Tufts University

Reports on Federal Awards in Accordance with the Uniform Guidance June 30, 2020 EIN #042103634

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Part I Financial Statements, Financial Responsibility Supplemental Schedule and Schedule of Expenditures of Federal Awards



Report of Independent Auditors

To the Board of Trustees of Tufts University

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of Tufts University and its subsidiaries (the "University"), which comprise the consolidated statements of financial position as of June 30, 2020 and 2019, and the related consolidated statements of activities for the year ended June 30, 2020 and of cash flows for the years ended June 30, 2020 and 2019, 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 were 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 Tufts University and its subsidiaries as of June 30, 2020 and 2019 and the changes in their net assets for the year ended June 30, 2020 and their cash flows for the years ended June 30, 2020 and 2019 in accordance with accounting principles generally accepted in the United States of America.

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Emphasis of Matter

As discussed in Note 2 to the consolidated financial statements, the University changed the manner in which it accounts for restricted cash or cash equivalents within the consolidated statements of cash flows in fiscal year 2020. Our opinion is not modified with respect to this matter.

Other Matters

We previously audited the consolidated statement of financial position as of June 30, 2019, and the related consolidated statements of activities and of cash flows for the year then ended (the statement of activities is not presented herein), and in our report dated November 1, 2019, 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, 2019 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, 2020 and the financial responsibility supplemental schedule as of and for the year ended June 30, 2020 are 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 the Department of Education, respectively and are not a required part of the consolidated financial statements. The 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 and the financial responsibility supplemental schedule are fairly stated, in all material respects, in relation to the consolidated financial statements taken as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 5, 2020 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, 2020. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and not to provide an opinion on the effectiveness of 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.

Pricemoterbonce Coorers LLP

November 5, 2020

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AS OF JUNE 30, 2020 AND JUNE 30, 2019 (in thousands)

	2020	2019	
ASSETS			
Cash and cash equivalents	\$ 69,539	\$ 73,8	354
Investments, intermediate-term	176,876	183,9) 50
Receivables and other assets, net	48,903	57,5	556
Contributions receivable, net	84,529	80,1	56
Notes and student loans receivable, net	41,067	42,9) 31
Investments, long-term	2,199,052	2,193,7	705
Land, buildings, and equipment, net	1,155,960	1,125,2	280
TOTAL ASSETS	\$ 3,775,926	\$ 3,757,4	132
LIABILITIES AND NET ASSETS			
LIABILITIES:			
Accounts payable and accrued expenses	\$ 175,188	\$ 182,3	353
Deferred revenue and deposits	53,118	51,0)54
Bonds and notes payable	745,436	758,7	730
Interest rate agreements	91,233	68,9	917
Government advances for student loans	18,550	23,7	122
Total liabilities	1,083,525	1,084,7	176
NET ASSETS:			
Without donor restrictions	1,322,472	1,341,5	595
With donor restrictions:			
Spendable	613,281	604,1	36
Non-Spendable	756,648	726,9)25
Total net assets with donor restrictions:	1,369,929	1,331,0)61
Total net assets	2,692,401	2,672,6	556
TOTAL LIABILITIES AND NET ASSETS	\$ 3,775,926	\$ 3,757,4	432

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

CONSOLIDATED STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2020, WITH SUMMARIZED INFORMATION FOR THE YEAR ENDED JUNE 30, 2019 (in thousands)

	Without donor restrictions	With donor restrictions	Total 2020	Total 2019
OPERATIONS:				
REVENUE AND OTHER SUPPORT:				
Tuition and fees, room and board (net of scholarships, see Note 2)	\$ 508,813	\$ -	\$ 508,813	\$ 480,582
Government grants and contracts	157,958	-	157,958	157,170
Clinical and other educational activities	118,543	-	118,543	132,069
Auxiliary enterprises	6,954	-	6,954	9,764
Contributions and private grants	39,729	65,835	105,564	116,044
Investment return utilized	88,958	16,528	105,486	103,283
Net assets released from restrictions	49,674	(49,674)		
Total revenue and other support	970,629	32,689	1,003,318	998,912
EXPENSES:				
Salaries, wages and benefits	569,984	-	569,984	556,154
Materials, supplies and other	142,292	-	142,292	141,498
Purchased services	83,963	-	83,963	81,570
Facility and maintenance costs	54,006	-	54,006	55,911
Depreciation	66,248	-	66,248	61,971
Interest	31,324	-	31,324	30,884
Travel	11,869		11,869	17,782
Total expenses	959,686		959,686	945,770
INCREASE IN NET ASSETS				
FROM OPERATING ACTIVITIES	10,943	32,689	43,632	53,142
NONOPERATING ACTIVITIES:				
Investment return (utilized)/reinvested, net	(32,672)	(6,537)	(39,209)	(19,018)
Contributions and grants, spendable	5,136	5,986	11,122	19,388
Contributions and grants, non-spendable	-	33,906	33,906	42,034
Net assets released from restrictions for				
capital and other nonoperating purposes	27,176	(27,176)	-	-
Net unrealized (loss) on interest rate agreements	(22,316)	-	(22,316)	(14,193)
Change in funded status of postretirement health care plan	(794)	-	(794)	(1,570)
Gain on sale of building	-	-	-	12,579
Other nonoperating activities	(6,596)		(6,596)	(3,880)
(DECREASE) INCREASE IN NET ASSETS FROM				
NONOPERATING ACTIVITIES	(30,066)	6,179	(23,887)	35,340
(DECREASE) INCREASE IN NET ASSETS	(19,123)	38,868	19,745	88,482
NET ASSETS—Beginning of year	1,341,595	1,331,061	2,672,656	2,584,174
NET ASSETS—End of year	\$ 1,322,472	\$ 1,369,929	\$ 2,692,401	\$ 2,672,656

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

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED JUNE 30, 2020 AND JUNE 30, 2019 (in thousands)

CASH FLOWS FROM OPERATING ACTIVITIES:		2020		2019
Total increase in net assets	\$	19,745	\$	88,482
Adjustments to reconcile total increase in net assets to	Ŷ	19,710	Ψ	00,102
net cash and cash equivalents provided by operating activities:				
Net realized and unrealized investment (gains)		(52,551)		(68,345)
Depreciation and amortization		67,525		63,536
Loss (gain) on disposal of fixed assets		2,089		(10,540)
Gifts of intangible assets		(8,600)		(10,010)
Gifts of securities, property and equipment		(10,805)		(17,893)
Proceeds from sales of donated securities		3,438		4,670
Settlements on interest rate swap agreements		7,259		5,645
Net unrealized loss on interest rate agreements		22,316		14,193
Contributions restricted for long-term investment		(33,948)		(28,825)
Changes in operating assets and liabilities:		(00,9.10)		(20,020)
Receivables and other assets		8,196		3,962
Contributions receivable		(4,373)		(29,621)
Accounts payable and accrued expenses		10,777		12,466
Deferred revenue and deposits		2,064		(12,621)
Net cash, cash equivalents and restricted cash provided by operating activities		33,132	_	25,109
CASH FLOWS FROM INVESTING ACTIVITIES:				
Notes and student loans granted		(5,259)		(5,331)
Student loans repaid		7,123		7,230
Purchases of investments		(1,566,230)		(1,596,085)
Proceeds from sale of investments		1,601,234		1,618,642
Proceeds from sale of building		-		29,631
Additions to land, buildings, and equipment		(118,709)		(120,361)
Net cash, cash equivalents and restricted cash (used in) investing activities		(81,841)	_	(66,274)
CASH FLOWS FROM FINANCING ACTIVITIES:				
(Decrease) increase in government advances for student loans		(5,172)		559
Proceeds from issuance of bonds and notes		-		34,289
Cash paid on interest rate swap agreements		(7,259)		(5,645)
Repayments of bonds and notes		(12,272)		(41,131)
Proceeds from contributions restricted for long-term investment		33,948		28,825
Proceeds from sales of donated securities restricted for long-term purposes		6,818		1,464
Net cash, cash equivalents and restricted cash provided by financing activities		16,063		18,361
Net decrease in cash, cash equivalents and restricted cash		(32,646)		(22,804)
Cash, cash equivalents and restricted cash—Beginning of year		167,746		190,550
Cash, cash equivalents and restricted cash—End of year	\$	135,100	\$	167,746
Supplemental Information on Cash, Cash Equivalents and Restricted Cash:				
Cash as shown in the statements of financial position		69,539		73,854
Restricted cash included in Investments, intermediate-term (see Note 2 and 12)		65,550		84,824
Restricted cash included in Other Assets (see Note 3)		11		9,068
Total cash, cash equivalents and restricted cash as shown on the Consolidated				
Statement of Cash Flows	\$	135,100	\$	167,746
Supplemental Data:				
Cash paid for interest, net of amounts capitalized (see Note 7)	\$	35,502	\$	34,791
Construction amounts remaining in accounts payable	\$	8,945	\$	26,887
Gifts of securities, property and equipment	\$	10,805	\$	17,893

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS JUNE 30, 2020 AND 2019

1. ORGANIZATION

Tufts University (the "University"), founded in 1852, is a not-for-profit institution committed to education and research. The University is a complex, independent nonsectarian university, with approximately 11,400 students and four campuses in Boston, Medford/Somerville and Grafton, Massachusetts. The University provides degree programs at both undergraduate and graduate levels in a variety of liberal arts and professional areas. The University has been granted a tax-exemption as described in Section 501(c)(3) of the Internal Revenue Code (the "Code") and is generally exempt from income taxes pursuant to Section 501(a) of the Code.

The following organizations are included in the consolidated financial statements of the University:

Walnut Hill Properties Corporation ("Walnut Hill")—Walnut Hill is a not-for-profit corporation established by the University to own and manage certain investment and rental properties.

Tufts Veterinary Emergency Treatment & Specialties ("Tufts VETS")—Tufts VETS is a not-for-profit corporation organized by the University to provide emergency and specialty veterinary services in a community environment. It provides postgraduate training in its emergency and critical care training program and training to veterinary students on elective rotations.

Tufts Media LLC ("Tufts Media")—Tufts Media is a single member limited liability company created by the University to operate its consumer publishing and media capability.

JM Holding Corporation ("JM Holdings")—JM Holdings is a for-profit development corporation created by the University to develop approximately 100 acres designated for commercial use in Grafton Science Park on the Cummings School of Veterinary Medicine campus. At this time, JM Holdings and the Cummings School are working to identify potential life science tenants who need a greenfield site to construct new research and development, office or bio-manufacturing facilities.

Omidyar–Tufts Active Citizenship Trust ("OT-ACT")— The Omidyar–Tufts Microfinance Fund (the "Fund") was organized in October 2005 as a charitable trust to support, benefit and carry out the purposes of public charity beneficiaries, including the University, by engaging in two activities: promoting the relief of the poor and distressed through microfinance investments, and promoting education through grants. The capital assets of the Fund were contributed by a third party and, according to the donor's stipulation, were to be invested in microfinance-related ventures. In 2006, a \$100 million contribution to establish the Fund was recorded in net assets with donor restrictions. In March 2020, the Trust Agreement was amended in order to remove certain limitations on the charitable activities described therein and thereby make the trust assets more productive, enhance the Fund's impact and increase the Trustee's ability to achieve the Fund's charitable purposes. The name of the Trust under this amendment was revised to be the Omidyar-Tufts Active Citizenship Trust ("OT-ACT"). The majority of OT-ACT's trustees are appointed by the University. Investments associated with these funds are recorded in net assets with donor restrictions.

Tufts Global, Inc ("Tufts Global")—Tufts Global is a not-for-profit corporation formed as a supporting organization of the University to conduct, support and facilitate educational and research activities resulting from grant-funded projects within and outside of the United States.

BrainGate, Inc ("BrainGate")—Braingate is a for-profit corporation donated to the University in September 2019. BrainGate owns patents that are the basis of a transformative neurotechnology that uses micro-electrodes implanted in the brain to let humans operate external devices such as computers or robotic arms with just their thought. BrainGate was donated to Tufts to facilitate further research and practical applications of the technology.

The assets of any of the organizations included in the consolidated financial statements may not be available to meet the obligations of the other entities.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America on the accrual basis with net assets and revenues, expenses, gains and losses classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the University are classified and reported as follows:

Net assets with donor restrictions—Net assets subject to donor-imposed stipulations that are maintained in perpetuity by the University consisting primarily of donor-restricted endowment funds (non-spendable), and also net assets subject to donor-imposed stipulations that may be satisfied by actions of the University that will expire with the passage of time or the occurrence of specific events (spendable).

Net assets without donor restrictions —Net assets not subject to donor-imposed stipulations. Net assets without donor restrictions may be designated for specific purposes.

Consolidation—The consolidated financial statements include the accounts of the University and its wholly owned or controlled subsidiaries. Intercompany accounts and transactions have been eliminated.

Classifications—Expenses are reported as decreases in net assets without donor restrictions. Gains and losses on investments are reported as increases or decreases in net assets without donor restrictions unless their use is restricted by explicit donor stipulations or by law. Contributions and investment return for operating activities subject to donor-imposed stipulations not utilized in the current period are released from net assets with donor restrictions when spent and are reported as net assets released from restrictions under revenue from operating activities. Expirations of all other net assets with donor restrictions (spendable) for capitalized long-term purposes are reported in the nonoperating section of the statement of activities.

Contributions—Contributions, including unconditional promises to give, are recognized as revenue in the period received. Contributions restricted for the acquisition of land, buildings, and equipment are reported as increases in net assets with donor restrictions. These contributions are reclassified to net assets without donor restrictions as the funds are expended, or in the case of construction, when the related assets are placed in service. Promises to give subject to donor-imposed stipulations that the corpus be maintained in perpetuity are recognized as increases in net assets with donor restrictions (non-spendable). Fundraising expenses totaled approximately \$24,300,000 and \$24,200,000 for the years ended June 30, 2020 and 2019, respectively.

Conditional promises to give are not recognized until the conditions on which they depend are substantially met. Contributions of assets other than cash are reported at their estimated fair value at the date of gift. Pledges for contributions scheduled to be received after one year are discounted using factors that approximate the risk and the expected term of the promise to give. Amortization of the discount is recorded as additional contributions in the appropriate net asset class.

