sciences	47.074		949,983	-
Social, Behavioral and Economic Sciences	47.075		722,011	14,814
Education and Human Resources	47.076		1,383,028	59,970
International Science and Engineering (OISE)	47.079		941,923	267,157
<u>Pass Through Programs</u>				
PolymerPlus LLC	47.041	IIP-1534063	96,054	-
University of Rochester	47.041	416928G/GR510497	59,554	-
Yale University	47.041	C17D12529 (D02172)	1,794	-
Ohio State University	47.049	60061860	63,944	-
University of Arkansas	47.049	SA1809190	7,779	-
University of Michigan	47.049	3002527784	2,228	-
University of North Florida	47.049	#017-001	8,010	-
University of Chicago	47.050	FP052668	166,451	-
University of Connecticut	47.070	104887	31,011	-
University of Kansas	47.074	FY2017-023	11,737	-
Louisiana Transportation Research Center	47.076	16-2ST, DOTLT1000101	9,931	-
The Research Foundation of the State University of New York	47.076	73299128962-3	10,400	-
Wayne State University	47.076	WSU17005/1612400	29,398	-
National Science Foundation Subtotal			12,386,707	707,867
Environmental Protection Agency				
<u>Direct Programs</u>				
P3 Award: National Student Design Competition for Sustainability	66.516		34,806	-
<u>Pass Through Programs</u>				
Michigan State University	66.509	RD-83479701 (RC063384CW)	9,291	-
Environmental Protection Agency Subtotal			44,097	-

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Department of Energy				
<u>Direct Programs</u>				
Research and Development	81.RD		8,809	-
Office of Science Financial Assistance Program	81.049		535,775	33,283
Conservation Research and Development	81.086		17,331	-
Renewable Energy Research and Development	81.087		830,083	174,084
Fossil Energy Research and Development	81.089		175,916	-
Stewardship Science Grant Program	81.112		169,234	-
Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Training, and Technical Analysis/Assistance	81.117		29,445	-
Advanced Research and Projects Agency Energy Financial Assistance Program	81.135		1,180,342	80,080
<u>Pass Through Programs</u>				
Los Alamos National Security, LLC	81.RD	418666	16,281	-
Princeton Plasma Physics Lab	81.RD	S-013864-W	37,407	-
University of California, Berkeley	81.RD	6878940	899	-
University of Arkansas	81.049	SA1711147	60,862	-
PolymerPlus, LLC	81.086	DE-EE0007211	54,723	17,331
Bay Area Photovoltaic Consortium	81.087	60220829-51077-T	(1,112)	-
Electric Power Research Institute	81.087	100006356	376,871	207,485
Indiana University	81.087	BL-4344500-CWRU	(4,886)	-
LEEDCo, Inc.	81.087	LEEDCOINC	24,643	-
Underwriters Laboratory, Inc.	81.087	7202040440	199,522	-
Department of Energy Subtotal			3,712,145	512,263
Department of Education				
<u>Pass Through Programs</u>				
Cuyahoga County of Ohio	84.419	CE1700063/RQ#EC-17-39441	111,057	-
Department of Education Subtotal			111,057	-
Department of Health & Human Services				
Agency for Healthcare Research and Quality				
<u>Direct Programs</u>				
Research on Healthcare Costs, Quality and Outcomes	93.226		525,725	154,338

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<u>Pass Through Programs</u>				
Oregon Health and Science University	93.226	HS (1005864_CaseWestern)	85,267	-
Rhode Island Hospital	93.226	701-713-7041-OH	31,849	-
Administration for Community Living	93.433	90SI5025-01-00	444,531	-
Centers for Disease Control and Prevention				
<u>Direct Programs</u>				
Centers for Research and Demonstration for Health Promotion and Disease Prevention	93.135		3,994,665	5,957
Centers for Disease Control and Prevention	93.283		1,457,836	13,114
<u>Pass Through Programs</u>				
Ohio Department of Health	93.079	FAM-32995-01	9,816	-
Ohio Department of Health	93.079	PS004127 (Frank)	8,921	-
Hemophilia Foundation of Michigan	93.080	ATH(CDC14-15-HTC443)	17,305	-
Cuyahoga County Board of Health	93.738	REACH CCBH (Trapl)	106,463	-
YMCA of Greater Cleveland	93.738	REACH YMCA	65,980	-
Cuyahoga County Board of Health	93.944	CCBH (TRAPL)	168,604	-
Food and Drug Administration				
<u>Direct Programs</u>				
Food and Drug Administration Research	93.103		390,167	-
<u>Pass Through Programs</u>				
Pennsylvania State University	93.103	FD00341(CWUFD003410)	(1,570)	-
Health Resources and Services Administration				
<u>Direct Programs</u>				
Maternal and Child Health Federal Consolidated Programs	93.110		793	-
Grants to Increase Organ Donations	93.134		183,643	-
<u>Pass Through Programs</u>				
City of Cleveland	93.RD	19276000	104,039	-
Children's Hospital of Philadelphia	93.110	MC20218-05 (320896)	(31)	-
Cleveland Clinic Foundation	93.110	794-SUB (H98MC26260)	74,616	-
Genetic Alliance	93.110	MC16509-05-05 (Genetic A)	37,075	-
Hemophilia Foundation of Michigan	93.110	1-H30MC24047-01-00	13,485	-
National Institutes of Health				
<u>Direct Programs</u>				
Research and Development	93.RD		234,615	-
Family Smoking Prevention and Tobacco Control Act Regulatory Research	93.077		523,115	-
Environmental Health	93.113		890,039	274,907

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Oral Diseases & Disorder Research	93.121		4,636,540	102,670
Human Genome Research	93.172		748,031	-
Research Related to Deafness and Communications Disorders	93.173		3,074,722	-
Research and Training in Complementary and Integrative Health	93.213		440,904	46,126
Mental Health Research Grants	93.242		3,003,830	206,490
Alcohol Research Programs	93.273		86,979	-
Drug Abuse and Addiction Research Programs	93.279		6,731,528	1,553,171
Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286		7,133,795	445,567
Minority Health and Health Disparities Research	93.307		1,325,937	108,465
Trans-NIH Research Support	93.310		3,289,396	366,076
National Center for Advancing Translational Sciences	93.350		5,539,801	-
Research Infrastructure Programs	93.351		628,336	-
Nursing Research	93.361		3,359,630	41,239
National Center for Research Resources	93.389		2,450	-
Cancer Cause & Prevention Research	93.393		3,499,458	580,949
Cancer Detection and Diagnosis Research	93.394		6,880,229	1,335,974
Cancer Treatment Research	93.395		3,440,147	235,733
Cancer Biology Research	93.396		4,053,254	318,774
Cancer Centers Support Grants	93.397		10,255,766	189,784
Cancer Research Manpower	93.398		847,656	-
Cancer Control	93.399		9,798	9,382
Cardiovascular Diseases Research	93.837		10,155,615	407,356
Lung Diseases Research	93.838		6,253,492	584,482
Blood Diseases and Resources Research	93.839		1,981,986	86,298
Arthritis, Musculoskeletal, and Skin Diseases Research	93.846		4,288,044	308,022
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		18,339,201	6,409,544
Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853		13,693,920	2,497,341
Allergy, Immunology and Transplantation Research	93.855		18,573,667	5,469,871
Microbiology and Infectious Diseases Research	93.856		357,827	29,880
Biomedical Research and Research Training	93.859		6,593,926	269,646
Child Health and Human Development Extramural Research	93.865		4,004,247	44,484
Aging Research	93.866		2,143,762	-
Vision Research	93.867		11,442,335	1,753,672
Medical Library Assistance	93.879		48,445	-

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<u>Pass Through Programs</u>				
Clinical Research Management, Inc.	93.RD	CWRU-08-01	(73,682)	-
Clinical Research Management, Inc.	93.RD	CWRU-2013-01	22,990	-
Clinical Research Management, Inc.	93.RD	HHSN272201500007I	13,395	-
Columbus NanoWorks, Inc.	93.RD	HHSN268201500011C	219	-
Cuyahoga County of Ohio	93.RD	CCC of Common Pleas	19,830	-
Cuyahoga County of Ohio	93.RD	CCC of Common Pleas	138,854	-
Duke Clinical Research Institute	93.RD	201316	(785)	-
Duke Clinical Research Institute	93.RD	12012000061 (199651)	38,827	-
Duke University	93.RD	HHSN (178785)	7,979	-
Johns Hopkins University	93.RD	HHSA290201200007I	1,027	-
Mayo Clinic	93.RD	HHSN (MCR-0114-CPN)	9,136	-
PediaStent, LLC	93.RD	HHSN268201600038C	64,098	-
Sujana Biotech	93.RD	HHSN268201700003C	32,363	-
University of Alabama	93.RD	000406291-001	31,432	-
University of Alabama	93.RD	HSSN272201100038C	3,928	-
University of Washington	93.RD	HHSN (WU-15-217)	165,232	-
Johns Hopkins University	93.113	ES026721 (2003332929)	137,065	-
Missouri University	93.121	C00054503-3	83,545	-
University of California, Davis	93.121	201604317-01	106,221	-
University of California, San Francisco	93.121	10597sc	722	-
University of Michigan	93.121	DE (3003724044)	41,836	-
West Virginia Research Corp.	93.121	16-573-CWRU	3,143	-
Cleveland Clinic Foundation	93.172	321-SUBI	57,640	-
University of Louisville Health Sciences	93.172	HG008988 (ULRF 16-0709-01)	155,695	-
Vanderbilt University	93.172	HG006857 (VUMC 43957)	11,993	-
Boys Town National Research Hospital	93.173	DC011038	21,674	-
Boys Town National Research Hospital	93.173	DC015056	45,148	-
Massachusetts Eye and Ear Infirmary	93.173	EY022305	172,322	-
University of Michigan	93.173	DC009410 (3002992709)	30,921	-
Vulintus, LLC	93.173	Vulintus (DC013467)	14,616	-
Mount Sinai Medical Center	93.213	UH3AT009149	12,245	-
The Ohio State University	93.213	AT004454 (60033066)	(6,574)	-
Drexel University	93.242	MH110360 (800002)	201,980	-
Johns Hopkins University	93.242	MH (2001815868)	36,228	-

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Massachusetts General Hospital	93.242	MH106053 (225144)	63,258	-
Massachusetts General Hospital	93.242	MH111320 (229447)	29,198	-
University of Rochester	93.242	MH (416088-G)	22,859	-
University of Rochester	93.242	MH014701 (416536)	24,616	-
University of Southern California	93.242	MH113457 (87651489)	229,153	-
University of Texas Health Science Center	93.242	MH (153442/152932)	(30)	-
University of Washington	93.242	UWSC10322	7,769	-
University of Washington	93.242	MH112355 (WU-17-328)	2,065	-
Nova Southeastern University	93.279	DA019048 (331985)	(11,800)	-
The Miriam Hospital	93.279	710-9958	20,859	-
University of Cincinnati	93.279	007073-026	23,540	-
University of Maryland	93.279	DA037979 (UWSC8811)	1,090	-
University of Washington	93.279	DA037979 (UWSC8811)	106,161	-
University of California, Los Angeles	93.286	U01EB025138	203,708	-
Mayo Clinic Rochester	93.307	MD008934(63706900)	146,913	-
University of Pittsburgh	93.307	0057336(130317-1)	26,098	-
Cleveland Clinic Foundation	93.310	OD923859-0151 (F-2018-08)	40,720	-
University of Pittsburgh	93.310	EB (0049064 (126858-1))	12,230	-
University of Rochester	93.310	TR002001 (417192G/UR FAO	32,272	-
University of Toledo	93.310	307-SUBI (OD023873)	32,712	-
Dartmouth College	93.350	TR001086(1592)	32,416	-
University of Kentucky	93.351	OD (3200000524-16-223)	3,487	-
American College of Radiology	93.393	CA021661 (RTOG)	7,800	-
Fred Hutchinson Cancer Research Center	93.393	CA201407 (0000883192)	13,486	-
Univeristy of Miami	93.393	CA187053 (SPC-000538)	16,765	-
University of Hawaii	93.393	CA168530 (KA1054)	14,150	-
University of Michigan	93.393	CA204863 (3004700010)	32,547	-
University of Southern California	93.393	CA143237 (73415689)	31,270	-
University of Virginia	93.393	CA(GB10413 154739)	249,967	-
University of Virginia	93.393	CA142081	(20,274)	-
University of Virginia	93.393	CA143237 (6B10402 154625)	108,202	-
University of Washington	93.393	CA194393 (UWSC9236)	104,329	-
Vanderbilt University	93.393	CA028842 (VUMC 58182)	71,761	-
Akrotome Imaging	93.394	CA180296	218,138	-
Akrotome Imaging	93.394	R44CA180296	(1)	-

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Johns Hopkins University	93.394	CA (2003087224)	43,876	-
Molecular Theranostics, LLC	93.394	CA199826	267,484	-
The Ohio State University	93.394	CA183713 (60040784)	(20,016)	-
University of Miami	93.394	CA160593 (660555)	(150)	-
BioInVision Inc.	93.395	BIOINVISION (R41CA213601)	120,002	-
Children's Hospital of Philadelphia	93.395	CA180886 (CHOP)	58,149	-
Dana Farber Cancer Institute	93.395	CA188288 (1236001)	50,122	-
ECOG-ACRIN Cancer Research Group	93.395	CA180820	4,336	-
MiRx Pharmaceuticals	93.395	CA139791(Invenio)	209,907	-
NRG Onconolgy Foundation, Inc.	93.395	CA180868 (CWRU-YR 1)	44,481	-
The American College of Obstetricians and Gynecologists	93.395	27469-094	61,919	-
The Ohio State University	93.395	CA186712	62,087	-
University of Texas Southwestern Medical	93.395	CA216863	228,282	-
Memorial Sloan-Kettering Cancer Center	93.396	CA213274 (BD521903)	84,547	-
University of Pittsburgh	93.396	CA (0051992 128582-1)	174,559	-
University of Utah	93.396	CA202144(10037968-CWRU)	63,181	-
Vanderbilt University Medical Center	93.396	CA162433 (VUMC 58042)	(2,719)	-
Roswell Park Cancer Institute	93.397	CA159981 (234-01)	1,544	-
NRG Oncology Foundation, Inc	93.399	CA189867	36,945	-
Affinity Therapeutics	93.837	AFFINITY HL121928	19,765	-
Binnacle Biosciences	93.837	HL134012	187,735	-
Brigham and Women Hospital	93.837	HL123336 (225707)	104,172	-
Children's Hospital of Philadelphia	93.837	HL125295	254,303	-
Cleveland Clinic Foundation	93.837	HL119810 (253-SUBI)	10,905	4,275
Duke Clinical Research Institute	93.837	177494/200464/209692	(516)	-
Duke Clinical Research Institute	93.837	HL084904 (IN121)	673	-
Duke University	93.837	HL(177494/218214/226028)	6,804	-
Duke University	93.837	HL075443 (2034808)	326,174	-
Duke University	93.837	HL084904 (193603)	117	-
Duke University	93.837	HL084904 (223700)	21,636	-
Duke University	93.837	HL084904(193603)	(2,272)	-
Emory University	93.837	HL117721 (T558589)	92,377	-
Georgia Institute of Technology	93.837	HL126004 (RJ471-G1)	10,360	-
Henry Ford Health System	93.837	HL028982	108,837	-
Kent State University	93.837	HL119977 (403013-CWRU)	90,518	-

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Michigan Technological University	93.837	HL129199 (1410048Z2)	1,800	-
New England Research Institute	93.837	HL107407	3,122	-
Northwestern University	93.837	HL132978 (60046752 CWRU)	16,058	-
Seattle Children's Hospital	93.837	HL119073 (116385SUB)	31,199	-
Seattle Children's Hospital	93.837	HL124053 (11489SUB)	38,899	-
The Ohio State University	93.837	HL134544 (60058122)	358,723	-
University of Minnesota	93.837	HL136679 (N006187421)	9,965	-
University of Pittsburgh	93.837	0025070 (406794-2)	(156)	-
University of Pittsburgh	93.837	0041063 (409584-1)	6,870	-
University of Pittsburgh	93.837	9011664 (126165-1)	887	-
University of Pittsburgh	93.837	HL 9005404 (126066-1)	2,849	-
University of Pittsburgh	93.837	HL098115 (0043880 410091)	1,145	-
University of Southern California	93.837	HL129902 (63709959)	137,421	-
University of Virginia	93.837	HL074940 (GB10332 153410)	42,767	-
Wake Forest University	93.837	HHSN268201100027C	1,201	-
University of Washington	93.837	HL118305 (WU-14-243)	14,967	-
Brigham and Women Hospital	93.838	HL113338 (108605)	56,931	-
George Washington University	93.838	2R01HL098354	10,722	-
Mayo Foundation - Rochester	93.838	HL056470 (CAS-222601)	133,232	-
Pennsylvania State University	93.838	HL(CWU HL 109086)	1,719	-
Seattle Children's Hospital	93.838	HL114623(11140SUB)	22,088	-
University of Pittsburgh	93.838	HL119952 (UP)	77,634	-
University of California, San Francisco	93.838	HL128156 (8892sc)	75,205	-
Oregon Health and Sciences University	93.839	HL138658 (1010098-CWRU)	2,917	-
Apto Orthopaedics	93.846	RAR067008A	19,504	-
Spectral Energies, LLC	93.846	SB1611-001-1	28,567	-
University of Michigan	93.846	AR069071 (3003716879)	149,526	-
Cincinnati Children's Hospital Medical Center	93.847	139294	4,521	-
George Washington University	93.847	DK (S-GRD1213-EAS)	67,688	-
George Washington University	93.847	DK(S-GRD1617-LL5)	6,617	-
George Washington University	93.847	DK061230	351,422	-
George Washington University	93.847	DK104845 (GRADE EDS)	5,589	-
George Washington University	93.847	U01-DK (S-GRD1718-LL5)	811,937	-
Medical College of Wisconsin	93.847	MCW (DK083538)	18,111	-
Medical University of South Carolina	93.847	DK104833 (MUSC)	131,327	-