Investments, long-term—Investments are reported at fair value. Dividends, interest, gains and losses on investments are reported as increases or decreases:

- in net assets with donor restrictions (non-spendable) if the terms of the gift require that they be added to the principal of a permanent endowment or loan fund;
- in net assets with donor restrictions (spendable) if the terms of the gift or relevant state law impose restrictions on the current use of the income or net gains. The University has relied on the Massachusetts Attorney General's interpretation of relevant state law that unappropriated endowment gains should generally be classified as net assets with donor restrictions; and
- in net assets without donor restrictions in all other cases.

Investments are comprised of the assets of the University's endowment and non-endowment funds. The majority of these assets are invested in the University's Total Return Pool (TRP). The TRP assets are owned by participating funds based on shares acquired by each fund when it entered the pool. The fair value of the pooled assets is determined each month and the resulting value per share is used to account for funds entering or leaving the pool. The University has established spending policies for endowment and non-endowment investments in the TRP as follows:

Endowment Spending Policy—The Board of Trustees determines the method to be used to appropriate endowment funds for expenditure. The objective of the policy is to ensure that endowment income available to support operations is stable and predictable, while at the same time increases over time to offset the effects of inflation. Endowment funds receive income distributions equal to the current spending level of all funds in the TRP.

As of July 1, 2017, the University Endowment Spending Policy applicable to the TRP maintained an annual spending rate in a range of 4% to 5% of the twelve-quarter moving average ended September 30 of the previous year. Beginning in fiscal year 2019, the range lowered 0.1% in each of the next five years resulting in a long-term spending range of 3.5% to 4.5% thereafter. Subject to the range limitation, the annual spending rate will increase at an annual rate of 2.5%. In establishing this policy, the Board considered the expected long-term rate of return on its endowment. In May 2020, the Board approved a temporary departure from the Spending Policy to increase the spending range from 4.2% to 5.2% for fiscal year 2021, as one of a number of actions to offset the impact of lost revenues and additional expenses related to the Covid-19 pandemic.

Non-endowment Spending Policy—The non-endowment investments in the TRP consist of operating and capital funds. These long-term funds, while invested in a similar manner as the endowment, are not intended to be held in perpetuity. For these investments, the University has adopted a fixed annual spending rate equivalent to 6% of the market value calculated as of the twelve-quarter moving average ended September 30 of the previous year.

Spending on all investments held outside the TRP represents the yield earned, unless otherwise prescribed by donor restrictions.

The Board of Trustees of the University has interpreted the "Uniform Prudent Management of Institutional Funds Act" ("UPMIFA") as requiring the preservation of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, the University classifies as net assets with donor restrictions, (a) the original value of 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.

Investments, intermediate-term—Investments are reported at fair value. This portfolio is invested in cash and highquality fixed income securities consisting of treasuries, agencies, investment grade corporates, and asset backed securities with maturities generally ranging from 1 to 3 years.

Operations and Nonoperating Activities—The consolidated statement of activities reports changes in net assets without donor restrictions and net assets with donor restrictions from operations and nonoperating activities. Operations include contributions with donor restrictions that have been released to net assets without donor restrictions as used for operational purposes. Non-operating includes the release from restrictions of contributions restricted to the acquisition of buildings and equipment and other transfers between restriction categories; investment return in excess of the University's operating needs as defined by its spending policy or amounts used in excess of investment return; endowment contributions, unrealized gains or losses on interest rate agreements; changes in the funded status of the postretirement health care plan; bequests and gifts of property, and gains on disposal of buildings that are investment properties.

Revenue Recognition - Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration the University expects to be entitled to in exchange for those goods or services. Generally, the University's contracts with customers have a duration of one year or less.

Tuition and fees, and room and board revenues are derived from degree programs as well as summer and continuing education programs and includes tuition, related fees, and room and board. Tuition and fees are recognized ratably over the academic period of the course or program offered based on time elapsed, and scholarships awarded to students reduce the amount of revenue recognized. The University's individual schools have various billing and academic cycles and the majority of our programs are designed to be completed within the fiscal year. Room and board revenue is recognized ratably over the course of the contracted time students are living on campus.

Student tuition, fees, room and board at published rates is summarized as follows for the years ended June 30, 2020 and 2019 (in thousands of dollars):

Tuition and fees, room and board	2020	2019
Tuition and fees	\$ 610,338	\$ 579,395
Room and board	43,006	50,078
Total	\$ 653,344	\$ 629,473
Financial aid applied to tuition and fees, room and board	\$ 144,531	\$ 148,891
Financial aid in excess of student charges, reported as other expenses	5,416	4,371
Total	\$ 149,947	\$ 153,262

The University receives sponsored research support from governmental and private sources. Certain sponsored arrangements are considered exchange arrangements, and revenue under these agreements is recognized based on the University's fulfillment of the contract, which is typically based on costs incurred or the achievement of milestones. Other sponsored support is considered contribution revenue in accordance with ASU 2018-08 *Clarifying the scope and accounting guidance for contributions received and contributions made (Topic 958)*, which is recognized when any donor-imposed conditions (if any) have been met.

Clinical and other educational activities include clinical revenues generated at the Veterinary school and Dental school, royalty income, rental income and revenues from a variety of other activities, which are subject to ASU 2014-09, *Revenue from Contracts with Customers (ASC 606)*, and are recognized at the point in time goods or services are provided. Clinical revenues are recorded at the transaction price estimated to reflect the total consideration due from patients and third-party payors in exchange for providing veterinary and dental services. Clinical services are considered a single performance obligation. Revenues are recognized as these performance obligations are fulfilled.

Clinical and other educational activities are summarized as follows for the years ended June 30, 2020 and 2019 (in thousands of dollars):

Clinical and other educational activities	2020	2019
Veterinary and Dental clinical	\$ 78,080	\$ 87,635
Other sources	40,463	44,434
Total	\$ 118,543	\$ 132,069

Auxiliary services exist to furnish goods or services to students, faculty, staff, or incidentally to the general public, and charges a fee directly related to, although not necessarily equal to, the cost of the goods or services. The distinguishing characteristic of auxiliary services is that they are managed as an essentially self-supporting activity. Auxiliary services revenue includes revenues from contracts with customers to provide conferences, parking services, and other miscellaneous activities and are recognized at the point in time goods or services are provided.

Tax Status—The University is a not-for-profit institution that is tax-exempt under Section 501(c)(3) of the Internal Revenue Code. US GAAP requires the University to evaluate tax positions taken by the University and recognize a tax liability (or asset) if the University has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. Tufts has analyzed the tax positions taken and has concluded that as of June 30, 2020 and 2019, there are no significant uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements.

Cash and Cash Equivalents—Short-term investments with maturities at the date of purchase of three months or less are classified as cash and cash equivalents. Certain balances meeting the definition of cash equivalents have been classified as investments as a result of the University's intent to segregate funds from cash available for current operations. Certain restricted cash balances have been classified as other assets and intermediate-term investments for the same intention. These amounts are identified as restricted cash in the Consolidated Statements of Cash Flows.

Land, Buildings, and Equipment—Land, buildings, and equipment are stated at cost at date of purchase or fair value at date of donation in the case of gifts. Depreciation is provided using the straight-line method over the assets'

estimated useful lives, which range from 15 to 60 years for land improvements, 10 to 60 years for buildings, 3 to 20 years for equipment and furnishings and technology software.

Perpetual Trusts, Life Income, and Annuity Agreements—The University has an interest in various perpetual trusts, irrevocable charitable remainder trusts, and life income and annuity agreements. Assets held in these trusts and agreements, which are administered by the University or third-party trustees, are included in investments and totaled approximately \$62,490,000 and \$63,380,000 at June 30, 2020 and 2019, respectively. Contributions are recognized at the date the trusts or annuity agreements are established. The primary unobservable input used in the fair value measurement of the charitable remainder trust and life income and annuity assets is the discount rate. Significant fluctuation in the discount rates utilized in this calculation could result in a significant change in fair value. The primary unobservable inputs used in the fair value measurement of these underlying securities held by the trust. Significant fluctuation in the market value of these underlying securities could result in a material change in fair value. Liabilities associated with life income and annuity agreements are recorded at the present value of the estimated future payments to be made to the donors and/or other beneficiaries by the University. The liabilities associated with life income and annuity agreements are adjusted during the term of the life income agreement or annuity for changes in the value of the assets, accretion of the discount and other changes in the estimates of future payments. The liabilities are included in accounts payable and accrued expenses and totaled approximately \$12,300,000 and \$12,700,000 at June 30, 2020 and 2019, respectively.

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

New Accounting Pronouncements— On July 1, 2019, the University adopted ASU 2016-15 - *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which provides clarification on classifying a variety of activities within the Statements of Cash Flows. The adoption of this standard did not have a material impact to the University's Statements of Cash Flows.

On July 1, 2019, the University adopted ASU 2016-18 - *Statement of Cash Flows: Restricted Cash.* Under this new guidance, the University must identify all cash, cash equivalents, and amounts generally described as restricted cash or cash equivalents within the Statements of Financial Position for inclusion in the beginning and ending totals within the Statements of Cash Flows. The University has evaluated and applied this guidance on a retrospective basis and included all applicable cash balances within the Statements of Cash Flows. The University made the policy election to exclude cash equivalents, which are included in long-term investments in the Statements of Financial Position, from the total cash, cash equivalents and restricted cash in the Statements of Cash Flows.

On July 1, 2019, the University early adopted ASU 2018-13 - Fair Value Measurement: Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement. Following this new guidance, the University is no longer required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy. For investments in certain entities that calculate net asset value, the requirement to disclose the estimated period of time over which the underlying assets might be liquidated is modified to only require disclosure if the investee has communicated the timing to the University or announced the timing publicly.

On July 1, 2019, the University adopted ASU 2017-07 - Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. This guidance requires the service cost component of net periodic benefit costs for pension and other postretirement benefits to be presented as a component part of employee benefit expense. The other components of net periodic benefit costs, such as interest, expected return on plan assets, and amortization of net actuarial gains and losses, are required to be presented outside of operating activities. This change is reflected in the University's Statement of Activities.

Reclassification—Certain June 30, 2019 balances and amounts previously reported have been reclassified to conform to the June 30, 2020 presentation. The University reclassified restricted cash on the Consolidated Statements of Cash Flows per ASU 2016-18 and reclassified payables for investments purchased to investments, long-term to improve reporting. Where applicable, changes to financial reporting and presentation have been applied to the prior period comparatives shown throughout the University's financial statements.

Subsequent events—The University has evaluated the impact of subsequent events through November 5, 2020, representing the date the financial statements were issued and has concluded that there were no such events that require adjustment to the audited consolidated financial statements or disclosure in the notes to the audited consolidated financial statements other than as identified in Note 8.

Prior Year Summarized Information—The consolidated statement of activities includes certain prior-year summarized comparative information in total, but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the University's consolidated statement of activities for the year ended June 30, 2019, from which the summarized information was derived.

COVID-19 Pandemic— In March of 2020, the outbreak of COVID-19 caused domestic and global disruption in operations for institutions of higher education. As a result of the pandemic, the University moved quickly to remote work and learning in March to protect the health and safety of our community. The University suspended in-person education and other campus-based activities and provided a combination of credits and refunds for a portion of residence and dining revenues.

For fiscal year 2020, the primary financial impact was the revenue loss in housing and dining and the loss of clinic income in the Dental and Veterinary Schools, where only emergency patients were able to be seen as per state guidelines on physical distancing. The University acted quickly and put in place several measures to control expenses and conserve cash, including holds on wage increases, hiring, discretionary spending and capital projects. The University received funding under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), used to provide emergency financial aid to students during the year ended June 30, 2020.

To address the potential impacts on future revenues and expected incremental costs required as a result of COVID-19, such as the transition to online/hybrid education and enhanced work environments and required investments in testing as well as health and safety protocols, the University has taken proactive budget actions for various scenarios. The full impact of COVID-19 and the scope of any adverse impact on the University's finances and operations is uncertain at this time.

3. RECEIVABLES AND OTHER ASSETS

Receivables represent amounts due from students, grants and contracts, clinical billings, and other sources. Other assets includes prepaid expenses and inventories, funded status of postretirement health care plan as well as approximately \$11,000 and \$9,069,000 of restricted funds held under bond agreement at June 30, 2020 and 2019, respectively. Intangible assets consist of patents that were received from the donation of BrainGate (see Note 1). The components at June 30, 2020 and 2019 are as follows (in thousands):

	2020	2019
Grant receivables	\$ 21,724	\$ 29,514
Student receivables, net	3,269	2,079
Clinic receivables, net	1,615	4,218
Other receivables, net	6,625	6,630
Receivables, net	33,233	42,441
Other assets	7,070	15,115
Intangible assets	8,600	
Total	<u>\$ 48,903</u>	\$ 57,556

4. CONTRIBUTIONS RECEIVABLE

Contributions receivable at June 30, 2020 and 2019, which are recorded at fair value, consisted of the following (in thousands):

	2020	2019
Unconditional promises scheduled to be collected in:		
Less than one year	\$ 50,342	\$ 43,481
One year to five years	35,694	40,073
More than five years	8,108	7,950
Gross contributions receivable	94,144	91,504
Less allowance for uncollectible amounts	(6,518)	(5,976)
Less discount to present value	(3,097)	(5,372)
Total	\$ 84,529	\$ 80,156

A review of pledges is periodically made with regard to collectability. As a result, the allowance for pledges that may not be collected is adjusted, and some pledges have been cancelled and are no longer recorded in the financial statements. The University's indicative 1 to 10-year taxable unsecured borrowing rate is used to discount pledges receivable upon receipt. The discount was calculated using rates ranging from 0.81% to 2.55% for the years ended June 30, 2020 and 2019. The University's pledges receivable have been categorized as Level 2 assets under the fair value hierarchy.

In addition, at June 30, 2020 and 2019, the University had approximately \$33,000,000 and \$25,000,000, respectively, of conditional promises from donors that are not recognized as assets in the consolidated statements of financial position. These conditional promises consisted of pledges for endowment, construction and other purposes. As of June 30, 2020, and 2019, the University had approximately \$446,510,000, and \$223,773,000, respectively, in funding awarded but not yet expended related to conditional contributions from sponsored support where the condition had not yet been met. Funding received in advance of recognition is recorded as deferred revenue. Included in deferred revenue at June 30, 2020 and 2019 are approximately \$11,769,000 and \$9,849,000, respectively, of sponsored receipts, that have not been expended and cannot yet be recognized as revenue due to having a barrier and right of return as defined under ASU 2018-08.