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Medical University of South Carolina	93.847	DK115495 MUSC17-085-8C976	4,391	-
Mount Sinai Icahn School of Medicine	93.847	DK096549 (0255-8161-4609)	(1,123)	-
Mount Sinai Icahn School of Medicine	93.847	DK112720 (0255-4021-4609)	4,981	-
Northwestern University	93.847	60031497	5,618	-
Research Foundation of the State University of New York	93.847	DK11045601 (1138946-77867	4,100	-
Stanford University	93.847	6020764851126-H	23,167	-
Theralin Diabetes Incorporated	93.847	DK111003-01A-1	21,555	-
Tulane University	93.847	DK109883 (TUL-TNPRC-555-2	17,286	-
University of Alabama, Birmingham	93.847	000406257-021	10,540	-
University of Alabama, Birmingham	93.847	DK108438 (000509533-004)	5,398	-
University of Michigan	93.847	DK083912	5,499	-
University of Pennsylvania	93.847	UM1DK100846	44,014	-
University of Wisconsin - Madison	93.847	U of WI (DK083538)	(7,831)	-
Vanderbilt University	93.847	DK (VUMC 40347)	53,983	-
Vanderbilt University	93.847	DK076169 (UNIV59596)	6,373	-
Winthrop Research Institute	93.847	DK114812(3500-07249 Case)	25,039	10,167
Beth Israel Deaconess Medical Center	93.853	NS074425 (01027587)	2,571	-
Brigham and Women Hospital	93.853	NS090259 (PSG Site #84)	142,693	-
Columbia University	93.853	NS078059 (GG00632)	123,898	-
Johns Hopkins University	93.853	NS055089(2001958471)	2,100	-
Johns Hopkins University	93.853	NS062851(2001049002)	76,927	-
Massachusetts General Hospital	93.853	229356	31,984	-
Massachusetts General Hospital	93.853	NS095548-01	5,548	-
Mayo Clinic Jacksonville	93.853	NS080168	16,678	-
Scripps Research Institute	93.853	NS098219 (5-53192)	70,134	-
University of California, San Diego	93.853	NS089272-04	38,313	-
University of California, San Francisco	93.853	NS092089 (9872sc)	2,034	-
University of Cincinnati	93.853	NS(010082-135571)	19,656	-
University of Cincinnati	93.853	NS091951-123198	3,371	-
University of Kentucky	93.853	HS (320000444-16-242)	192,204	-
University of Kentucky	93.853	NS(3200001171-17-221)	94,059	-
University of Minnesota	93.853	NS085188 (N003584201)	187,983	-
University of Minnesota	93.853	NS098573 (N006040201)	78,454	-
Van Andel Research Institute	93.853	NS060729-07 V1858-1	120,374	-
Vanderbilt University	93.853	2797-018496	(523)	-

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Vanderbilt University	93.853	UNIV 58936	140,655	-
Benaroya Research Institute	93.855	AI109565 (FY15ITN136)	4,065	-
Beth Israel Deaconess Medical Center	93.855	AI124377 (01028935)	397,385	-
Brigham and Women Hospital	93.855	AI068636 (110009)	8,959	-
Brigham and Women Hospital	93.855	AI068636 (110230)	4,051	-
Brigham and Women Hospital	93.855	AI068636 (110668)	683,411	-
Brigham and Women Hospital	93.855	AI106701 (109926)	294,641	-
Brigham and Women Hospital	93.855	AI106701 (109928)	43,812	-
Colorado State University	93.855	AI115619 (G-16851-1)	77,597	-
Drexel University	93.855	AI128910 (800111)	97,598	-
Duke University	93.855	AI (189925/218470)	3,170	-
Duke University	93.855	AI104681 (203-8435)	173,224	-
Emory University	93.855	AI107960 (T270260)	193,158	-
Emory University	93.855	AI110334 (T310399)	306,779	-
Family Health International	93.855	AI068619 (PO16002949)	40,075	40,075
Fred Hutchinson Cancer Research Center	93.855	AI068614 (0000926098)	438,393	-
Fred Hutchinson Cancer Research Center	93.855	AI068614 (000819593)	268,148	-
Grand Valley State University	93.855	AI082416 (GVU-207034-01)	2,843	-
Hemex Health	93.855	AI131810 Hemex (Grimberg)	149,316	-
Icahn School of Medicine at Mount Sinai	93.855	AI (0255-1358-4609)	257,091	-
Icahn School of Medicine at Mount Sinai	93.855	AI (0255-1611-4609)	1,328	-
Icahn School of Medicine at Mount Sinai	93.855	AI 135972 (0255-ABI-4609)	46,655	-
Institute for Clinical Research Inc.	93.855	ICR (Salata)	19,466	-
Johns Hopkins University	93.855	AI069918	56,215	-
La Jolla Institute for Allergy and Immunology	93.855	AI118626 (20025-04-384)	32,660	-
Oregon Health and Sciences University	93.855	AI123148 (1009456)	132,330	-
Partners Healthcare System	93.855	AI068636 (113237)	70,582	-
Rutgers, The State University of New Jersey	93.855	AI090155 (8318)	39,368	-
Rutgers, The State University of New Jersey	93.855	AI109713 (8282)	114,213	-
Seattle Childrens Hospital	93.855	AI134419 (11669 SUB)	80,060	-
St. Jude Children's Research Hospital	93.855	112192019-7633216	193,005	-
Stanford University	93.855	AI102918 (61017674-117727)	21,480	-
University of Alabama, Birmingham	93.855	AI (000510836-002)	282,400	-
University of California, Irvine	93.855	AI129326	331,479	-
University of California, San Francisco	93.855	9885SC	38,075	-

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University of California, San Francisco	93.855	AI096109 (8428SC)	(467)	-
University of California, San Francisco	93.855	AI127300 (10342sc)	65,340	-
University of California, San Francisco	93.855	AI131296 (10038sc)	69,685	-
University of Florida	93.855	AI (UFDSP00011053)	49,869	-
University of Florida	93.855	AI130185 (UFDSP00012050)	12,717	-
University of Maryland	93.855	AI103228 (10019432)	15,647	-
University of Miami	93.855	AI073961 (665103)	34,326	-
University of Miami	93.855	AI073961 (667330)	(3,860)	-
University of Michigan	93.855	AI091627 (3004050998)	51,939	-
University of South Florida	93.855	AI (6408-1063-00-A)	112,605	-
University of Southern California	93.855	AI117211 (72507150)	52,686	-
University of Southern California	93.855	AI130060 (94033102)	3,691	-
University of Texas Health Science Center	93.855	AI077774 (0011877C)	47,821	-
University of Washington	93.855	AI104920 (759576)	175,717	-
University of Washington	93.855	AI13872 BPO031725	16,428	-
Vanderbilt University	93.855	AI093234 (VUMC 51740)	17,838	-
Cuyahoga Community College	93.859	GM049010 (TRI-C)	8,723	-
University of Michigan	93.859	3002520016	150	-
University of Michigan	93.859	3004645804	165,862	-
University of Mississippi	93.859	66662060718-05	121,925	-
University of Mississippi	93.859	GM103328	31,418	-
University of Pittsburgh	93.859	0050790 (128759-1)	17,483	-
University of Pittsburgh	93.859	GM (0024510 123320-1)	(737)	-
University of Pittsburgh	93.859	GM082251	355,501	-
University of Pittsburgh	93.859	GM082251 0029564(123550-8	16,342	-
University of Texas at Austin	93.859	GM111926 (UTA15-000330)	88,914	-
University of Washington	93.859	GM110569 (755978)	16,487	-
Ann & Robert H. Lurie Children's Hospital	93.865	HD068901 (901467-CWRU)	19,028	-
Children's National Medical Center	93.865	HD (30000744-13-03)	11,615	-
Children's National Medical Center	93.865	HD (30002425-03)	123,828	-
Children's Research Institute	93.865	HD076885 (933816)	157,023	-
Cincinnati Children's Hospital	93.865	HD089076 (137578)	31,045	-
George Washington University	93.865	21050-37-CCLS29181F	541,169	-
Kent State University	93.865	403004 CWRU	(1,250)	-
MC3, Inc.	93.865	HD088243 (MC3)	6,605	-

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RTI International	93.865	HD063036	(8,694)	-
RTI International	93.865	HL13606 (0215920)	233,161	-
The Ohio State University	93.865	60035809-CWRU	6,587	-
University of Colorado, Boulder	93.865	1555881	619	-
University of Pittsburgh	93.865	HD079647	27,065	-
University of Utah	93.865	HD082148 (10036366-CASE)	11,115	-
Medical University of South Carolina	93.866	AG046543 (MUSC14-074)	72,659	-
New York University	93.866	AG058267	310,617	-
University of California, Los Angeles	93.866	AG(1440 G TA931)	17,533	-
University of California, San Diego	93.866	AG010483 (37336810)	7,730	-
University of California, San Diego	93.866	AG047922 (78916834)	2,000	-
University of Louisville Health Sciences	93.866	AG (ULRF 14-1080S1-01)	6,055	-
University of Louisville Health Sciences	93.866	AG047297 (ULRF 14-1080-01)	35,850	-
University of Miami	93.866	AG032984 (SPC-000475)	60,209	-
University of Miami	93.866	AG052410 (667146)	316,558	-
University of Miami	93.866	AG054074 (667608)	157,922	-
University of Pennsylvania	93.866	AG (568933/10052383/19536)	274,047	-
University of Pennsylvania	93.866	AG047133 (564315)	597,215	-
University of Southern California	93.866	AG024904 (79685610)	68,614	-
University of Southern California	93.866	AG024904 (CTAADNI114)	10,724	-
University of Southern California	93.866	WFUHS 110858 USC	104,717	-
Wake Forest University	93.866	AG044325 (WFUHS 115068)	21,539	-
Wake Forest University	93.866	AG055606 (WFUHS 115478)	148,285	14,254
Indiana University	93.867	EY025383 (IN4684833CWRU)	107	-
Jaeb Center for Health Research	93.867	EY014231 (DRCRN 58)	15,683	-
Jaeb Center for Health Research	93.867	EY11751	27,856	-
Massachusetts Eye and Ear Infirmary	93.867	EY020928	11,783	-
University of Alabama, Birmingham	93.867	EY025383	14,100	-
University of California, Irvine	93.867	EY014362 (2015-3236)	123,565	-
University of California, Riverside	93.867	EY028242 (S-000956)	89,934	-
University of Miami	93.867	EY012118 (661456)	5,503	-
University of Pennsylvania	93.867	EY022879 (564824)	6,769	-
University of Pennsylvania	93.867	EY023164 (560636)	257,928	-
University of Washington	93.867	EY025696 (WU-17-56)	109,700	-
University of Pennsylvania	93.879	LM010098 (567329)	8	-

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Office of Adolescent Health, Office of the Secretary				
<u>Pass Through Programs</u>				
Cuyahoga County Board of Health	93.297	CCBH (Trapl)	93,364	-
Substance Abuse and Mental Health Services Administration				
<u>Direct Programs</u>				
Substance Abuse and Mental Health Services-Projects of Regional and National Significance	93.243		106,625	-
<u>Pass Through Programs</u>				
City of Cleveland	93.243	CT0115PS 2015-127	21,886	-
City of Cleveland	93.243	CT0115PS 2016-127	104,155	-
Cuyahoga County of Ohio	93.243	CCC of Common Pleas	23,794	-
Montgomery County Juvenile Court	93.243	H79TI080283	7,213	-
Ohio Department of Mental Health	93.243	FY17-1700107/FY18 1800364	138,869	-
Department of Health & Human Services Subtotal			197,642,614	23,918,083
Corporation for National and Community Service				
<u>Direct Programs</u>				
National Service and Civic Engagement Research Competition	94.026		170,927	9,932
Corporation for National and Community Service Subtotal			170,927	9,932
Department of Homeland Security				
<u>Direct Programs</u>				
Assistance to Firefighters Grant	97.044		250,775	37,251
Department of Homeland Security Subtotal			250,775	37,251
Total Research and Development Grants – University Only			233,758,071	30,680,730

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Research Training – University				
Department of Commerce				
<u>Direct Programs</u>				
Science, Technology, Business and/or Education Outreach	11.609		12,203	-
Department of Commerce Subtotal			12,203	-
Department of Defense				
<u>Direct Programs</u>				
Military Medical Research and Development	12.420		11,391	-
Department of Defense Subtotal			11,391	-
Department of State				
<u>Pass Through Programs</u>				
IREX US	19.009	FY17-YALI-PM-CWRU-01	130,664	-
Department of State Subtotal			130,664	-
Department of Education				
<u>Direct Programs</u>				
Overseas Programs - Doctoral Dissertation Research Abroad	84.022		40,146	-
Graduate Assistance in Areas of National Need	84.200		550,393	-
Special Education - Personnel Development to Improve Services and Results for Children with Disabilities	84.325		195,569	-
Department of Education Subtotal			786,108	-
Department of Health & Human Services				
Health Resources and Services Administration				
<u>Direct Programs</u>				
Grants for Training in Primary Care Medicine and Dentistry	93.884		349,957	-

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National Institutes of Health				
<u>Direct Programs</u>				
Oral Diseases & Disorder Research	93.121		4,093	-
Health Resources & Services Administration	93.124		39,484	-
Research Related to Deafness and Communication Disorders	93.173		79,712	-
National Research Service Award in Primary Care Medicine	93.186		259,831	-
Substance Abuse and Mental Health Service	93.243		18,920	-
Drug Abuse and Addiction Research Programs	93.279		32,909	-
Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286		515,056	-
National Center for Advancing Translational Sciences	93.350		245,251	-
Nursing Research	93.361		912,805	-
Cancer Research Manpower	93.398		1,283,949	40,748
Centers for Medicare & Medicaid Services	93.543		18,591	-
Health Resources & Services Administration	93.732		132,719	-
Substance Abuse and Mental Health Services Administration	93.788		67,102	-
Cardiovascular Diseases Research	93.837		615,677	-
Lung Diseases Research	93.838		256,465	-
Blood Diseases and Resources Research	93.839		113,170	-
Arthritis, Musculoskeletal and Skin Diseases Research	93.846		541,454	-
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		217,666	-
Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853		290,396	-
Allergy and Infectious Diseases Research	93.855		683,688	-
Biomedical Research and Research Training	93.859		2,562,622	38,408
Child Health and Human Development Extramural Research	93.865		329,132	-
Aging Research	93.866		91,285	-
Vision Research	93.867		181,008	-
International Research and Research Training	93.989		378,949	17,804
<u>Pass Through Programs</u>				
Northeast Ohio Medical University	93.884	G0098-A	108,350	-
Makerere University	93.989	TW010132 (02-01)	23,471	-
University of Nebraska Medical Center	93.989	34-5319-2013-001	11,421	-

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Substance Abuse and Mental Health Services Administration				
<u>Pass Through Programs</u>				
Kalamazoo Community Mental Health	93.104	Kalamazoo Community MHSAS	6,536	-
Ohio Department of Mental Health	93.243	1700079	82,140	-
Ohio Department of Mental Health	93.243	1700117	(14)	-
Ohio Department of Mental Health	93.243	1800543	133,249	-
State University of New York	93.648	18-17	203,401	-
Ohio Department of Mental Health	93.958	1,700,190.00	39,276	-
Ohio Department of Mental Health	93.958	1700730	(187)	-
Ohio Department of Mental Health	93.958	1800136	394,619	-
Ohio Department of Mental Health	93.958	1800317	283,971	-
Ohio Department of Mental Health	93.958	1800346	66,277	-
Department of Health & Human Services Subtotal			11,574,401	96,960
Total Research Training Grants – University Only			12,514,767	96,960
Total Research and Development Cluster – University Only			246,272,838	30,777,690
Research and Development Cluster – Cleveland Clinic Lerner College of Medicine (See Note A)				
Department of Health & Human Services				
National Institutes of Health				
<u>Direct Programs</u>				
Family Smoking Prevention and Tobacco Control Act Regulatory Research	93.077		6,104	-
Human Genome Research	93.172		217,404	4,509
National Center on Sleep Disorders Research	93.233		(137)	-
Mental Health Research Grants	93.242		1,202,718	18,336
Alcohol Research Programs	93.273		4,760,235	1,284,733
Discovery and Applied Research for Technological Innovations to Improve Human Health	93.286		1,667,512	103,868
Trans-NIH Research Support	93.310		700,772	5,500
National Center for Research Resources	93.389		512,578	55,333
Cancer Cause & Prevention Research	93.393		1,708,083	361,943
Cancer Detection and Diagnosis Research	93.394		605,650	31,618
Cancer Treatment Research	93.395		3,550,884	184,716
Cancer Biology Research	93.396		5,252,585	667,365