Contributions receivable at June 30, 2020 and 2019 were intended for the following purposes (in thousands):

	2020	2019
Endowment for educational and general purposes	\$ 29,743	\$ 35,343
Construction and modernization of plant	12,492	11,204
Support of current operations	42,294	33,609
Total	\$ 84,529	\$ 80,156

5. NOTES AND STUDENT LOANS RECEIVABLE

Student loans receivables at June 30, 2020 and 2019 consisted of the following (in thousands):

	2020	2019
Student loans receivable	\$ 41,051	\$ 42,968
Less allowance for uncollectible amounts	(334)	(387)
Student receivables, net	\$ 40,717	\$ 42,581
Other notes receivable	350	350
Total	<u>\$ 41,067</u>	\$ 42,931

Loans receivable are principally amounts due from students under U.S. Government-sponsored loan programs, which are subject to significant restrictions. Generally, payment on student loans receivable commences upon graduation and can extend up to 20 years. Interest rates range from 2% to 12% for the years ending June 30, 2020 and 2019.

The University assesses the adequacy of the allowance for doubtful accounts by evaluating the loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the economic environment in which the borrowers operate, the level of delinquent loans, and, where applicable, the existence of any guarantees or indemnifications. In addition to these factors, the University reviews the aging of the loans receivable and the default rate in comparison to prior years. The allowance is adjusted based on these reviews. The University considers the allowance at June 30, 2020 and 2019 to be reasonable and adequate to absorb potential credit losses inherent in the loan portfolio.

6. INVESTMENTS AND FAIR VALUE MEASUREMENTS

The accounting standard for fair value measurement establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the entities' own assumptions about how market participants would value an asset or liability based on the best information available. Valuation techniques used to measure fair value under the accounting standard must maximize the use of observable inputs and minimize the use of unobservable inputs. The accounting standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value.

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. The three levels of inputs are as follows:

- Level 1 Quoted prices in active markets for identical assets or liabilities.
- Level 2 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.
- 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.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The University invests in alternative investments, consisting of hedge funds, private equities, real estate, natural resources, nonmarketable credit and commingled public equity funds through various limited partnerships and similar vehicles. Alternative investments utilize a variety of investment strategies incorporating marketable securities and, in some cases, derivative instruments, all of which are reported at fair value or its equivalent as estimated by management using values provided by external investment managers. Hedge funds consist of limited partnership investments in stocks, bonds, commodities, currencies, derivatives and other instruments and often use non-traditional portfolio management techniques including shorting, leveraging, arbitrage and swaps. Commingled public equity funds consist of investments in commingled investment products that invest in long positions of publicly traded equity. Private equity investments consist of long-term private investment securities. Natural resources consist of private and public investments. Nonmarketable credit securities consist of private investments. Estimates of fair value may differ significantly from values that would have been used had a ready market for the investments existed. The University is obligated under certain limited partnership agreements and other alternative investment arrangements to advance additional funding periodically up to specified levels.

Investment fund managers may invest in derivatives, and the value of these positions is reflected in the NAV of the respective funds. Separately the University may employ derivatives to hedge its risks and to rebalance its market exposures. The University also has ownership in certain investments that are classified as equity method investments.

The following tables present the financial instruments carried at fair value as of June 30, 2020, and 2019, by the fair value hierarchy defined above (in thousands):

Assets as of June 30, 2020:	ii N	oted Prices n Active Markets Level 1)	Oł	gnificant Other oservable Inputs Level 2)	Uno	gnificant bservable Inputs Level 3)	As	sured at Net sset Value (NAV)]	[°] otal Fair Value
Investments:										
Short-term investments	\$	51,547	\$	-	\$	-	\$	-	\$	51,547
Equity securities		285,790		-		200		-		285,990
Equity derivatives		-		1,086		-		-		1,086
Commingled public equity		-		-		-		435,284		435,284
Fixed income securities		251,010		-		-		6,311		257,321
Hedge funds		-		-		961		408,586		409,547
Private equities		-		-		5,391		517,547		522,938
Non-marketable credit		-		-		-		51,701		51,701
Real estate		4,454		-		6,954		111,367		122,775
Natural resources		-		-		-		103,408		103,408
Perpetual trusts		-		-		31,222		-		31,222
Total Investments	\$	592,801	\$	1,086	\$	44,728	\$	1,634,204	\$	2,272,819
Equity method investment (see Note 13)		-		-		-		-		10,150
		592,801		1,086		44,728		1,634,204		2,282,969
Liabilities:										
Interest rate swaps liability	\$	-	\$	91,233	\$	-	\$	-	\$	91,233

Assets as of June 30, 2019:	i	oted Prices n Active Markets Level 1)	Ob	gnificant Other servable Inputs Level 2)	Un	gnificant observable Inputs Level 3)	As	sured at Net set Value (NAV)	Fotal Fair Value
Investments:									
Short-term investments	\$	45,722	\$	-	\$	-	\$	-	\$ 45,722
Equity securities		299,827		-		200		-	300,027
Commingled public equity		-		-		-		376,528	376,528
Fixed income securities		273,529		-		143		37,626	311,298
Hedge funds		-		-		2,444		537,261	539,705
Private equities		-		-		11,999		452,769	464,768
Non-marketable credit		-		-		-		58,656	58,656
Real estate		4,448		-		11,210		107,433	123,091
Natural resources		-		-		-		109,914	109,914
Perpetual trusts		-		-		31,688		-	31,688
Total Investments	\$	623,526	\$	-	\$	57,684	\$	1,680,187	\$ 2,361,397
Equity method investment (see Note 13)		-		-		-		-	10,499
		623,526		-		57,684		1,680,187	2,371,896
Liabilities:		,							
Interest rate swaps liability	\$	-	\$	68,917	\$	-	\$	-	\$ 68,917

In accordance with ASU 2015-07, certain investments that are measured at fair value using the NAV per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of financial position.

Excluded from the tables above, but included in total investments at June 30, 2020 and 2019, are net investment receivables of approximately \$52,959,000 and net investment payables of approximately \$11,768,000, respectively.

In addition, the tables above exclude approximately \$40,000,000 and \$17,527,000 representing cash subscriptions made in two investments pending settlement at June 30, 2020 and 2019, respectively.

The value of certain alternative investments represents the ownership interest in the NAV of the respective partnership. The fair values of the securities held by limited partnerships that do not have readily determinable fair values are determined by the general partner and are based on appraisals, or other estimates that require varying degrees of judgment. These values are reviewed by management of the University. If no public market exists for the investment securities, the fair value is determined by the general partner or management for securities held directly, taking into consideration, among other things, the cost of the securities, prices of recent significant placements of securities of the same issuer, and subsequent developments concerning the companies to which the securities relate. The University has performed significant due diligence around these investments to ensure NAV is an appropriate measure of fair value as of June 30.

Interest rate swaps, held for investment purposes, are valued using both observable and unobservable inputs, such as quotations received from the counterparty, dealers or brokers, whenever available and considered reliable. In instances where models are used, the value of the interest rate swap depends upon the contractual terms of, and specific risks inherent in the instrument as well as the availability and reliability of observable inputs. Such inputs include market prices for reference securities, yield curves, credit curves, measures of volatility, prepayment rates, assumptions for nonperformance risk, and correlations of such inputs. The interest rate swap arrangements have inputs which can generally be corroborated by market data and are therefore classified within Level 2.

Beneficial and perpetual trusts held by third parties are valued at the present value of the future distributions expected to be received over the term of the agreement and are classified as Level 3.

The methods described above may 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 also invests directly in private companies that are primarily valued using industry standard methodologies, as applicable. Management strives to corroborate information from third-party sources for relevance and accuracy; these valuations are subject to significant review and consideration by management. The valuation procedures performed on these assets are based on industry standard processes for each respective asset class. The inputs utilized in any valuation model may be significant and unobservable and require a certain degree of judgment. Management examines market data and collaborates closely with industry experts to attempt to arrive at the best estimation of fair value for each respective asset. While the inputs described below represent the range of inputs utilized as of the measurement date, these inputs may change over time, which may have a material effect on the valuation of these types of investments in the future.

Level 3 investments have been valued using pending or recent market transactions.

The following tables include roll forwards of investments classified by the University within Level 3 as of June 30, 2020 and 2019. Transfers between levels are recognized at the beginning of the reporting period. There were no transfers between levels in 2020 and 2019.

	Equ	iity					Private			I	Perpetual		Total
	Secu	rities	Fixe	d Income	Hee	dge Funds	Equities	Re	eal Estate		Trusts	In	vestments
Fair value, July 1, 2019	\$	200	\$	143	\$	2,444	\$ 11,999	\$	11,210	\$	31,688	\$	57,684
Sales		-		(143)		-	-		-		-		(143)
Unrealized and realized													
gains(losses), net		-		-		(1,483)	(6,608)		(4,256)		(466)		(12,813)
Fair value, June 30, 2020	\$	200	\$	-	\$	961	\$ 5,391	\$	6,954	\$	31,222	\$	44,728
	Equ	iity					Private			I	Perpetual		Total
	Equ Secur	-	Fixe	d Income	Не	dge Funds	Private Equities	Re	eal Estate]	Perpetual Trusts	In	Total vestments
Fair value, July 1, 2018	1	-	Fixee \$	d Income 2,253	Hee \$	dge Funds 4,133	\$	Re \$	eal Estate -	\$	-	In \$	
Fair value, July 1, 2018 Purchases	Secur	rities				U	 Equities				Trusts		vestments
	Secur	rities 200				U	 Equities		-		Trusts 30,781		vestments 52,031
Purchases	Secur	rities 200		2,253		4,133	 Equities 14,664		-		Trusts 30,781		vestments 52,031 11,210
Purchases Sales	Secur	rities 200		2,253		4,133	 Equities 14,664		-		Trusts 30,781		vestments 52,031 11,210

The following tables present liquidity information for the investments carried at fair value at June 30, 2020, and 2019, respectively.

Redemption Terms as of June 30, 2020	Non- Marketable Credit	Fixed Income	Private Equities	Hedge Funds	Commingled Public Equity Funds	Real Estate	Natural Resources	Total
Monthly, 2-120 days prior written notice	\$ -	\$6,311	\$ -	\$85,564	\$251,174	\$ -	\$	\$343,049
Quarterly, 30-90 days prior written notice	-	-	-	302,158	88,531		-	390,689
Semi-Annually, Annually, 30-90 days prior written notice	-	-	-	-	59,211	-	-	59,211
1-3 Years, 45-120 days prior written notice	-	-	2,240	14,525	76,368	-	-	93,133
1-7 Years (no terms)	45,057	-	310,300	6,339	-	81,000	92,353	535,049
7+ Years (no terms)	6,644	-	205,007	-	-	30,367	11,055	253,073
Total	\$51,701	\$6,311	\$517,547	\$408,586	\$475,284	\$111,367	\$103,408	\$1,674,204
Level 1 securities								592,801
Other investments not subject to redemption							_	108,923
Total Investments							_	\$2,375,928

					Commingled			
	Non- Marketable	Fixed	Private	Hedge	Public Equity	Real	Natural	
Redemption Terms as of June 30, 2019	Credit	Income	Equities	Funds	Funds	Estate	Resources	Total
Monthly, 2-120 days prior written notice	\$ -	\$37,626	\$ -	\$121,580	\$266,691	\$ -	\$	\$425,897
Quarterly, 30-90 days prior written notice	-	-	-	208,432	70,986		-	279,418
Semi-Annually, Annually, 30-90 days prior written notice	-	-	-	63,353	10,838	-	-	74,191
1-3 Years, 45-120 days prior written notice	-	-	2,984	133,371	45,540	-	-	181,895
1-7 Years (no terms)	49,500	-	286,281	10,525	-	78,756	91,018	516,080
7+ Years (no terms)	9,156	-	163,504	-	-	28,677	18,896	220,233
Total	\$58,656	\$37,626	\$452,769	\$537,261	\$394,055	\$107,433	\$109,914	\$1,697,714
Level 1 securities								623,526
Other investments not subject to redemption								56,415
Total Investments								\$2,377,655

The University had unfunded commitments of approximately \$292,539,000 at June 30, 2020 which consisted of approximately \$155,552,000 in private equities, \$90,574,000 in real estate, \$19,597,000 in natural resources, and \$26,816,000 in non-marketable credit.

The total return on investments for the years ended June 30, 2020 and 2019 is as follows (in thousands), net of investment expenses:

		2019		
Dividends and interest	\$	13,726	\$	15,920
Net realized and unrealized gains		52,551		68,345
Total return on investments		66,277		84,265
Investment return utilized		(105,486)		(103,283)
Investment return (utilized)/reinvested, net	\$	(39,209)	\$	(19,018)

7. LAND, BUILDINGS, AND EQUIPMENT

Land, buildings, and equipment at June 30, 2020 and 2019 consisted of the following (in thousands):

	2020		2019
Land and land improvements	\$ 79,1	59 \$	79,144
Buildings	1,644,8	97	1,527,419
Construction in progress	94,2	29	134,960
Equipment and furnishings	246,8	69	239,981
	2,065,1	54	1,981,504
Less accumulated depreciation	(909,1	94)	(856,224)
Total	\$ 1,155,9	60 \$	1,125,280

Depreciation expense charged to operations was approximately \$66,248,000 and \$61,971,000 in 2020 and 2019, respectively. Net interest cost capitalized in fiscal 2020 and 2019 was approximately \$2,494,000 and \$2,220,000, respectively.

Maintenance and repairs are expensed as incurred, and improvements are capitalized. When assets are retired or disposed of, the cost and accumulated depreciation thereon are removed from the accounts and gains or losses are included in the statement of activities.

8. BONDS AND NOTES PAYABLE

Bonds and notes payable at June 30, 2020 and 2019 consisted of the following (in thousands):

	2020		2019
Massachusetts Health and Educational Facilities Authority ("MHEFA"):			
Series G, variable rate bonds, 5.12% average rate for 2020,			
par value of \$27,900, due February 2024 - February 2026	\$ 24,300	\$	24,300
Series M, fixed rate bonds at 5.25-5.50%, par value of \$59,150,			
due February 2020 - February 2028	49,130		56,020
Series N-1, variable rate bonds, 4.68% average rate for 2020, par value of			
\$86,400, due August 2029 - August 2040	57,100		57,100
Series N-2, variable rate bonds, 4.56% average rate for 2020, par value of			
\$54,200, due August 2022 - August 2034	54,200		54,200
Massachusetts Development Finance Agency ("MDFA"):			
Series P, multi-mode bond, 5.75% average rate for 2020, par value of			
\$49,835, due February 2029 - February 2036	49,835		49,835
Series Q, fixed rate bonds at 3.75%-5%, par value of \$69,575, due August 2020 - August 2045 Series R, variable rate bonds, 3.75% average rate for 2020, par value of \$34,000,	65,220		67,210
due August 2029-2048	34,000		34,000
JPM tax exempt line of credit, fixed rate 2.65%, par value of \$28,000,	,		,
due May 2026	18,646		21,853
Tufts Issue 2012A, taxable fixed rate bond at 5.017%, par value of \$250,000,			
due April 2112	250,000		250,000
Tufts Issue 2017A, taxable fixed rate bond at 4.005%, par value of \$130,000,			
due August 2053 - August 2057	130,000		130,000
Cummings Property, LLC at 4%, par value of \$1,400, due February 2026	861		994
Bank of America note fixed rate 2.54%, par value of \$10,200, due May 2026	10,200		10,200
Capital Leases-various imputed interest rates, due through 2024	 214		266
	743,706		755,978
Net unamortized bond premium	6,894		8,102
Net unamortized debt issuance costs	 (5,164)	<u> </u>	(5,350)
Total bonds and notes payable	\$ 745,436	\$	758,730

The average rates reflected above for the variable rate bonds are computed based on the variable interest, fees and related swap interest payments. Series P is a long-term multi-mode bond (final maturity 2036), the first mode of which was a 5-year put bond with a 3% coupon which was due on February 16, 2016. The second mode is a 15-year bank purchase mode with a variable bank purchase rate which is due February 17, 2031. The average rate for the fiscal 2020 and 2019 was 5.75% and 5.74% respectively.

During fiscal year 2019, the University sold the building at 35 Kneeland Street, Boston and used the proceeds to retire approximately \$27,100,000 of associated Series N-1 bonds and defease approximately \$2,365,000 of associated Series Q bonds. In addition, the University issued \$34,000,000 MDFA Revenue Bonds, Series R in December 2018. The University issued the bonds at par, due August 2048.

Scheduled aggregate principal repayments on bonds and notes payable at June 30, 2020 are as follows (in thousands):

Fiscal Year Ending	Scheduled Principal Maturities
2021	\$31,328
2022	32,158
2023	33,122
2024	12,869
2025	18,787
Thereafter	615,442
Total	\$743,706

As of June 30, 2020, included in the University's debt is \$169,600,000 of variable rate demand bonds ("VRDBs"). The University has entered into standby bond purchase agreements with a diverse group of financial institutions to secure bond repayment and interest obligations associated with its VRDBs. In fiscal year 2012, the University replaced the three standby bond purchase agreements with substantially similar agreements with other financial institutions. In fiscal year 2019, the University entered into a fourth standby bond purchase agreement. These agreements expire in October 2020, March 2021 and December 2021. In the event a bond cannot be remarketed, the bond may be "put" to the standby bond purchase agreement providers, resulting in a loan to fund redemption of the bond. If it is assumed that outstanding bonds are put during fiscal year 2021, the maximum aggregate scheduled principal repayments under the VRDBs would be as follows: \$56,533,000 in 2021, \$56,533,000 in 2022 and \$56,534,000 in 2023.

In October 2020, the University terminated two of the standby bond purchase agreements following the conversion of the bonds to the bank purchase mode with a variable bank purchase rate. The University intends to renew or execute a bank direct purchase for the third agreement, due to expire in March 2021, but not before the issuance date of these financial statements. As a result, approximately \$19,000,000 is included in the above table for each fiscal year ending 2021, 2022 and 2023. Since the third agreement is in place until March 2021, the bonds would only become due if the bonds were not remarketed or if the agreement was not renewed or converted.

In September 2020, the University closed on a \$75 million line of credit to support investment operations. The line of credit will be used for portfolio management purposes to reduce the need to make short-term trades to maintain cash levels during transactions and has a one-year term.

Interest Rate Agreements— The University has entered into derivative transactions for the purpose of reducing the impact of fluctuations in interest rates and reducing interest expense. The University has entered into fixed-to-floating and floating-to-fixed interest rate swaps and basis swaps. The following summarizes the terms for each of the interest rate swap agreements as of June 30, 2020 and 2019 (in thousands).

Swaps	Interest Rate Swap	Interest Rate Swap	Interest Rate Swap	Interest Rate Swap	Interest Rate Swap	Total
Debt Hedged	(Series P)	(Series G, N-1 & R)	(Series N-1 & R)	(Series N-1)	(Series N-2)	
Notional Amount	\$50,500	\$39,900	\$40,000	\$34,000	\$54,000	
Termination Date	February 15, 2036	August 15, 2033	August 15, 2040	August 15, 2036	August 15, 2034	
Fair Value June 30, 2020	(\$27,100)	(\$10,446)	(\$18,506)	(\$17,426)	(\$17,755)	(\$91,233)

Swap Agreements as of June 30, 2020

Swap Agreements as of June 30, 2019

Swaps	Interest Rate Swap	Total				
Debt Hedged	(Series P)	(Series G & N-1)	(Series N-1)	(Series N-1)	(Series N-2)	
Notional Amount	\$50,500	\$39,900	\$40,000	\$34,000	\$54,000	
Termination Date	February 15, 2036	August 15, 2033	August 15, 2040	August 15, 2036	August 15, 2034	
Fair Value June 30, 2019	(\$21,684)	(\$8,651)	(\$12,106)	(\$12,814)	(\$13,662)	(\$68,917)

The University reported the fair value of its interest rate swap agreements in the statement of financial position as a liability of \$91,233,000 and \$68,917,000 at June 30, 2020 and 2019, respectively. The change in fair market value of approximately \$22,316,000 and \$14,193,000 for the years ended June 30, 2020 and 2019, respectively, is included in the statement of activities as net unrealized (loss) on interest rate agreements.

The estimated market value of the interest rate exchange agreements at June 30, 2020 and June 30, 2019, was computed using the net present value of fixed and floating future cash flows, with floating future cash flows estimated through the use of forward interest rate yield curves adjusted for non-performance risk. These financial instruments necessarily involve counterparty credit exposure. The counterparties for these interest rate exchange transactions are a diversified group of major financial institutions that meet the University's criteria for financial stability and credit worthiness.

9. NET ASSETS

Net assets at June 30, 2020 and 2019 consisted of the following (in thousands):

	Without donor restrictions	With donor restrictions	2020 Total
Endowment	\$ 744,733	\$ 1,192,540	\$ 1,937,273
Invested in physical plant	404,080	-	404,080
Operating	91,866	138,916	230,782
Building projects	61,541	16,675	78,216
Student loans	20,252	21,798	42,050
Total	\$ 1,322,472	\$ 1,369,929	\$ 2,692,401
	Without donor restrictions	With donor restrictions	2019 Total
Endowment	\$ 746,030	\$ 1,163,577	\$ 1,909,607
Invested in physical plant	433,545	-	433,545
Operating	58,170	122,929	181,099
Building projects	81,607	21,761	103,368
Student loans	22,243	22,794	45,037
Total	\$ 1,341,595	\$ 1,331,061	\$ 2,672,656

Endowment consists of resources that have been restricted by the donor, trust, split interest agreement, or designated by the Board of Trustees for investment to provide future resources to support the University's activities. Endowment with donor restrictions includes unappropriated gains of approximately \$315,239,000 and \$307,297,000 in 2020 and

2019, respectively. Operating without donor restrictions includes funds that have been internally designated for use by various schools, departments, and programs throughout the University.

The University's endowment consists of individual donor restricted endowment funds and board-designated endowment funds for a variety of purposes plus the following where the assets have been designated for endowment: pledges receivables, split interest agreements, and other net assets. The net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions. Board-designated endowment funds at June 30, 2020 and 2019 total the endowment without donor restrictions amount in the above table, and are earmarked for the following:

	2020	2019
General university support	\$ 564,285	\$ 569,100
Scholarships and fellowships	37,417	37,726
Professorships	26,062	24,498
Other purposes	116,969	114,706
Total	\$ 744,733	\$ 746,030

Note: Other purposes include several categories, including but not limited to, departmental, innovative education, faculty development, maintenance, research, library, prizes, books, lectureships, and other miscellaneous purposes

Changes in endowment net assets for the years ended June 30, 2020 and June 30, 2019 are as follows (in thousands):

	hout donor strictions	With donor restrictions	2020 Total
Endowment net assets, beginning of year	\$ 746,030	\$ 1,163,577	\$ 1,909,607
Total investment return, net	10,395	40,029	50,424
Contributions	1,768	33,602	35,370
Appropriation of endowment assets for expenditure	(36,243)	(45,201)	(81,444)
Other changes, net	22,783	533	23,316
Endowment net assets, end of year	\$ 744,733	\$ 1,192,540	\$ 1,937,273
	hout donor strictions	With donor restrictions	2019 Total
Endowment net assets, beginning of year	\$ 751,166	\$ 1,141,870	\$ 1,893,036
Total investment return, net	26,032	34,466	60,498
Contributions	1,134	31,855	32,989
Appropriation of endowment assets for expenditure	(33,683)	(43,749)	(77,432)
Other changes, net	1 201	(865)	516
ould changes, net	 1,381	(003)	 510

Other changes include additions or deductions to the endowment from net transfers resulting from changes in donor restrictions or University designations.

Total endowment assets classified with donor restrictions consist of the following components (in thousands):

	2020	2019
Spendable:		
Subject to time restriction	\$ 82,020	\$ 96,140
Restricted for program support	381,619	373,552
Total net assets with spendable restrictions	\$ 463,639	\$ 469,692
Non-Spendable:		
Restricted for scholarship support	\$ 360,504	\$ 331,091
Restricted for faculty support	155,134	149,102
Restricted for program support	213,263	213,692
Total net assets with non-spendable restrictions	\$ 728,901	\$ 693,885
Total net assets with donor restrictions	\$ 1,192,540	\$ 1,163,577

Underwater Endowment Funds

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the value of the initial and subsequent donor gift amounts (underwater). When underwater endowment funds exist, they are classified as a reduction of net assets with donor restrictions. Underwater endowment funds reported in net assets with donor restrictions were approximately \$1,487,000 and \$71,000 as of June 30, 2020 and 2019, respectively.

10. FUNCTIONAL CLASSIFICATION OF EXPENSES

The University reports operating expenses in its consolidated statement of activities by natural classification. Interest, depreciation, operations and maintenance expenses have been allocated to functional expense classifications based on square footage utilized. Operating expenses by functional category for the years ended June 30, 2020 and 2019 consisted of the following (in thousands):

		Ju	ne 30, 2020		
	 struction & Research	-	Clinical & Auxiliary	General & ministration	Total
Salaries, wages and benefits	\$ 289,653	\$	86,651	\$ 193,680	\$ 569,984
Materials, supplies and other	23,890		78,098	40,304	142,292
Purchased services	51,759		10,430	21,774	83,963
Facility and maintenance costs	33,432		7,923	12,651	54,006
Travel	8,494		873	2,502	11,869
Allocations:					
Depreciation	29,822		21,176	15,250	66,248
Interest	14,100		10,012	7,212	31,324
Operations and maintenance	 27,096		4,163	(31,259)	-
Total	\$ 478,246	\$	219,326	\$ 262,114	\$ 959,686

		Ju	ne 30, 2019		
	 struction & Research	-	Clinical & Auxiliary	General & ministration	Total
Salaries, wages and benefits	\$ 283,607	\$	83,146	\$ 189,401	\$ 556,154
Materials, supplies and other	32,745		80,089	28,664	141,498
Purchased services	47,930		12,209	21,431	81,570
Facility and maintenance costs	34,405		8,319	13,187	55,911
Travel	10,835		1,269	5,678	17,782
Allocations:					
Depreciation	27,897		19,808	14,266	61,971
Interest	13,903		9,872	7,109	30,884
Operations and maintenance	26,609		4,088	(30,697)	-
Total	\$ 477,931	\$	218,800	\$ 249,039	\$ 945,770

11. BENEFIT PLANS

Defined Contribution Plan—The University sponsors a defined contribution retirement plan under Section 401(a) of the Code, which is available to eligible faculty and administrative staff. All contributions are funded by the University and are subject to a vesting schedule. The University's contributions to the plan amounted to approximately \$34,150,000 and \$32,255,000 in 2020 and 2019, respectively.

The University also offers a supplemental retirement plan under Section 403(b) of the Code, which is fully funded by voluntary employee contributions.

Deferred Compensation Plans—The University maintains two separate plans under Section 457(b) of the Code for eligible officers, faculty and administrative staff. The University funded the Officers' Plan with approximately \$152,000 and \$137,000 in 2020 and 2019, respectively. Under the terms of the Faculty and Administrative Staff Plan, no contributions are made by the University but are fully funded by voluntary employee contributions. The assets and related liabilities of these plans are recorded in investments and accrued liabilities in the consolidated financial statements and total approximately \$24,400,000 and \$22,522,000 at June 30, 2020 and 2019, respectively. The University also maintains a plan under Section 457(b) of the Code for eligible faculty and administrative staff that was closed to future participants in 1989. The University funded this plan with approximately \$4,000 at June 30, 2020 and 2019, respectively. The investment assets and related liabilities of these plans, which total approximately \$6,800,000 and \$6,540,000 in 2020 and 2019, respectively, are recorded in investments and accrued liabilities in the consolidated statements of financial position.

Health and Welfare Benefit Plan—The University provides postretirement health care benefits to eligible retired employees and their eligible spouses. Retirees share in the cost of their health care benefits through co-payments and deductibles related to years of service and date of retirement. Employees who were hired after December 31, 1993, must pay for the entire cost of their benefit when they retire. The University established a trust to fund the postretirement health care benefits for most of the eligible employees. The trust qualifies as a "voluntary employees beneficiary association" ("VEBA") under the provisions of Section 501(c)(9) of the Code in order that the trust be exempt from certain taxes.