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Cancer Research Manpower	93.398		601,534	-
Cardiovascular Diseases Research	93.837		22,598,690	1,080,030
Lung Diseases Research	93.838		9,946,287	1,163,897
Blood Diseases & Resources Research	93.839		4,597,962	44,086
Arthritis, Musculoskeletal, & Skin Diseases Research	93.846		3,241,497	492,568
Diabetes, Digestive, and Kidney Diseases Extramural Research	93.847		6,391,108	693,744
Extramural Research Programs in the Neurosciences and Neurological Disorders	93.853		11,321,002	1,208,063
Allergy, Immunology and Transplantation Research	93.855		4,897,998	58,472
Biomedical Research and Research Training	93.859		2,257,622	135,629
Child Health and Human Development Extramural Research	93.865		163,758	-
Aging Research	93.866		2,827,559	210,781
Vision Research	93.867		5,417,194	-
<u>Pass Through Programs</u>				
Childrens Hospital of Philadelphia	93.RD	HHSN261200800001E	(21,101)	-
Emmes Corporation	93.RD	EMMES1504MS	3,087	-
Northwestern University	93.RD	HHSN2612012000351	27,500	-
Radiological Society North America	93.RD	HHSN268201500021C	9,096	-
Sujana Biotech	93.RD	HHSN268201700003C	23,823	-
Vanderbilt University	93.242	R01MH095621	7,155	-
Ludwig Institute for Cancer Research	93.286	U54DK107977	214,431	-
Massachusetts General Hospital	93.286	R01EB009048	18,053	-
Massachusetts General Hospital	93.286	U01EB023820	137,802	-
Mayo Clinic	93.286	R01EB018965	67,065	-
New York University Lagone Medical Center	93.286	UL1TR001445	398	-
Pressure Profile Systems	93.286	R44EB024713	168,543	-
University of Pennsylvania	93.350	U01TR001263	1,080	-
Vanderbilt University	93.350	UG3TR002097	5,371	-
Vanderbilt University	93.350	UH3TR000491	2,218	-
Cornell University	93.389	R01CA184712	2,832	-
Cedars-Sinai Medical Center	93.393	7UM1CA167551-06	24,344	-
Fred Hutchinson Center	93.393	R01CA215134-01	13,044	-
Stanford University	93.393	UM1CA167551	(3,781)	-
University of New Mexico	93.393	P01CA206980	22,753	-
Cornell University	93.394	R01CA184712	20,629	-
Duke University	93.394	R01CA210544	7,132	-

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Rice University	93.394	R01CA186132	12,308	-
Texas A&M University	93.394	5R03CA198630-02	22,647	-
University of Texas	93.394	U01CA086402	44,837	-
Brigham and Women's Hospital	93.395	U10CA076001	(81,351)	-
Children's Hospital of Philadelphia	93.395	U10CA180886	41,877	-
Children's Oncology Group	93.395	U10CA180886	(111)	-
Fred Hutchinson Center	93.395	824954	(40,274)	-
Fred Hutchinson Center	93.395	0000803703-212968 S5293	3,679	-
Fred Hutchinson Center	93.395	5U01CA154967	28	-
Fred Hutchinson Center	93.395	R01CA118953	8,378	-
Johns Hopkins University	93.395	UM1CA137443	93,527	-
Massachusetts General Hospital	93.395	P01CA084203	217,198	-
Mount Sinai School Of Medicine	93.395	P01CA108671	239	-
NRG Oncology Foundation, Inc.	93.395	1U10CA180868	1,281	-
Oregon Health and Science University	93.395	U10CA037429	4,313	-
Sloan-Kettering Cancer Research	93.395	BD517265	(85,396)	-
University of Virginia	93.395	R01CA189524	8,324	-
The Ohio State University	93.396	P01CA124570	270,816	-
University of South Carolina	93.396	1R01CA204786	9,986	-
Northwestern University	93.397	U54CA199091	33,726	-
University of Pittsburgh	93.397	P50CA121973-10	11,794	-
Cernostics, Inc.	93.399	1R44CA192416	24,657	-
Elucid Bioimaging	93.399	R44HL126224	1,713	-
Brigham and Women's Hospital	93.837	108025	(11,851)	-
Brigham and Women's Hospital	93.837	R01HL034594	125,638	-
Brigham and Women's Hospital	93.837	U01HL101422	706	-
Brigham and Women's Hospital	93.837	U01HL130163	8,562	-
Children's Hospital of Los Angeles	93.837	U10HL069294	1,205	-
Duke University	93.837	200464	529	-
Duke University	93.837	R01HL105448	6,505	-
Duke University	93.837	U01HL084904	9,705	-
Fred Hutchinson Center	93.837	P50HL110787	1,206	-
Icon Clinical	93.837	22220003	52,257	-
Lam Foundation	93.837	U54HL127672	2,979	-
Mayo Clinic	93.837	1K23HL128859	2,531	-

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Missouri Breaks Research, Inc.	93.837	5R01HL109315	32,964	-
Mount Sinai School of Medicine	93.837	0255-3106-4605	23,661	-
Mount Sinai School of Medicine	93.837	ISMMS No.0255-3106-4605	10,746	-
Mount Sinai School of Medicine	93.837	U01HL088942	56,902	-
National Bone Marrow Donor Program	93.837	3U10HL069294-12S1	1,552	-
New England Research Institute	93.837	BEST-CLI	(45,556)	-
Perfusion Solutions, Inc.	93.837	R43HL126236	8,008	-
The Ohio State University	93.837	R01HL128857	12,709	-
The Ohio State University	93.837	R34HL123586	26,086	-
Tufts University	93.837	R01HL135920	396,940	-
University of Alabama, Birmingham	93.837	U01HL120338	18,413	-
University of Cincinnati	93.837	U01HL131755	14,962	-
University of Indiana	93.837	R24HL123767	255,547	-
University of Pennsylvania	93.837	R01HL115041	13,528	-
University of Pennsylvania	93.837	R01HL118018	120,892	-
University of Southern California	93.837	R01HL133169	200,103	-
University of Virginia	93.837	U01HL117006	14,487	-
Fred Hutchinson Center	93.838	788123	(18,259)	-
Massachusetts General Hospital	93.838	U01HL123009	400,708	266,365
National Jewish Health	93.838	R01HL114587	29,250	-
Pennsylvania State University	93.838	U10HL109086	28,227	-
University of Alabama, Birmingham	93.838	R01HL085324	(1)	-
University of Pennsylvania	93.838	R01HL113988	427	-
Vanderbilt University	93.838	R01HL117074	66,406	-
Virginia Commonwealth University	93.838	1UM1HL116885	39,381	-
Beth Israel Deaconess Medical Center	93.839	1R34HL127156	61,445	-
The Ohio State University	93.839	R01HL131720	61,172	-
University of Michigan	93.839	U01HL117658	535,786	47,759
Brigham and Women's Hospital	93.846	R01AR055557	1,285	-
Brigham and Women's Hospital	93.846	U01AR068043	20,240	-
Brigham and Women's Hospital	93.846	U01AR071658	41,377	-
Children's Hospital Boston	93.846	R34AR066631	67,513	-
University of Alabama, Birmingham	93.846	UM1AR065705	189	-
University of Pennsylvania	93.846	R01AR064153	8,518	-
University of Pennsylvania	93.846	R01AR072363	21,144	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
University of Pennsylvania	93.846	U54AR057319	134,584	-
Baylor College of Medicine	93.847	R01DK101500	100,448	-
Children's Hospital Louisanna	93.847	R25DK078385	540	-
Children's Mercy Hospital and Clinic	93.847	13-0017	8,017	-
East Tennessee State University	93.847	R01DK102020	18,045	-
Image IQ	93.847	R41DK107071	12,250	-
Mayo Clinic	93.847	R01DK090358	54,038	-
Nationwide Children's Hospital Research Center	93.847	R01DK106286	2,227	-
New England Medical Center - Tufts	93.847	DK098245	58,334	-
New England Medical Center - Tufts	93.847	PO5010810SERV	63,125	-
North Dakota State University	93.847	R01DK112585	189,065	-
Northwestern University	93.847	R01DK102438	11,520	-
Sloan-Kettering Cancer Research	93.847	DK097087	8,847	-
University of Indiana	93.847	R01DK106286	10,055	-
University of Michigan	93.847	U54DK083912	20,675	-
University of Pennsylvania	93.847	UM1DK100846	8,679	-
Boston University	93.853	U01NS093334	104,364	-
Children's Hospital Boston	93.853	U54NS092090	333,873	-
Columbia University	93.853	7 (GG010312)	863	-
Columbia University	93.853	U54NS078059	5,048	-
Cornell University	93.853	UH3NS095554	5,188	-
Emmes Corporation	93.853	1U01NS026835	22,041	-
Iron Horse Diagnostics Inc.	93.853	IH-STTR-02	2,225	-
Massachusetts General Hospital	93.853	U01NS090259	49,574	-
Mayo Clinic Jacksonville	93.853	U01NS080168	(15,376)	-
Northwestern University	93.853	R01NS096376	21,569	-
Northwestern University	93.853	U01NS080818	10,448	-
University of Alabama, Birmingham	93.853	R01NS083767	117,313	-
University of California, Los Angeles	93.853	U01NS098961	178,645	-
University of California, San Francisco	93.853	R01NS071463	630	-
University of California, San Francisco	93.853	R56NS062820-06	3,364	-
University of Miami	93.853	U54NS092091	113,323	-
University of North Texas	93.853	R01NS048837	134,734	-
Benaroya Research Institute	93.855	UM1AI109565	22,121	-
Brigham and Women's Hospital	93.855	U01AI063594-13	3,764	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Duke University	93.855	4UM1AI104681	74,364	-
Duke University	93.855	R01AI113315	4,257	-
Duke University	93.855	U01AI113315	329,429	-
Johns Hopkins University	93.855	2002156950	692	-
Mount Sinai School of Medicine	93.855	R01AI132405	70,494	-
Mount Sinai School of Medicine	93.855	U01AI063594	461,625	-
National Jewish Health	93.855	U01AI097073	242	-
University of California, San Francisco	93.855	U01AI113362	41,298	-
University of Pennsylvania	93.855	R01AI104887	214,361	-
University of Pennsylvania	93.855	R21AI114920	9,339	-
Washington University in Saint Louis	93.855	U01AI077810	7,814	-
NEOMED	93.859	R01GM112044-01A1	7,095	-
University of Iowa	93.859	R01GM113935	199,649	-
Wake Forest University	93.859	P01GM113852	64,672	-
Wake Forest University	93.859	P01GM113853	45,813	-
Advanced Medical Electronics	93.865	R43HD082952	19,953	-
Duke University	93.865	R01HD081044	814	-
International Foundation for CDKL5 Research	93.865	U54HD061222	2,885	-
Metrohealth Hospital	93.865	R01HD088061	225,707	-
Research Triangle International	93.865	U01HD041249	3	-
Research Triangle International	93.865	U01HD069031	10,106	-
University of South Florida	93.865	U01DK061055	9,538	-
Great Lakes Neuro Technologies	93.866	AG033947-05	278	-
Northwestern University	93.866	R01AG047416	42,074	-
University of California, San Diego	93.866	U19AG010483	(36,784)	-
University of Indiana	93.866	7RF1AG051495	74,073	-
University of Southern California	93.866	U19AG02	90,595	-
Cincinnati Children's Hospital Research Foundation	93.867	R01EY027077	201,531	-
Emory University	93.867	EY025553	5,791	-
H-Cubed Inc.	93.867	R43EY025463	1,124	-
Jackson Laboratories	93.867	R01EY027860	22,550	-
Jaeb Center Health Research	93.867	Jaeb	1,226	-
Jaeb Center Health Research	93.867	U10EY011751	541	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Jaeb Center Health Research	93.867	U10EY014231	55,786	-
Thomas Jefferson University	93.867	R01EY012042	103,534	-
University of Pennsylvania	93.867	U10EY023530	46,589	-
Sarcoma Alliance for Research	93.937	U54CA168512	242	-
Department of Health & Human Services Subtotal			102,752,453	8,119,315
Total Research and Development Cluster – Cleveland Clinic Lerner College of Medicine			102,752,453	8,119,315
Total Research and Development Cluster			349,025,291	38,897,005
Highway Planning & Construction Cluster				
Department of Transportation				
<u>Pass Through Programs</u>				
Ohio Department of Transportation	20.205	26906	67,277	-
Total Department of Justice – Highway Planning & Construction Cluster			67,277	-
Medicaid Cluster				
Department of Health & Human Services				
Centers for Medicaid and Medicare Services				
<u>Pass Through Programs</u>				
Children's Hospital Medical Center	93.778	G-1617-05-0003; ODM201604	(6,086)	-
Cincinnati Children's Hospital	93.778	301507	13,261	-
Cincinnati Children's Hospital	93.778	G-1617-05-0003 (OMD201609)	41,588	3,028
Northeast Ohio Medical University	93.778	G-1617-05-0003 (NEOMED)	108,310	-
The Ohio State University	93.778	60058545	(1,158)	-
The Ohio State University	93.778	60058546	1,742	-
The Ohio State University	93.778	60058563	2,640	-
The Ohio State University	93.778	60060964	73,022	-
The Ohio State University	93.778	60060965	51,755	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
The Ohio State University	93.778	60061022	25,834	-
The Ohio State University	93.778	60061023	20,976	-
The Ohio State University	93.778	60063621	72,365	-
The Ohio State University	93.778	60063624	41,576	-
The Ohio State University	93.778	6000653358	4,958	-
The Ohio State University	93.778	60058440 (MEDTAPP)	2,618	-
The Ohio State University	93.778	60058441 (MEDTAPP)	2,748	-
The Ohio State University	93.778	60059809 (MEDTAPP)	21,004	-
The Ohio State University	93.778	60059810 (MEDTAPP)	52,097	-
The Ohio State University	93.778	G-1415-07-0060 (OMD201409)	46,182	-
The Ohio State University	93.778	G-1617-05-0003; ODM201604	831,943	113,735
The Ohio State University	93.778	G-1617-05-0003; ODM201609	275	-
The Ohio State University	93.778	G-1819-05-0094	2,817	-
The Ohio State University	93.778	ODM201650	5,466	1,919
The Ohio State University	93.778	ODM201858	299,861	-
Total Department of Health & Human Services – Medicaid Cluster			1,715,794	118,682
SNAP Cluster				
Department of Agriculture				
<u>Pass Through Programs</u>				
The Ohio State University	10.561	2OH430128 (60047119)	348,426	30,688
Total Department of Agriculture – SNAP Cluster			348,426	30,688
Other Federal Assistance				
Department of State				
<u>Pass Through Programs</u>				
Institute of International Education, Inc.	19.401	3069-CWRU-4-1-16	(1,212)	-
Department of State Subtotal			(1,212)	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
National Endowment for the Humanities				
<u>Direct Programs</u>				
Promotion of the Humanities - Fellowships and Stipends	45.160		83,408	-
Promotion of the Humanities - Professional Development	45.163		365	-
Promotion of the Humanities - Public Programs	45.164		12,525	-
National Endowment for the Humanities Subtotal			96,298	-
Department of Health & Human Services				
Administration for Children and Families				
<u>Pass Through Programs</u>				
US Together, Inc.	93.604	90ZT0157-01-01	(420)	-
Substance Abuse and Mental Health Services Administration				
<u>Pass Through Programs</u>				
Ohio Department of Mental Health	93.958	1700758	11,800	-
Department of Health & Human Services Subtotal			11,380	-
Total Other Federal Assistance			106,466	-
TRIO Cluster				
Department of Education				
<u>Direct Programs</u>				
TRIO Talent Search	84.044		253,716	-
TRIO Upward Bound	84.047		507,213	-
Total Department of Education – TRIO Cluster			760,929	-

CASE WESTERN RESERVE UNIVERSITY
Schedule of Expenditures of Federal Awards
For the year ended June 30, 2018

FEDERAL GRANTOR/PASS-THROUGH GRANTOR PROGRAM or CLUSTER TITLE	CFDA	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub-Recipients
Student Financial Assistance Cluster				
Department of Education				
<u>Direct Programs</u>				
Federal Supplemental Educational Opportunity Grants	84.007		1,063,574	-
Federal Work-Study Program	84.033		1,585,682	-
Federal Perkins Loan				
Outstanding loans as of July 1, 2017	84.038		11,730,926	-
New loans issued during 2018	84.038		1,480,341	-
Federal Pell Grant Program	84.063		3,205,843	-
Federal Direct Student Loans	84.268		138,917,469	-
Department of Education Subtotal			157,983,835	-
Department of Health & Human Services				
<u>Direct Programs</u>				
Nurse Faculty Loan Program				
Outstanding loans as of July 1, 2017	93.264		11,587,960	-
New loans issued during 2018	93.264		1,469,687	-
Health Professions Student Loans, Including Primary Care Loans				
Outstanding loans as of July 1, 2017	93.342		1,740,669	-
New loans issued during 2018	93.342		200,000	-
Loans for Disadvantaged Students				
Outstanding loans as of July 1, 2017	93.342		6,237	-
New loans issued during 2018	93.342		-	-
Nursing Student Loans				
Outstanding loans as of July 1, 2017	93.364		171,911	-
New loans issued during 2018	93.364		30,090	-
Department of Health & Human Services Subtotal			15,206,554	-
Total Student Financial Assistance Cluster			173,190,389	-
TOTAL EXPENDITURES OF FEDERAL AWARDS			\$ 525,214,572	\$ 39,046,375

A. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") summarizes the expenditures of Case Western Reserve University (the "University") under programs of the federal government for the year ended June 30, 2018. The information presented in the Schedule is presented on the accrual basis of accounting, which is in accordance with the 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 the federal award activity of the University, it is not intended to and does not present the financial position, changes in net assets and cash flows of the University.

Negative numbers in the Schedule represent adjustments to amounts reported in prior years in the normal course of business. Catalog of Federal Domestic Assistance ("CFDA") numbers and pass-through numbers are provided when available.

For purposes of the Schedule, federal awards include all grants, contracts and similar agreements entered into directly between the University and agencies and departments of the federal government and all sub-awards to the University by non-federal organizations pursuant to federal grants, contracts and similar agreements.