Changes in the University's postretirement health care benefit obligation for the years ended June 30, 2020 and 2019 are as follows (in thousands):

	2020		2019
Change in Accumulated Postretirement Benefit Obligation (APBO):			
APBO at prior fiscal year end	\$	13,218	\$ 14,788
Employer service cost		1	4
Interest cost		447	601
Actuarial loss (gain)		409	(1,313)
Plan participants' contributions		973	951
Benefits paid from plan assets ¹		(2,177)	(1,813)
APBO at current fiscal year end	\$	12,871	\$ 13,218

¹Net of retiree contributions

The funded status of the University's postretirement health care plan and the amounts recognized in the consolidated statements of financial position at June 30, 2020 and 2019 are as follows (in thousands):

		2019		
Change in Plan Assets:				
Fair value of assets at prior fiscal year end	\$	14,539	\$	16,972
Actual return on assets ²		51		612
Employer contributions for key employees		10		0
Plan participants' contributions		973		951
Benefits paid ¹		(2,177)		(1,813)
Transfers		0		(2,183)
Fair value of assets at current fiscal year end	\$	13,396	\$	14,539
Funded Status	\$	526	\$	1,321

¹Net of retiree contributions ²Net of administrative expenses

Amounts recognized in the Statement of Financial Position (in thousands):

	2020	2019
Receivables and other assets, net	\$ 526	\$ 1,321
Net amount recognized in the statement of financial position	\$ 526	\$ 1,321

In fiscal year 2020, the University updated the participant mortality table for actuarial assumptions from RP-2018 to PRI-2012. In fiscal year 2020, the University updated the projections scales table from MP-2018 to MP-2019.

There are no amounts expected to be recognized in the net periodic cost in the following year as there were no events creating any prior service cost and there is no unrecognized actuarial (gain) loss over the 10% corridor this year.

The components of net periodic benefit cost (in thousands):

	2020			2019
Employer service cost	\$	1	\$	4
Interest cost		447		601
Expected return on assets		(1,076)		(1,249)
Subtotal		(628)		(644)
Net prior service (credit) cost amortization		(2,219)		(2,219)
Net loss amortization		(105)		(27)
Net periodic postretirement (income) benefit cost	\$	(2,952)	\$	(2,890)
Total changes recognized in unrestricted net assets	\$	794	\$	1,570

The weighted-average assumptions to determine obligations are as follows:

		2020	2019
Discount rate at end of year		2.67%	3.53%
The weighted-average assumptions to determine net periodic benefit cost are as for	ollows:		
		2020	2019
Assumptions Used to Determine Benefit Cost			
Discount rate		3.53%	4.28%
Long-term rate of return on assets		7.70%	7.70%
Current health care cost trend rate		6.50%	6.50%
Ultimate health care cost trend rate		4.50%	4.50%
Year of ultimate trend rate		2025	 2022
Effect of 1% Increase in Health Care Cost Trend Rates			
Employer service cost	\$	1,129	\$ 3,882
Interest cost		456,615	 614,609
Total		457,744	\$ 618,491
Change	\$	10,125	\$ 14,099
Percentage change		2.26%	2.33%
Effect of 1% Decrease in Health Care Cost Trend Rates			
Employer service cost	\$	1,090	\$ 3,686
Interest cost		437,649	588,163
Total	\$	438,738	\$ 591,849
Change	\$	(8,881)	\$ (12,543)
Percentage change		(1.98%)	(2.08%)

¹These assumptions were used to calculate Net Periodic Postretirement Benefit Cost (Income) as of the beginning of the year. Rates are expressed on an annual basis where applicable.

The expected future benefit payments net of employee contributions (in thousands):

Expected Future Benefit Payments:	
During fiscal year ending 06/30/2021	\$ 959
During fiscal year ending 06/30/2022	932
During fiscal year ending 06/30/2023	904
During fiscal year ending 06/30/2024	866
During fiscal year ending 06/30/2025	831

The estimated University cash contribution for fiscal year 2020 is \$0.

VEBA Trust Asset Allocation and Investment Strategy—The weighted-average investment allocation of plan assets by category is as follows:

	2020	2019	Target Allocation
Equity securities	56%	57%	56%
Debt securities	29%	28%	29%
Real estate securities	15%	15%	15%
Total	100%	100%	100%

The Health and Welfare Benefit Plan fiduciaries set the investment policy and strategy for investment of plan assets, including selecting investment managers and setting long-term risk and return objectives. The asset allocations are broadly diversified among asset category and within each category, which lowers the expected volatility of the portfolio's return and may protect against negative market environments.

To determine the expected long-term rate of return on plan assets, the University considers the target asset allocations, and the expected return on assets by category.

Equity securities primarily include mutual fund investments in large-cap and small-cap companies primarily located in the United States. Debt securities include high quality, investment grade and international bond funds. Real estate securities consist of mutual fund investments in domestic and international real estate investment trusts. The fair values of the University's post-retirement health care plan assets at June 30, 2019 and 2018 by asset category (in thousands):

at June 30, 2020	Level	Level 2	Level 3	Total
Equity securities	\$ 6,80)9 \$ -	\$ -	\$ 6,809
Debt securities	3,5	62 -	-	3,562
Real estate securities	1,73	80 -		1,780
	\$ 12,1	51\$	\$ -	\$ 12,151
VEBA Trust Investments				
at June 30, 2019	Level	1 Level 2	Level 3	Total
Equity securities	\$ 7,9	98 \$ -	\$ -	\$ 7,998
Debt securities	4,0	87 -	-	4,087
Real estate securities	2,1	15		2,115
	\$ 14,2	00 \$ -	\$ -	\$ 14,200

VEBA Trust Investments

At June 30, 2020 and 2019, the plan also held cash and cash equivalents amounting to approximately \$1,087,000 and \$628,000.

12. LIQUIDITY AND FUNDS AVAILABLE FOR GENERAL EXPENDITURE

As part of the University's liquidity management strategy, the University structures its financial assets to be available as its general expenditures, liabilities and other obligations come due. The University regularly monitors the availability of resources required to meet its operating needs and other contractual commitments, while also striving to maximize the investment of its available funds.

For purposes of analyzing resources available to meet general expenditures over a 12-month period, the University considers all expenditures related to its ongoing mission-related activities, as well as the conduct of services undertaken to support those activities, to be general expenditures.

The University invests excess daily cash in short-term and intermediate-term investments. In accordance with University spending policies, TRP funds appropriated for spending are distributed to University department and program budgets for spending, subject to donor restrictions where applicable; however, cash distributions from the TRP to support the appropriations are available for general liquidity purposes.

To help manage unanticipated liquidity needs, the University has a committed bank line of credit in the amount of \$50,000,000 which it could draw upon through September 2021. The University also has a surplus liquidity fund, an intermediate-term investment invested in fixed income securities, which included approximately \$111,300,000 and \$99,100,000 of unrestricted funds as of June 30, 2020 and 2019, respectively.

The University's financial assets and resources available to meet cash needs for general expenditures within one year of the date of the Consolidated Statements of Financial Position were as follows:

	2020	2019
Cash and cash equivalents	\$ 69,539	\$ 73,854
Investments, intermediate-term, net of unspent bond proceeds	111,326	99,126
Accounts receivable, net	33,233	42,441
Expected pledge and private grant payments available	31,196	20,646
Investments: appropriated for spending in the following year	102,028	89,785
Financial assets available for general expenditure within one year	\$ 347,322	\$ 325,852
Unspent bond proceeds for limited use	\$ 65,550	\$ 84,824
Notes receivable due in more than one year	41,067	42,931
Contributions receivable due in more than one year	53,333	59,510
Board-designated quasi endowment funds	744,733	746,030
Donor-restricted endowment funds less appropriated spending	1,022,814	1,073,792
Annuities and perpetual trusts	61,536	62,428
Other long-term investments	267,941	233,438
Inventories, prepaid expenses and other assets	15,670	15,115
Property, plant, and equipment	1,155,960	1,125,280
Total financial assets	\$3,775,926	\$3,769,200

In addition to these available financial assets, a significant portion of the University's annual expenditures are funded by current year operating revenues including tuition, grant and contract income, clinical and other educational income, and contributions and grants.

As part of total investments, the University has board-designated quasi endowment funds of approximately \$745,000,000 and \$746,000,000 as of June 30, 2020 and 2019, respectively. Although the University does not intend to spend from its board-designated quasi endowment funds other than amounts appropriated for expenditure as part of its annual budget approval process, amounts from its board-designated quasi endowment could be liquidated and made available.

13. RELATED ORGANIZATIONS

Tufts Shared Services, Inc. ("TSS")—The University and Tufts Medical Center, Inc. ("Medical Center") jointly formed TSS, a not-for-profit service corporation, to provide the organization and facilities for coordinating certain education and health services activities. The administrative board of TSS includes equal representation from the University and the Medical Center. The cost of services provided by TSS to the University for the years ended June 30, 2020 and 2019 were approximately \$5,087,000 and \$5,065,000, respectively. The University's 50% ownership investment in TSS has been recorded at approximately \$10,150,000 and \$10,499,000 at June 30, 2020 and 2019 using the equity method of accounting. The accounts of TSS are included in the accompanying consolidated financial statements of the University using the equity method of accounting, in investments and non-operating revenues.

14. CONTINGENCIES AND COMMITMENTS

Outstanding commitments on construction contracts amounted to approximately \$83,138,000 at June 30, 2020.

There are currently several legal cases pending involving labor relations and other matters related to the normal operation of the University. The University believes that the outcome of these cases will have no significant effect on the financial position or results of operations of the University.

Operating Leases—The University has several non-cancelable operating lease commitments at June 30, 2020, with terms in excess of one year for office space. Expenses associated with operating leases totaled approximately \$11,320,000 and \$10,134,000 for the years ended June 30, 2020 and 2019, respectively.

Future minimum lease payments under operating leases are as follows (in thousands):

Fiscal Year 2021	\$8,850
Fiscal Year 2022	6,514
Fiscal Year 2023	4,406
Fiscal Year 2024	3,229
Fiscal Year 2025	2,525
Thereafter	<u>1,559</u>
Total	\$27,083

15. FINANCIAL RESPONSIBLITY

The Department of Education issued regulations on February 23, 2019, which became effective July 1, 2020, regarding additional disclosures deemed necessary to calculate certain ratios for determining sufficient financial responsibility under Federal Title IV regulations. These disclosures require the inclusion of a supplemental schedule to the audited financial statements that contains all financial elements needed to calculate the composite score ratios with a cross-reference to the financial statement line, or notes to the financial statements, that contains the element. The required financial elements as of June 30, 2020 not already included in the financial statements or previous footnotes are in bold text as follows (in thousands):

A.	Secured related party receivables	\$ -
	Unsecured related party receivables	18,115
	Total secured and unsecured related party receivables	\$ 18,115
B.	Property, plant and equipment at June 30, 2019	\$ 1,125,280
	Less: 2020 depreciation and amortization of 2019 and prior property, plant and equipment	(60,572)
	Less: 2020 disposals of 2019 and prior property, plant and equipment	(5,209)
	Property, plant and equipment, pre-implementation	 1,059,499
	Property, plant and equipment - post-implementation with outstanding debt for original purchase	-
	Property, plant and equipment - post-implementation without outstanding debt for original purchase	14,620
	Construction in process	81,841
	Property, plant and equipment, at June 30, 2020	\$ 1,155,960
C.	Annuities with donor restrictions	\$ 7,286

FINANCIAL RESPONSIBILITY SUPPLEMENTAL SCHEDULE FOR THE YEAR ENDED JUNE 30, 2020 (in thousands)

Reference to consolidated financial statements or footnotes Calculation component Amount (\$)

	Expendable net assets	
Statement of financial position - Net assets without donor restrictions	Net assets without donor restrictions	\$ 1,322,472
Statement of financial position - Net assets with donor restrictions	Net assets with donor restrictions	1,369,929
spendable plus non-spendable		
Note 15	Unsecured related party receivable	18,115
Statement of financial position - Land, buildings and equipment, net	Property, plant and equipment, net (includes construction in	
	progress)	
Note 15	Property, plant and equipment - pre-implementation	1,059,499
Note 15	Property, plant and equipment - post-implementation with	-
	outstanding debt for original purchase	
Note 15	Property, plant and equipment - post-implementation without	14,620
	outstanding debt for original purchase	
Note 15	Construction in process	81,841
Note 3	Intangible assets	8,600
Note 11, APBO at current fiscal year end	Post-employment and pension liabilities	12,871
Statement of financial position, Bonds and notes payable	Long-term debt - for long term purposes	
Statement of financial position, Bonds and notes payable	Long-term debt - for long term purposes pre-implementation	745,436
· · · · · ·	Long-term debt - for long term purposes post-implementation	-
Note 15	Annuities with donor restrictions	7,286
Note 9, Spendable endowment assets subject to time restriction	Term endowments with donor restrictions	82,020
	Life income funds with donor restrictions	-
Statement of financial position - Net assets with donor restrictions non-	Net assets with donor restrictions: restricted in perpetuity	756,648
spendable	Total expendable net assets	\$ 1,422,079
		, , ,
	Total expenses and losses	
Statement of activities - Total operating expenses	Total expenses without donor restrictions	959,686
Statement of activities - Non-operating activities: Investment return	Non-Operating and net investment (loss)	62,378
(utilized)/reinvested, net, Net unrealized (loss) on interest rate agreements,		
Other non-operating activities, Change in funded status of postretirement		
health care plan less		
Statement of activities - Nonoperating activities: Investment return	Net investment losses	(32,672
(utilized)/reinvested, net		
Statement of activities - Change in funded status of postretirement health	Pension - related changes other than net periodic costs	(794
care plan		
	Total expenses and losses	\$ 988,598

Equity ratio:

	Modified net assets	
Statement of financial position - Net assets without donor restrictions	Net assets without donor restrictions	\$ 1,322,472
Statement of financial position - Net assets with donor restrictions	Net assets with donor restrictions	1,369,929
spendable plus non-spendable		
Note 3	Intangible assets	8,600
Note 15	Unsecured related party receivables	18,115
	Total modified net assets	\$ 2,665,686
	Modified assets	
Statement of financial position - Total assets	Total assets	\$ 3,775,926
Note 3	Intangible assets	8,600
Note 15	Unsecured related party receivables	18,115
	Total modified assets	\$ 3,749,211

Net income ratio:

Statement of activities - (Decrease) Increase in net assets	Change in net assets without donor restrictions	(19,123)
Statement of activities - Operating without donor restrictions: Total	Total revenues and gains	1,002,941
revenue and other support, Non-operating without donor restrictions:		
Contributions and grants, spendable, Net assets released from restrictions		
for capital and other nonoperating purposes		

The accompanying note is an integral part of the financial responsibility supplemental schedule. 30

NOTE TO THE SUPPLEMENTAL FINANCIAL RESPONSIBILITY SCHEDULE FOR THE YEAR ENDED JUNE 30, 2020

BASIS OF PRESENTATION

The schedule of financial responsibility ratios (the "Schedule") of Tufts University (the "University") provides financial information required by the Department of Education to calculate of the primary reserve ratio, equity ratio, net income ratio and the composite score as defined in hSubpart L of 34 CFR 668 for the fiscal year-ended June 30, 2020. The financial information in the Schedule has been prepared in accordance with accounting principles generally accepted in the United States of America consistent with the consolidated financial statements. The Schedule is presented for purposes of additional analysis as required by the Department of Education and is not a required part of the consolidated financial statements.

Tufts University Schedule of Expenditures of Federal Awards Year Ended June 30, 2020

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
Descent and Development Objects							
Research and Development Cluster							
Department of Agriculture							
Agricultural Research Service	40.004	A 40 450 005	•			A 40.450.005	•
Agricultural Research Basic And Applied Research	10.001	\$ 16,459,825				\$ 16,459,825	\$ -
Agricultural Research Basic And Applied Research	10.001	-	59,121	USDA	59-8050-7-001	59,121	-
Agricultural Research Basic And Applied Research	10.001	-	26,593	USDA/ARS	59-8050-7-002	26,593	-
Agricultural Research Basic And Applied Research	10.001	-	43,757	USDA/ARS	58-8050-8-002	43,757	-
National Institute of Food and Agriculture							
Plant And Animal Disease, Pest Control, And Animal Care	10.025	41,666	-			41,666	-
Wholesale Farmers And Alternative Market Development	10.164	7,966	-			7,966	-
Animal Health And Disease Research	10.207	37,420	-			37,420	-
Higher Education – Graduate Fellowships Grant Program	10.210	81,499	-			81,499	-
Sustainable Agriculture Research And Education	10.215	-	6,992	University of Maine	38640284153864000000	6,992	-
Sustainable Agriculture Research And Education	10.215	-	2,999	University of Vermont	2019-38640-29877	2,999	-
Sustainable Agriculture Research And Education	10.215	-	9,314	University of Vermont	2018-38640-28415	9,314	-
Community Food Projects	10.225	-	14,478	Third Sector New England	5590	14,478	-
Agricultural And Rural Economic Research, Cooperative Agreements And Collaborations	10.250	6,355	-	Ũ		6,355	-
Consumer Data And Nutrition Research	10.253	409.449	-			409.449	234.359
Organic Agriculture Research And Extension Initiative	10.307	-	4,272	University of Vermont	5130028515513000000	4,272	-
Agriculture And Food Research Initiative (Afri)	10.310	598.043	-			598,043	29.365
Beginning Farmer And Rancher Development Program	10.311	124,522	-			124,522	26,382
Beginning Farmer And Rancher Development Program	10.311		12,307	University of California at Santa Cruz	A19-0272-S002-P06927	12,307	
Food Insecurity Nutrition Incentive Grants Program	10.331	-	60,097	Farm Fresh Rhode Island	2018-70025-28157	60,097	-
Outreach And Assistance For Socially Disadvantaged And	10.443	84,760	-		2010 10020 20101	84,760	-
Veteran Farmers And Ranchers	10.110	01,700				01,100	
Cooperative Extension Service	10.500	-	(112)	University of Delaware	42695	(112)	-
Wic Special Supplemental Nutrition Program For Women,	10.557	450,219	(112)	oniversity of Delaware	42000	450,219	54,562
Infants. And Children	10.007	400,210				400,210	04,002
Technical Agricultural Assistance	10.960		(428)	Rutgers University	642521	(428)	_
Total Department of Agricultu		18,301,724	239,390	Rugers Oniversity	042021	18,541,114	344,668
Total Department of Agricult		10,301,724	239,390			10,541,114	344,000
Department of Defense							
Department of the Navy, Office of the Chief of Naval							
Basic And Applied Scientific Research	12.300	3,305,688	-			3,305,688	633,928
Basic And Applied Scientific Research	12.300	-	90,154	Aptima, Inc.	N68335-19-C-0133	90,154	-
Basic And Applied Scientific Research	12.300	-	90,165	Aptima, Inc.	1286-2084	90,165	-
Basic And Applied Scientific Research	12.300	-	121,469	Carnegie Mellon University	SCHEUTZCMU2018	121,469	-
Basic And Applied Scientific Research	12.300	-	125,518	Oregon State University	163639	125,518	-
Research On Chemical And Biological Defense	12.360	9,623	-			9,623	-
Department of Army Research and Material Command							
Military Medical Research And Development	12.420	2,630,849	-			2,630,849	698,877
Military Medical Research And Development	12.420	-	82,896	Fraunhofer USA Center for Molecular Biotechnology	W81XWH1710604	82,896	-
	12.420	-	39,217	Nano Terra, Inc.	W911SR-19C-0019	39,217	-
Military Medical Research And Development				North Carolina State University	2016-2475-03	17,919	-
Military Medical Research And Development Military Medical Research And Development	12.420	-	17,919		2010-247 3-03	17,919	
Military Medical Research And Development	12.420 12.420	-	17,919 36,116			36,116	-
		-		University of Pittsburgh Wake Forest University Health	0042752 (409774-1) WFUHS 441078C CF-08		-
Military Medical Research And Development Military Medical Research And Development	12.420	- - -	36,116	University of Pittsburgh	0042752 (409774-1)	36,116	-

The accompanying notes are an integral part of this schedule. 32

Tufts University Schedule of Expenditures of Federal Awards Year Ended June 30, 2020

					Pass-Through Entity Sponsor		Passed to Sul
Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Number	Total Expenditures	Recipients
search and Development Cluster, continued							
Army Material Command						o	
Basic Scientific Research	12.431	2,199,414	-			2,199,414	-
Basic Scientific Research	12.431	-	13,371	Emory University	T863163	13,371	-
Basic Scientific Research	12.431	-	168,660	Smart Information Flow Technologies	CLIC-ECI-TUFTS-01	168,660	-
Basic Scientific Research	12.431	-	22,559	Smart Information Flow Technologies	CLIC-TUFTS-01	22,559	-
Basic Scientific Research	12.431	-	91,012	The University of Liverpool	W911NF-17-2-0109	91,012	-
Basic, Applied, And Advanced Research In Science And	12.630	(57)) -			(57)	-
Engineering							
Basic, Applied, And Advanced Research In Science And	12.630	-	85,110	Brown University	W912HQ-18-C-0002	85,110	-
Engineering				-			
Basic, Applied, And Advanced Research In Science And	12.630	-	21,292	Sandia National Laboratories	2139930	21,292	-
Engineering			, -				
Basic, Applied, And Advanced Research In Science And	12.630	-	94.252	UES. Inc.	FA8650-15-D-5405	94.252	-
Engineering	12.000		01,202	020, 110		01,202	
Legacy Resource Management Program	12.632	_	1.229	Washington State University	128528-G003746	1.229	-
Legacy Resource Management Program	12.632	_	37,871	Washington State University	HQ00341920001	37,871	_
Uniformed Services University Medical Research Projects	12.750		95,902	Henry M Jackson Foundation for the	HU00012020015	95,902	
Uniformed Services University Medical Research Projects	12.750	-	95,902	Advancement of Military Medicine	H000012020015	95,902	-
Uniformed Services University Medical Research Projects	12.750		68,996	Henry M Jackson Foundation for the	HU0001-20-20014	68,996	
Uniformed Services University Medical Research Projects	12.750	-	00,990		HUUUU 1-20-20014	00,990	-
Uniforms and Open in an Ularity and the Mardia al Days a such Designate	40 750		20,000	Advancement of Military Medicine		20.000	
Uniformed Services University Medical Research Projects	12.750	-	38,006	Henry M Jackson Foundation for the	HU0001-17-2-0009 1	38,006	-
	40 777		007.440	Advancement of Military Medicine		007.140	
Defense Production Act Title III (DPA Title III)	12.777	-	207,443	Mide Technology Corporation	W8IXWHI8CO142	207,443	-
Department of Air Force							
Air Force Defense Research Sciences Program	12.800	1,437,664	-			1,437,664	-
Air Force Defense Research Sciences Program	12.800	-	55,006	Lockheed Martin Advanced Technologies	Lockheed Martin Advanced Techn	55,006	-
Air Force Defense Research Sciences Program	12.800	-	217,663	Stanford University	60805793-114411	217,663	-
Air Force Defense Research Sciences Program	12.800	-	(18,790)	University of California, SD	70303838	(18,790)	-
Defense Advanced Research Projects Agency							
Research And Technology Development	12.910	1.265.579	-			1.265.579	420.0
Research And Technology Development	12.910	1,200,019	64.334	Galois, Inc.	GALOIS 2019-022	64.334	420,0
Research And Technology Development	12.910	-	192,264	Galois, Inc.	HR001118S0054	192,264	-
Research And Technology Development	12.910	-	422,543	Harvard Medical School	153284.5109540.0012	422,543	-
Research And Technology Development	12.910	-	422,543 143,891	Harvard University	168007-5112681	422,543 143,891	-
	12.910	-			W911NF1920105		-
Research And Technology Development		-	209,557	Massachusetts Institute of Technology		209,557	-
Research And Technology Development	12.910	-	109,801	University of California at Santa Cruz	A20-0427-S002	109,801	-
Research And Technology Development	12.910	-	75,249	University of California at Santa Cruz	W911NF1820104	75,249	-
Abriola: SERDP 2017 PFAS	12.RD	358,714				358,714	195,1
Cardiac Extracellular Matrix	12.RD	316,731	-			316,731	-
Cardiac Extracel-ScopeToARM030	12.RD	10,246				10,246	-
Department Of Defense, Contract, Adiabatic quantum	12.RD	-	63,036	MIT Lincoln Laboratory	7000446033	63,036	-
simulation							
Total Department of Defe	nse	11,534,451	3,207,487			14,741,938	1,947,9