In May 2002, the University entered into an agreement with the Cleveland Clinic Foundation ("CCF") to form a new medical education and research program, Cleveland Clinic Lerner College of Medicine ("CCLCM"), within the University's School of Medicine. This is a collaborative arrangement between the University and CCF which is governed by the academic and research standards of the University. The results of both the academic and research operations of CCLCM are included in the University's accompanying consolidated financial statements. Beginning in fiscal 2004, research grants from the National Institutes of Health were awarded to and administered through the University in support of CCLCM investigators based at CCF. Oversight for the CCLCM grants is ultimately the responsibility of the Vice Dean for the University's School of Medicine, though day-to-day operations is delegated to CCF who abide by the research policies and procedures of the University. The University's indirect cost rate set by the Department of Health & Human Services is applied to the grants awarded for CCLCM. For these reasons, the awards in support of CCLCM investigators based at CCF are not presented as sub-recipient awards in the Schedule.

The University applies its predetermined approved facilities and administrative rate ascertained through negotiations with the U.S. Department of Health and Human Services when charging indirect costs to federal awards rather than the 10% de minimis cost rate as described in Section 200.414 of the Uniform Guidance. Pursuant to the agreement with the U.S. Department of Health and Human Services dated April 13, 2018, the final rate effective for the period July 1, 2017 to June 30, 2018 for on-campus research and for CCLCM is 60% of modified total direct costs, while the off-campus research rate is 26%. The April 13, 2018 agreement also finalized rates through fiscal year 2021 and established provisional rates for fiscal year 2022 and beyond.

B. Directly Administered Student Loan Programs

The federal student loan programs listed below are administered directly by the University and balances and transactions relating to these programs are included in the University's basic financial statements. The balance of loans outstanding at June 30, 2018 consists of:

Title	CFDA Number	Amount Outstanding at June 30, 2018
Perkins Loan Program	84.038	\$ 10,792,850
Nurse Faculty Loan Program	93.264	11,336,364
Health Professions Student Loans, Including Primary Care Loans	93.342	1,669,715
Loan for Disadvantaged Students	93.342	3,836
Nursing Student Loan Program	93.364	152,382
Total loan balances outstanding		<u>\$ 23,955,147</u>

The Nurse Faculty Loan Program balance as of June 30, 2017 of \$11,587,960 and the loans issued in fiscal year 2017 of \$1,796,251 were omitted from the prior year Schedule of Expenditures of Federal Awards and Notes thereto.

REPORTS ON INTERNAL CONTROL AND COMPLIANCE



Report of Independent Auditors 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*

To the Board of Trustees,
Case Western Reserve University:

We have audited, 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, the consolidated financial statements of Case Western Reserve University (the "University"), which comprise the consolidated statement of financial position as of June 30, 2018, and the related consolidated statements of activities and of cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated October 20, 2018.

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 opinion 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 a 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 entity'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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

PricewaterhouseCoopers LLP

October 20, 2018



Report of Independent Auditors on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program and on Internal Control Over Compliance in Accordance with the Uniform Guidance

To the Board of Trustees,
Case Western Reserve University:

Report on Compliance for Each Major Federal Program

We have audited Case Western Reserve University's (the "University") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2018. The University's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

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 programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs 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 each major federal program. However, our audit does not provide a legal determination of the University's compliance.

Opinion on Each Major Federal Program

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2018.

Other Matters

The results of our auditing procedures disclosed instances of noncompliance, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as items 2018-001, 2018-002 and 2018-003. Our opinion on each major federal program is not modified with respect to these matters.



The University's response to the noncompliance findings identified in our audit is described in the accompanying management's corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

Report on Internal Control Over Compliance

Management of the 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 each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each 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 and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified a certain deficiency in internal control over compliance, as described in the accompanying schedule of findings and questioned costs as item 2018-001 that we consider to be a significant deficiency.

The University's response to the internal control over compliance findings identified in our audit is described in the accompanying management's corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

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.

PricewaterhouseCoopers LLP

March 28, 2019

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

CASE WESTERN RESERVE UNIVERSITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2018

SECTION I – SUMMARY OF AUDITORS' RESULTS

FINANCIAL STATEMENTS

Type of auditors report issued: Unmodified

Internal control over financial reporting:

- | | | |
|---|-----------|----------------------------|
| ◆ Material weakness(es) identified? | _____ Yes | <u> X </u> No |
| ◆ Significant deficiency(ies) identified that are not considered to be material weakness(es)? | _____ Yes | <u> X </u> None reported |
| ◆ Noncompliance material to financial statements noted? | _____ Yes | <u> X </u> No |

FEDERAL AWARDS

Internal control over major programs:

- | | | |
|---|------------------|---------------------|
| ◆ Material weakness(es) identified? | _____ Yes | <u> X </u> No |
| ◆ Significant deficiency(ies) identified that are not considered to be material weakness(es)? | <u> X </u> Yes | _____ None reported |

Type of auditors report issued on compliance for major programs: Unmodified

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)? X Yes _____ No

IDENTIFICATION OF MAJOR PROGRAMS

CFDA Number(s)

Name of Federal Program or Cluster

Various

Research and Development Cluster

Various

Student Financial Assistance Cluster

93.778

Medicaid Cluster

Dollar threshold used to distinguish between Type A and Type B programs: \$3,000,000

Auditee qualified as low-risk auditee? X Yes _____ No

SECTION II – FINANCIAL STATEMENT FINDINGS

No findings to be reported.

SECTION III – FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

2018-001 – Loan Program Reporting – Significant Deficiency

Cluster: Student Financial Assistance

Grantor: Department of Health & Human Services

Program Name: Nurse Faculty Loan Program

CFDA Number: 93.264

Award Year: July 1, 2017 – June 30, 2018

Criteria

The Schedule of Expenditures of Federal Awards (“SEFA”) must provide total Federal awards expended for each individual Federal program, including the total Federal awards expended for loan programs. Balances outstanding at the end of the period for loan programs must be identified in the notes to the schedule. (2 CFR 200.510(b)).

Condition

When performing procedures to reconcile the SEFA and related notes to the financial statements in the current year, it was identified that the Nurse Faculty Loan Program (“NFLP”) had been omitted from the SEFA and related notes for the year ended June 30, 2017 as well as from prior year reports.

Cause

The University’s process of reconciling the SEFA to the financial statements did not include a query to identify Federal awards expended for loan programs unless the loan program was already included in the prior year schedule. Management from the University’s Office of Financial Aid were not involved in reviewing the SEFA and related notes in their entirety.

Effect

The NFLP was omitted from the SEFA and related notes for the year ended June 30, 2017. The outstanding loan balance of the NFLP was \$11,380,743 as of July 1, 2016 while new NFLP loans issued during the year ended June 30, 2017 were \$1,796,251. Accordingly, Student Financial Assistance Cluster expenditures were reported to total \$151,783,976 for the year ended June 30, 2017 while they should have totaled \$164,960,970. Additionally, the outstanding loan balance of the NFLP of \$11,587,960 should have been included in the notes to the SEFA as of June 30, 2017. NFLP amounts were omitted from prior year reports as well.

Questioned Costs

None noted.

Recommendation

We recommend that the University enhance its process of reconciling the SEFA to the financial statements such that all loan program amounts are evaluated to determine if they should be included on the SEFA. Additionally, we recommend that management from the Office of Financial Aid are included in the group of management that reviews the full draft of the SEFA and related notes prior to issuance of the report.

Management’s Views and Corrective Action Plan

Management’s views and corrective action plan are included at the end of this report after the summary schedule of prior audit findings.

2018-002 – Enrollment Reporting

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Direct Student Loans and Federal Perkins Loans

CFDA Numbers: 84.268 and 84.038

Award Year: July 1, 2017 – June 30, 2018

Criteria

Under the Federal Direct Student Loan and Federal Perkins Loan programs, institutions must complete and return within 15 days the Enrollment Reporting roster file placed in their Student Aid Internet Gateway mailboxes sent by the Department of Education via National Student Loan Data System (“NSLDS”). The institution determines how often it receives the Enrollment Reporting roster file with the default set at every two months, but the minimum is twice a year. Once received, the institution must update for changes in student status, report the date the enrollment status was effective, enter the new anticipated completion date, and submit the changes electronically through the batch method or the NSLDS web site. Unless the school expects to complete its next roster within 60 days, the school must notify the lender or the guaranty agency within 15 days, if it discovers that a student who received a loan either did not enroll or ceased to be enrolled on at least a half-time basis. (34 CFR 685.309(b) and 674.19(f)).

Condition

The University Registrar's Office uses the National Student Clearinghouse (“NSC”) as its servicer for enrollment reporting to the NSLDS. Through our testing of 25 students who received Federal student financial assistance and had an enrollment status change, we identified that the University did not inform the NSC on a timely basis about one student’s enrollment status change. As a result, this student’s status change was reported 280 days late to NSLDS.