					Pass-Through Entity Sponsor		Passed to Sub
Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Number	Total Expenditures	Recipients
Research and Development Cluster, continued Department of Education							
Office of innovation and Improvement							
Investing in Innovation (i3) Fund	84.411	123,095	-			123,095	-
Biomedical Research And Research Training	84.305	-	20,064	National Bureau of Economic Research	R305A200060	20,064	-
Total Department of Educati	on	123,095	20,064			143,159	-
Department of Energy							
Office Of Science Financial Assistance Program	81.049	1,525,197	-			1,525,197	-
Office Of Science Financial Assistance Program	81.049	-	28,938	Harvard University	130298-5079796	28,938	-
Office Of Science Financial Assistance Program	81.049	-	134,068	Harvard University	DE-SC0012573	134,068	-
Office Of Science Financial Assistance Program	81.049	-	9,081	Harvard University	DESC0012573	9,081	-
Office Of Science Financial Assistance Program	81.049	-	99,120	Harvard University	SC0012573	99,120	-
Office Of Science Financial Assistance Program	81.049	-	54.021	Tanner Research, Inc.	SC0019905	54.021	-
Office Of Science Financial Assistance Program	81.049	-	79,849	University of Wisconsin - Madison	18SC503846	79.849	-
Renewable Energy Research And Development	81.087	19,858	-	- ,		19,858	-
Renewable Energy Research And Development	81.087	-	28,384	3M	EE0007650	28,384	-
Fossil Energy Research And Development	81.089		3,873	ZwitterCo, Inc.	DE-FE0031851	3,873	-
Advanced Research Projects Agency - Energy	81.135		15,651	Cambridge Crops, Inc.	AR0001233	15,651	
Advanced Research Projects Agency - Energy	81.135	-	36,695	Georgia Institute of Technology	AR0001137	36,695	-
Energy Policy And Systems Analysis	81.250	-	67,595	Battelle Memorial Institute	DE-AC05-76RL01830	67,595	-
Improved Conversion for Radioisope of Power Generators	81.RD	12,601	-			12,601	-
Mech. Behavior of REBCO, contract	81.RD	-	49,284	Lawrence Berkeley National Lab	7323038	49,284	-
Total Department of Ener	gy	1,557,656	606,559	ž		2,164,215	-
Department of Enviromental Protection							
Office of Research and Development							
Science To Achieve Results (Star) Research Program	66.509	_	60.285	Northeastern University	505110-78050	60.285	_
Total Department of Enviromental Protecti			60,285	Northeastern Oniversity	303110-78030	60,285	
Department of Health and Human Services National Institutes of Health							
Training In General, Pediatric, And Public Health Dentistry	93.059	418,518	_			418.518	
Advancing System Improvements For Key Issues In Womer		+10,510	5.526	Futures Without Violence	5 ASTWH160050-03	5,526	
Health	13 93.000	-	5,520	i dures without violence	3 ASTWIT100030-03	5,520	-
Food And Drug Administration Research	93.103	-	14,999	Duke University	08RFD005292A	14,999	-
Maternal And Child Health Federal Consolidated Programs	93.110	40.293	_			40,293	-
Maternal And Child Health Federal Consolidated Programs	93.110	-	65.774	University of Massachusetts	OSP2017043	65,774	-
Environmental Health	93.113	327.494	-	•······		327,494	122.654
Environmental Health	93.113	-	68,912	Northeastern University	500608-78050	68,912	.22,00
Environmental Health	93.113	-	(449)	University of California Irvine	2016-3343	(449)	-
Environmental Health	93.113	-	62,213	University of Connecticut	RES026980B	62,213	-
Environmental Health	93.113	_	156,055	University of Connecticut	RES030289A	156,055	_
Environmental Health	93.113	-	4,369	Vaxess Technologies Inc	R44ES025516	4,369	-
Environmental Health	93.113	-	66,193	Yale University	08RES026246A	66.193	-
Oral Diseases And Disorders Research	93.113	2,123,742	,	Tale University	0011L0020240A	2,123,742	- 244,550
		2,123,742		Columbia University	1/00012517)	, ,	244,000
Oral Diseases And Disorders Research	93.121	-	1,622	Columbia University	1(GG012517)	1,622	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
	0.2/18	2	r dee rineugn	i doo i mougii Entity		rota: Exponentation	iteeipiente
Research and Development Cluster, continued							
Oral Diseases And Disorders Research	93.121		22.440	GreenMark Biomedical Inc.	08R454DE027903	22.440	
Oral Diseases And Disorders Research	93.121	-	99,121	The Forsyth Institute	TUFTS024308-2476	99,121	-
		-	,	5			-
Oral Diseases And Disorders Research	93.121 93.121	-	15,024	University of Michigan	1U24DE026915	15,024	-
Oral Diseases And Disorders Research		-	2,076	University of Michigan	U24DE026915	2,076	-
Oral Diseases And Disorders Research	93.121	-	16,834	University of North Carolina	U01DE025046	16,834	-
Oral Diseases And Disorders Research	93.121	-	3,950	University of North Carolina	UDE025046A	3,950	-
Centers For Research And Demonstration For Health	93.135	-	81,387	University of North Carolina	6U48DP005017	81,387	-
Promotion And Disease Prevention							
Injury Prevention And Control Research And State And	93.136	-	48,989	Boston Medical Center	11639177-S	48,989	-
Community Based Programs							
Niehs Hazardous Waste Worker Health And Safety Training	93.142	-	(4,634)	Steelworkers Charitable and Educational Organization	5U45ES006175FY19	(4,634)	-
Niehs Hazardous Waste Worker Health And Safety Training	93.142	-	(3,165)	Steelworkers Charitable and Educational Organization	5UH4ES009761FY19	(3,165)	-
Research Related To Deafness And Communication	93.173	374,909	-	C. gamzaion		374,909	21,064
Disorders							
Research And Training In Complementary And Integrative Health	93.213	-	110,751	Texas A&M University Health	RAT010282A	110,751	-
Research On Healthcare Costs, Quality And Outcomes	93.226	240,438	-			240,438	148,494
Research On Healthcare Costs, Quality And Outcomes	93.226	-	5,975	Brown University	1430	5,975	-
Mental Health Research Grants	93.242	2,567,347	-			2,567,347	262,095
Mental Health Research Grants	93.242	-	13,314	Boston Children's Hospital	RSTFD000065024	13,314	-
Mental Health Research Grants	93.242	-	412,011	Massachusetts Eye and Ear	2300199	412,011	-
Mental Health Research Grants	93.242	-	4,148	Yale University	RMH087217B	4,148	-
Substance Abuse And Mental Health Services Projects Of	93.243	-	5,813	University of Massachusetts	0818TI81671A	5,813	-
Regional And National Significance				,		-,	
Occupational Safety And Health Program	93.262	-	1,560	University of Southern California	PAR13129OCCSAHLRES15	1,560	-
Alcohol Research Programs	93,273	608.292		- ,		608,292	-
Alcohol Research Programs	93.273		55,830	Nanoscience Solutions, LLC	RAI142890A	55,830	-
Drug Abuse And Addiction Research Programs	93.279	1,216,666	,	· ······, <u> </u>		1,216,666	2,338
Drug Abuse And Addiction Research Programs	93.279		2,978	Stony Brook Medicine	86276/2/1157303	2,978	_,
Drug Abuse And Addiction Research Programs	93.279	_	57.214	Baystate Medical Center	08UDA044830A	57.214	-
Drug Abuse And Addiction Research Programs	93.279	_	5,866	Baystate Medical Center	17-158	5.866	-
Drug Abuse And Addiction Research Programs	93.279	_	254,588	Baystate Medical Center, Inc.	08UDA050067A	254,588	-
Drug Abuse And Addiction Research Programs	93.279	-	35,139	Boston Medical Center	ACTIVITY# 0577101	35,139	-
Drug Abuse And Addiction Research Programs	93.279	_	97,443	Boston Medical Center	ACTIVITY# 0589901	97,443	_
Drug Abuse And Addiction Research Programs	93.279	_	1,941	Weinberg Medical Physics, Inc.	R43CA174280	1.941	
National Institutes Of Health Loan Repayment Program For	93.280	31,625	-		11450/114200	31.625	-
Clinical Researchers	00.200	01,020				01,020	
Centers for Disease Control and Prevention Investigations an	id 93.283	-	88,807	Council of State and Territorial	PO# 7043	88,807	-
Technical Assistance				Epidemiologists		,	
Discovery And Applied Research For Technological	93,286	1.833.613	-	1 5		1.833.613	396.772
Innovations To Improve Human Health		,,-				,,	
Discovery And Applied Research For Technological	93.286	-	241,810	Columbia University	PEB027062A	241,810	-
Innovations To Improve Human Health			,	,		,• . •	
Discovery And Applied Research For Technological	93.286	-	2,556	Lahey Clinic, Inc.	REB027900A	2,556	-
Innovations To Improve Human Health	50.200		2,000			2,000	
Discovery And Applied Research For Technological	93.286	-	48,240	University of California at Irvine	REB026705A	48.240	-
Innovations To Improve Human Health	50.200		-10,2-10			0,20	
Minority Health And Health Disparities Research	93.307	344,040	-			344,040	17,964

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub Recipients
esearch and Development Cluster, continued							
Trans-Nih Research Support	93.310	(50.020)				(52,238)	
	93.310 93.310	(52,238)	120,703	Massachusetts General Hospital	RDK113599A	(52,230) 120,703	-
Trans-Nih Research Support Trans-Nih Research Support	93.310 93.310	-	4,181	Medical College of Wisconsin	UHG010423A	4,181	-
	93.349	-	,	8	19U18DP006429		-
Packaging And Spreading Proven Pediatric Weight	95.549	-	56,384	The Miriam Hospital	19016DP006429	56,384	-
Management Interventions For Use By Low-Income Families National Center For Advancing Translational Sciences	93.350	12.404.838				12,404,838	9.391.965
National Center For Advancing Translational Sciences	93.350 93.350	12,404,030	33.468	University of Missouri	C00061087-1	33.468	9,391,900
Research Infrastructure Programs	93.350 93.351	470.046	33,400	University of Missouri	00001087-1	470.046	- 11,378
Research Infrastructure Programs Research Infrastructure Programs	93.351	470,046	- 2,420	Purdue University	11000451-005	470,046 2,420	11,378
8		-	2,420	Purdue Oniversity	11000451-005		-
21St Century Cures Act - Beau Biden Cancer Moonshot	93.353	516,592	-		0 10050 01	516,592	148,735
21St Century Cures Act - Beau Biden Cancer Moonshot	93.353	-	146,758	Colorado State University	G-40258-01	146,758	-
Nursing Research	93.361	221,911	-		0000100170014	221,911	141,182
Nursing Research	93.361	-	8,527	Brigham and Women's Hospital	08RNR017034A	8,527	-
Nursing Research	93.361	-	33,295	Brigham and Women's Hospital	117914	33,295	-
Cancer Cause And Prevention Research	93.393	2,079,153	-	Destan University	450000000	2,079,153	397,609
Cancer Cause And Prevention Research	93.393	-	5,186	Boston University	450002809	5,186	-
Cancer Cause And Prevention Research	93.393	-	240	Dana Farber Cancer Institute	PCA203655A	240	-
Cancer Cause And Prevention Research	93.393	-	333,324	Dana-Farber Cancer Institute	PCA203655A	333,324	-
Cancer Cause And Prevention Research	93.393	-	64,703	Fox Chase Cancer Center	08RCA190542A	64,703	-
Cancer Cause And Prevention Research	93.393	-	(2,089)	Fox Chase Cancer Center	08RCA190542A	(2,089)	
Cancer Cause And Prevention Research	93.393	-	(448)	Research Institute Fox Chase	15075-03	(448)	-
Cancer Cause And Prevention Research	93.393	-	15,981	University of Arkansas	1R15CA231510	15,981	-
Cancer Cause And Prevention Research	93.393	-	21,595	Uppsala University	1R01CA225755-01AL	21,595	-
Cancer Detection And Diagnosis Research	93.394	187,582	-		00.10.15	187,582	48,073
Cancer Detection And Diagnosis Research	93.394	-	239,310	Massachusetts General Hospital	234045	239,310	-
Cancer Detection And Diagnosis Research	93.394		13,343	Texas A&M University	08RCA230738A	13,343	-
Cancer Treatment Research	93.395	87,401				87,401	-
Cancer Treatment Research	93.395	-	52,806	NanoHybrids Inc	08RCA221420A	52,806	-
Cancer Treatment Research	93.395	-	3,942	Tufts Medical Center, Inc.	5015786-SERV	3,942	-
Cancer Treatment Research	93.395	-	(1,364)	Tufts Medical Center, Inc.	5015857-SERV	(1,364)	-
Cancer Treatment Research	93.395	-	21,927	University of Massachusetts	OSP2018105	21,927	-
Cancer Treatment Research	93.395	-	10,537	Leidos Biomedical Research	HHSN261200800001E	10,537	-
Cancer Biology Research	93.396	673,934	-			673,934	-
Cancer Biology Research	93.396	-	18,880	Massachusetts General Hospital	233267	18,880	-
Cancer Biology Research	93.396	-	44,608	PathoVax LLC	KaplanPathoVax2019-2	44,608	-
Cancer Biology Research	93.396	-	11,471	Purdue University	11000722-015	11,471	-
Cancer Biology Research	93.396	-	106,213	Tufts Medical Center	5017060-SERV	106,213	-
Cancer Centers Support Grants	93.397	-	35,079	Dana-Farber Cancer Institute	08UCA156732B	35,079	-
Cancer Centers Support Grants	93.397	-	54,415	Dana-Farber Cancer Institute	PCA006516L	54,415	-
Cancer Research Manpower	93.398	183,923	-			183,923	-
Mental And Behavioral Health Education And Training Grants	93.732	122,688	-			122,688	-
Cardiovascular Diseases Research	93.837	3,554,617	-			3,554,617	1,418,00
Cardiovascular Diseases Research	93.837	-	725	Brigham & Women's Hospital	111147	725	-
Cardiovascular Diseases Research	93.837	-	39,023	Tufts Medical Center	RHL133215A	39,023	-
Cardiovascular Diseases Research	93.837	-	45	Tufts Medical Center	5012318-SERV	45	-
Cardiovascular Diseases Research	93.837	-	16,285	University of Arizona	081R01 HL 136528	16,285	-
Cardiovascular Diseases Research	93.837	-	(273)	University of Washington	BPO21191/UWSC9636	(273)	
Lung Diseases Research	93.838	759,483	-			759,483	334,296
Blood Diseases And Resources Research	93.839	91,867	-			91,867	-
Blood Diseases And Resources Research	93.839	-	1,061	Brigham & Women's Hospital	116380	1,061	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
Research and Development Cluster, continued							
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	693,793	-			693,793	194,398
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	8,730	Boston University	4500002740	8,730	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	145,602	Boston University	4500002415	145,602	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	5,696	Brigham and Women's Hospital	2R01AR059775-06A1	5,696	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	176,531	Celdara Medical, LLC	2R44AR072170-02	176,531	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	84,590	The Washington University	WU-17-376-MOD-1	84,590	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	151,295	Tufts Medical Center	5014247-SERV	151,295	-
Arthritis, Musculoskeletal And Skin Diseases Research	93.846	-	114,674	University of Massachusetts	1R01AR072741	114,674	-
Diabetes, Digestive, And Kidney Diseases Extramural	93.847	1,663,590	-			1,663,590	102,784
Research Diabetes, Digestive, And Kidney Diseases Extramural	93.847	-	60,760	Augusta University Research Institute	5U24DK115255	60,760	-
Research				0			
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	1,279	Beth Israel Deaconness Medical Center	1028521	1,279	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	(930)	Boston Medical Center	3475 / 0186712	(930)	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	36,739	Boston Medical Center	08PDK046200H	36,739	-
Diabetes, Digestive, And Kidney Diseases Extramural	93.847	-	74,171	Boston Medical Center	3P30DK046200-27S2	74,171	-
Research			,			,	
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	(312)	Boston Medical Center	BMC ID 6687	(312)	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	80,402	Boston Medical Center	7442	80,402	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	(386)	Boston Medical Center	08PDK046200H	(386)	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	(1,192)	Boston Medical Center	08PDK046200E	(1,192)	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	(1,950)	Boston Medical Center	475501	(1,950)	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	34,175	Duke University	081R01DK121710-01	34,175	-
Research Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	4,868	Joslin Diabetes Center, Inc.	P30DK057521	4,868	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	47,560	Maine Medical Center	OXBURGH R21-01	47,560	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	16,731	Northern California Institute	R01DK115562	16,731	-
Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	196,641	The Rogosin Institute, Inc.	RDK106743B	196,641	-
Diabetes, Digestive, And Kidney Diseases Extramural	93.847	-	223,971	UCSF	5R01DK108722-03	223,971	-
Research Diabetes, Digestive, And Kidney Diseases Extramural Research	93.847	-	11,233	University of Iowa	W000942864	11,233	-
Research Extramural Research Programs In The Neurosciences And	93.853	6,194,407	-			6,194,407	584,495
Neurological Disorders Extramural Research Programs In The Neurosciences And	93.853	-	(79)	Massachusetts General Hospital	230537	(79)	-
Neurological Disorders Extramural Research Programs In The Neurosciences And Neurological Disorders	93.853	-	9,169	University of Texas Medical Branch at Galveston	08PHD065702B	9,169	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
Research and Development Cluster, continued							
Allergy And Infectious Diseases Research	93.855	15,838,866				15,838,866	2,068,621
Allergy And Infectious Diseases Research	93.855	-	244,539	Boston College	08UAI124302A	244,539	2,000,021
Allergy And Infectious Diseases Research	93.855	_	92,414	Boston College	5103181-2	92.414	_
Allergy And Infectious Diseases Research	93.855	_	26.758	Boston Medical Center	0515001 - 5581	26.758	
Allergy And Infectious Diseases Research	93.855	_	311.808	Broad Institute. Inc.	08AI142780A	311.808	
Allergy And Infectious Diseases Research	93.855	-	67,235	Fox Chase Cancer Center	08R01AI144400A	67,235	-
Allergy And Infectious Diseases Research	93.855	-	240.139	Medical College of Wisconsin	1624288	240.139	-
Allergy And Infectious Diseases Research	93.855	-	(780)	Medical College of Wisconsin	R01AI118799	(780)	-
Allergy And Infectious Diseases Research	93.855	-	(1,074)	Medical College of Wisconsin	1624288	(1,074)	-
Allergy And Infectious Diseases Research	93.855	-	(1,782)	Microbiotix Inc.	5R01Al099269	(1,782)	-
Allergy And Infectious Diseases Research	93.855	-	(1,782) 32.603	Microbiotix Inc.	R41AI122433	(1,782) 32.603	-
Allergy And Infectious Diseases Research	93.855	-	243.925	New York Univ School of Medicine	17-A0-00-007347-01	243.925	-
Allergy And Infectious Diseases Research	93.855	-	243,925 262,409		500490-78050	243,925 262,409	-
		-		Northeastern University			-
Allergy And Infectious Diseases Research	93.855	-	16,643	Northwestern University	60039166TU	16,643	-
Allergy And Infectious Diseases Research	93.855 93.855	-	71,044 199.310	PhagePro, Inc.	08R41Al142960 PO225208/A12878	71,044 199.310	-
Allergy And Infectious Diseases Research		-	,	Rensselaer Polytechnic Institute		/	-
Allergy And Infectious Diseases Research	93.855	-	20,150	Texas A&M University Health Sciences	M1902051	20,150	-
Allergy And Infectious Diseases Research	93.855	-	1,561	Tufts Medical Center, Inc.	08RAI128342A	1,561	-
Allergy And Infectious Diseases Research	93.855	-	232,045	University of California Irvine	2016-3336	232,045	37,866
Allergy And Infectious Diseases Research	93.855	-	43,959	University of Florida	R01Al128750	43,959	-
Allergy And Infectious Diseases Research	93.855	-	83,358	University of Maryland	5U19Al09776-5	83,358	-
Allergy And Infectious Diseases Research	93.855	-	12,458	University of Maryland	5U19Al09776-5	12,458	-
Allergy And Infectious Diseases Research	93.855	-	117	University of Oklahoma	RS20161502	117	-
Allergy And Infectious Diseases Research	93.855		(923)	University of Pittsburgh	9012710 (127648-1)	(923)	-
Biomedical Research And Research Training	93.859	5,945,281	-			5,945,281	104,331
Biomedical Research And Research Training	93.859	-	132,649	Brandeis University	402373	132,649	-
Biomedical Research And Research Training	93.859	-	50,579	Brandeis University	402374	50,579	-
Biomedical Research And Research Training	93.859	-	16,295	Brandeis University	402375	16,295	-
Biomedical Research And Research Training	93.859	-	5,748	Harvard Medical School	PGM107618A	5,748	-
Biomedical Research And Research Training	93.859	-	(1,614)	Leidos Biomedical Research	HHSN261200800001E	(1,614)	-
Biomedical Research And Research Training	93.859	-	15,827	University of Michigan	MunroNIH2018	15,827	-
Biomedical Research And Research Training	93.859	-	(1,717)	University of Pittsburgh	29564	(1,717)	-
Biomedical Research And Research Training	93.859	-	54,617	Velum Incorporated	R41GM133272	54,617	-
Biomedical Research And Research Training	93.859	-	59,380	Velum Incorporated	SUB-R41GM130257	59,380	-
Biomedical Research And Research Training	93.859	-	(182)	Yale University	RGM116654A	(182)	-
Child Health And Human Development Extramural Research	93.865	1,735,295				1,735,295	528,620
Child Health And Human Development Extramural Research	93.865	-	14,463	Brigham & Womens Hospital	111265	14,463	-
Child Health And Human Development Extramural Research	93.865	-	11,944	Johns Hopkins University	2003314752	11,944	-
Child Health And Human Development Extramural Research	93.865	-	21,550	Johns Hopkins University	2003145744	21,550	-
Child Health And Human Development Extramural Research	93.865	-	68,541	Massachusetts General Hospital	226712	68,541	-
Child Health And Human Development Extramural Research	93.865	-	27,729	Tufts Medical Center, Inc.	164038	27,729	-
Child Health And Human Development Extramural Research	93.865	-	114,981	Tufts Medical Center, Inc.	7R01HD088061	114,981	-
Child Health And Human Development Extramural Research	93.865	-	14,760	University of Massachusetts	08RHD099435A	14,760	-
Child Health And Human Development Extramural Research	93.865	-	12,927	University of North Carolina	R01HD092374	12,927	-
Aging Research	93.866	3,566,232	-			3,566,232	677,737
Aging Research	93.866	-	37,724	Brigham and Women's Hospital	115640	37,724	-
Aging Research	93.866	-	45,356	Brigham and Women's Hospital	2-P30-AG031679-06A1	45,356	-
Aging Research	93.866	-	34,907	Brigham and Women's Hospital	5P30AG031679-09	34,907	-
Aging Research	93.866	-	3,646	Duke University	DAS2019DUKE	3,646	-
Aging Research	93.866	-	(7)	Hebrew Rehabilitation Center	90075	(7)	-