Cause

The University Registrar's Office transmits updated enrollment information for all students enrolled, including students receiving Title IV funds, to NSC via a file that is produced from the Oracle PeopleSoft Campus Solutions Student Information System (“SIS”). The file from SIS must contain a valid social security number for each student’s record in order for the data to be recognized by the NSC. While the University’s PowerFAIDS student financial aid management system contained a valid social security number for a student, the SIS system did not, and thus the student’s enrollment status was not identified by the NSC.

Effect

Effective administration of Title IV loans could be impacted when changes in students’ status are not reported timely and accurately. The accuracy of enrollment information is important as a student’s enrollment status determines eligibility for in-school status, deferment, grace periods, and repayments, as well as the Government’s payment of interest subsidies. The amount of loan repayments impacted by the issue cannot be determined by the University because the calculations are handled by the loan servicer and are different for each student depending on his or her own individual circumstances.

Questioned Costs

None noted.

Recommendation

We recommend the University improve their process of comparing student records in SIS to student records in PowerFAIDS. All relevant data mismatches should be reviewed and corrected on a timely basis.

Management's Views and Corrective Action Plan

Management's views and corrective action plan are included at the end of this report after the summary schedule of prior audit findings.

2018-003 – Verification

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Pell Grant Program

CFDA Numbers: 84.063

Award Year: July 1, 2017 – June 30, 2018

Criteria

For each award year the Secretary of Education publishes in the Federal Registrar notice the FAFSA information that the University and a student may be required to verify. If a student is selected for verification, the University must obtain the specified documentation. For subsidized student financial assistance programs, if a student's FAFSA information changes as a result of verification, the student or the University must submit the changes to the Secretary of Education. (34 CFR 668.56–.59)

Condition

In examining 25 student records that had been selected for verification, we found one student's file was supported by federal tax return documents that were not accurately reflected in the student's FAFSA information. The student was a dependent of an unmarried parent who had filed federal taxes jointly with the ex-spouse. The FAFSA was completed using the single dependent parent's AGI but the joint taxes paid amount. This error was not identified by the University.

Cause

The staff who reviewed the tax return information in the student's file during the performance of verification procedures failed to identify an error in the FAFSA information.

Effect

Errors in FAFSA information impacting the amount of estimated family contribution can result in over-awards or under-awards of financial aid.

Questioned Costs

If the parent's tax information for the student had been corrected it would have caused the student's Estimated Family Contribution to increase and the student would have been awarded \$1,700 less of financial assistance under the Federal Pell Grant Program.

Recommendation

We recommend the University refund the over-awarded funds to the Department of Education and provide training to all staff who perform verification procedures to ensure the staff have a complete understanding of how the FAFSA should reflect information contained in the various types of tax forms that the staff may be required to review.

Management's Views and Corrective Action Plan

Management's views and corrective action plan are included at the end of this report after the summary schedule of prior audit findings.

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS AND STATUS

2017-001 – Enrollment Reporting

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Direct Student Loans and Federal Perkins Loans

CFDA Number: 84.268 and 84.038

Award Year: July 1, 2016 – June 30, 2017

Condition

The University Registrar's Office uses the National Student Clearinghouse (“NSC”) as its servicer for enrollment reporting to the NSLDS. Through PwC’s testing of 25 students who received Federal student financial assistance and had an enrollment status change, it was identified that the University did not inform the NSC on a timely basis about 4 students that withdrew from all of their classes for a semester. An additional student withdrawal that was never communicated to the NSC was also identified.

The amount of time that a withdrawal was reported late to the NSLDS depended on the date of the withdrawal, if and when the student re-enrolled in classes for the subsequent semester, and was limited by the fact that the NSC has a process to insert the withdrawn date as the last date of the withdrawn term for students that did not re-enroll in classes for the subsequent semester. The late-reported student withdrawals were ultimately updated in NSLDS an average of 60 days later than the requirement and in some instances without accurate withdrawn dates.

Status Update

The University corrected the Oracle Peoplesoft Campus Solutions Student Information System process that transmits data to the NSC and ultimately to the NSLDS. The University also implemented a monthly review process to check that records of withdrawn students have been reported correctly and within the required time period.

2017-002 – Pell Disbursement

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Pell Grant Program

CFDA Number: 84.063

Award Year: July 1, 2016 – June 30, 2017

Condition

In examining 41 student recipients of Pell, one student was found by PwC to have been under-awarded because their award was calculated based on a three quarters enrollment while they had in fact been enrolled full time.

Status Update

The University uses their PowerFAIDS system to automatically calculate the amount of Pell awarded to students based on the student’s enrollment status, estimated family contribution, and the cost of attendance. The University implemented a nightly scheduled process in PowerFAIDS that automatically recalculated Federal Pell Grants for students whose enrollment changed from full-time to less than full-time and vice versa.

2017-003 – Title IV Disbursement Notification Letters

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Supplemental Educational Opportunity Grants, Federal Work-Study Program, Federal Perkins Loan, Federal Pell Grant Program, Federal Direct Student Loans, Nursing Student Loans, Health Professional Student Loans (Including Primary Care Loans), Loans for Disadvantaged Students

CFDA Number: 84.007, 84.033, 84.038, 84.063, 84.268, 93.364, 93.342

Award Year: July 1, 2016 – June 30, 2017

Condition

In examining 60 student records, PwC identified that 23 of the 60 students had not been notified in writing of their receipt of Title IV funds within the 30 day requirement. Each of the 23 students had Title IV funds credited to their accounts in the fall semester, and each of the 23 students were ultimately notified within 60 days after receiving their Title IV funds.

Status Update

The University corrected the automated email communications schedule process such that appropriate emails were sent on the Friday of the week of any Title IV disbursement.

2017-004 – E-Sign Act

Cluster: Student Financial Assistance

Grantor: Department of Education

Program Name: Federal Supplemental Educational Opportunity Grants, Federal Work-Study Program, Federal Perkins Loan, Federal Pell Grant Program, Federal Direct Student Loans, Nursing Student Loans, Health Professional Student Loans (Including Primary Care Loans), Loans for Disadvantaged Students

CFDA Number: 84.007, 84.033, 84.038, 84.063, 84.268, 93.364, 93.342

Award Year: July 1, 2016 – June 30, 2017

Condition

In examining 60 student records, PwC identified that the University requires each student annually agree to certain terms and conditions before they accept federal student assistance, however a statement prompting the student to voluntarily consent to participate in electronic transactions was not included in the list of terms and conditions.

Status Update

The University updated its system to allow for students to voluntarily agree to the requirements of the E-Sign Act before they can access, accept or decline financial aid in the My Financial Aid portal.

**Case Western Reserve University
Management's Corrective Action Plan
Year Ended June 30, 2018****2018-001 – Loan Program Reporting**

The University reviewed all of its loan programs in February 2019 and determined that the Schedule of Expenditures of Federal Awards ("SEFA") and related notes includes all Federal awards expended for loan programs for the year ended June 30, 2018. When the SEFA is reconciled to the financial statements for the year ended June 30, 2019, we will fully reconcile all loan program amounts. The University's Director of Financial Aid and the Executive Director of Student Financial Services will review the SEFA annually.

Primary responsibility for implementing the correction action plan for this finding rests with Diane Domanovics, Assistant Vice President for Sponsored Projects, 216-368-5930.

2018-002 – Enrollment Reporting

The University investigated the exception. While there was a reconciliation process being performed between the data in the Student Information System ("SIS") and the data in the PowerFAIDS student financial aid management system, the reconciliation process was not flagging exceptions when the social security number of a student who had received Title IV financial aid was blank in SIS. In October 2018, the University implemented a process to query SIS data to identify and update the data of all students who had received Title IV financial aid but did not have a social security number in SIS prior to each NSC file submission. Five student records were found to contain blank social security numbers and all of these were corrected. Additionally, the University now reviews the NSLDS database on a monthly basis to search for any CWRU records with a status of "Z – record not found" in order to monitor that the University's controls over the SIS data are operating effectively.

Primary responsibility for implementing the correction action plan for this finding rests with Amy Hammett, University Registrar and Director of Student Information Systems and Services, 216-368-4310.

2018-003 – Verification

The University investigated the exception. The student's file containing the error was a dependent of one unmarried parent who happened to have filed federal taxes jointly with the ex-spouse in the year the tax information was being verified. While the appropriate documents were obtained for verification of the student's information, the file reviewer did not identify the error in the federal taxes paid information, which should have been allocated to each parent. We concluded the infrequency of these circumstances contributed to the error as there were only 14 unmarried parents selected for verification in FY2018 that had filed joint returns, and we reviewed those student records noting no additional errors. Additional training was provided in October 2018 to the staff who perform verification. The Department of Education was refunded for the Pell over-award in January 2019.

Primary responsibility for implementing the correction action plan for this finding rests with Sheryl Reinschmidt, Associate/Deputy Director of Financial Aid, 216-368-6659.

Sincerely,

A handwritten signature in blue ink that reads "Diane Domanovics". The signature is fluid and cursive, with the first name "Diane" and last name "Domanovics" clearly legible.

Diane Domanovics
Assistant Vice President for Sponsored Projects