					Pass-Through Entity Sponsor		Passed to Sub
Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Number	Total Expenditures	Recipients
Research and Development Cluster, continued							
Aging Research	93.866	-	43,381	Mayo Clinic	TUF-24756	43,381	-
Aging Research	93.866	-	476,191	Thomas Jefferson University	08RAG057882A	476,191	-
Aging Research	93.866	-	6,783	University of Colorado	1551883	6,783	-
Aging Research	93,866	-	12,600	University of Connecticut	UCHC7-1096475708	12,600	-
Aging Research	93.866	-	(1,386)	University of Florida	08U01AG050499	(1,386)	3,556
Aging Research	93,866	-	22.673	University of Massachusetts	S51110000037006	22.673	-
Aging Research	93.866	-	97,178	University of Wisconsin - Madison	SCOTT UNIV WISC 19	97,178	-
Aging Research	93,866	-	16.385	Velum, Inc.	08RAG061909A	16.385	-
Vision Research	93.867	1,261,172	-			1,261,172	61,371
Vision Research	93.867	.,20.,2	128.306	NanoHybrids Inc	REY028839A	128.306	-
Maternal, Infant And Early Childhood Home Visiting Grant	93.870		13,821	Home Visiting Applied Research	UD5MC30792	13,821	_
Medical Library Assistance	93.879	14.476	-	home violang/ ppiloa recodulon	02011000102	14,476	_
Grants For Primary Care Training And Enhancement	93.884	1,208,878	_			1,208,878	
Ryan White Hiv/Aids Dental Reimbursement And Community		53,515	-			53,515	-
Based Dental Partnership Grants	55.524	55,515	-			55,515	-
International Research And Research Training	93.989	38,277	-			38.277	22,883
International Research And Research Training	93.989	30,211	- 213	Brown University	444	213	22,000
	93.856 93.856	-		Leidos Biomedical Research	20X063F		-
Microbiology And Infectious Diseases Research	93.850	-	152,646	Leidos Biomedical Research	20X063F	152,646	-
Health Resources and Services Administration							
Department Of Health And Human Services, Contract	93.RD	367,677				367,677	-
Department Of Health And Human Services, Contract	93.RD	-	611,423	Icahn School of Medicine at Mount Sinai	0258-0597-4609	611,423	-
Department Of Health And Human Services, Contract	93.RD	-	153,305	Icahn School of Medicine at Mount Sinai	0258-0676-4609	153,305	-
Department Of Health And Human Services, Contract	93.RD	-	2,831	Icahn School of Medicine at Mount Sinai	0258-0681-4609 AEROS	2,831	-
Department Of Health And Human Services, Contract	93.RD	-	12,271	Icahn School of Medicine at Mount Sinai	0258-0681-4609 HAINT	12,271	-
Department Of Health And Human Services, Contract	93.RD	-	34,843	Leidos Biomedical Research Inc	13XS110	34,843	-
Department Of Health And Human Services, Contract	93.RD	-	25,245	Morris Animal Foundation	D17CA-501	25,245	-
Department Of Health And Human Services, Contract	93.RD	-	22,337	Northwestern University	60053813 TUFTS	22,337	-
Department Of Health And Human Services, Contract	93.RD	-	35,472	Qrono Inc.	P15016-TUFTS1	35,472	-
Total Department of Health and Human Service	s	70,010,233	9,969,986			79,980,219	17,493,838
National Service and Civic Engagement Research Competition							
Corporation for National and Community Service	94.026	66,738	-			66,738	31,156
National Service And Civic Engagement Research Competition	94.026	2,596	-			2,596	-
Corporation For National And Community Service	94.027	4,810	-			4,810	-
Total National Service and Civic Engagement Research	h	74,144	-			74,144	31,156
executive Office of the President							
Research And Data Analysis	95.007	_	(3,097)	University of Baltimore	G1799ONDCP06	(3,097)	-
Total Executive Office of the Presiden			(3,097)	Onversity of Datamore	01/000100100	(3,097)	-
	n		(0,007)			(0,007)	
Department of Homeland Security						-	
Centers For Homeland Security	97.061	-	309,387	Northeastern University	505035-78057/78053	309,387	-
Homeland Security Grant Program	97.067	-	204,869	Integrated Defense & Security	Intriligator 2019	204,869	-
Novel Features and Emerging Technologies for Opioid Detection	97.RD	-	14,111	Northeastern University	HSHQDC-16-AB0008	14,111	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
Research and Development Cluster, continued							
Department of Housing and Urban Development							
Lead-Based Paint Hazard Control In Privately-Owned Housin	ng 14.900	257,945	-			257,945	61,915
Total Department Of Housing and Urban Developme	ent	257,945	-			257,945	61,915
Department of the Interior							
Design Life Issues Related, contract	15.RD	102,375	_			102,375	
Block Island Wind demonstration	15.RD 15.RD	102,375	- 122,132	University of Rhode Island	AW D06987	102,375	-
	15.807			University of Rhode Island	AVV D00967		-
Earthquake Hazards Program Assistance Total Department of the Inter		236,450 338,825				236,450 460,957	
		000,020	,			,	
Department of Justice Drug Enforcement Administration							
National Institute Of Justice Research, Evaluation, And	16.560	24,090	-			24,090	_
Development Project Grants	10.000	24,000	-			24,000	-
Total Department Of Justi	ce	24,090	-			24,090	-
National Aeronautics and Space Administration							
Science	43.001	136,500	_			136,500	_
Science	43.001	100,000	10,396	Cornell University	77810-10705	10,396	
Science	43.001	-	2,677	Massachusetts Space Grant Cons	SajinaMASpace2019	2,677	-
Science	43.001	-	2,769	California Institute of Technology Jet	1628064	2,769	-
Science	43.001	-	2,709	Propulsion Laboratory	1028004	2,709	-
Science	43.001	-	78,200	California Institute of Technology Jet Propulsion Laboratory	1628138	78,200	-
Exploration	43.003	-	63.669	Baylor College of Medicine	NNX16A069A	63.669	-
Exploration	43.003	-	296,415	Baylor College of Medicine	NNX16A069A	296,415	-
Space Operations	43.007	530,440		Daylor Conogo of Modicinio		530,440	_
Education	43.008		101,236	The National Institute of Aerospace	C17-2D00-TU	101,236	
Space Technology	43.012	53,487	-	The National Institute of Acrospace	011-2000-10	53,487	-
Association of Universities for Research in Astronomy, Inc	43.RD	55,407	63.621	Space Telescope Science Institute	HST-GO-14095-002-A	63,621	-
Grizli: The Grism reshift&Line	43.RD	-	45.148	Space Telescope Science Institute	HST-AR 14553.002-A	45,148	-
Total National Aeronautics and Space Administrati		720,427		Space Telescope Science institute	1131-AIC_14555.002-A	1,384,558	-
						.,	
National Endowment for the Arts Promotion Of The Arts Grants To Organizations And Individuals	45.024	3,654	-			3,654	-
Total National Endowment for the A	rts	3,654				3,654	-
National Ocianae Foundation							
National Science Foundation	47.044	0 700 440				0 700 440	100.040
Engineering	47.041	2,702,442			1110	2,702,442	123,919
Engineering	47.041	-	27,373	BROWN UNIVERSITY	1148	27,373	-
Engineering	47.041	-	103,276	MIT MIT Lines In Laboratory (5710003972	103,276	-
Engineering	47.041	-	18,047	MIT Lincoln Laboratory	FA8702-15-D-0001	18,047	-
Engineering	47.041	-	56,130	RFCUNY - College Of Staten Island	1805179	56,130	-
Engineering	47.041	-	177,235	University of Tennessee	A12-0044-S004-A03	177,235	-
Engineering	47.041	-	24,509	Yale University	1830870	24,509	-
Engineering	47.041	-	111,017	ZwitterCo, Inc.	1843847	111,017	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub Recipients
Research and Development Cluster, continued							
Mathematical And Physical Sciences	47.049	2,386,514				2.386.514	52,27
Mathematical And Physical Sciences	47.049	2,300,314	- 166,915	Duke University	333-2460	166,915	52,21
Geosciences	47.050	254,321	100,915	Duke Oniversity	333-2400	254,321	(23
Geosciences	47.050	204,021	(2,226)	CUAHSI	1338606	(2,326)	(23
Geosciences	47.050	-	(2,326) 800	University of Maryland	1855982	(2,320) 800	-
Computer And Information Science And Engineering	47.050	2,095,325	000	University of Maryland	1000902	2,095,325	- 15,63
Computer And Information Science And Engineering	47.070	2,095,325	- 151,352	Utah State University	201242-477	2,095,325	15,63
	47.070	-	151,552	Otari State University	201242-477		- 104,93
Biological Sciences		1,809,409	- (012)	I Iniversity of Mandand	EE27E 72709010	1,809,409	104,93
Biological Sciences	47.074	-	(913)	University of Maryland	55375-Z3708019	(913)	-
Social, Behavioral, And Economic Sciences	47.075	249,474	-		050 4750447	249,474	17,99
Social, Behavioral, And Economic Sciences	47.075	-	111,192	Harvard University	SES-1756447	111,192	-
Education And Human Resources	47.076	2,855,961	-			2,855,961	404,4
Education And Human Resources	47.076	-	15,149	BirdBrain Technologies LLC	Rogers_Birdbrain2018	15,149	-
Education And Human Resources	47.076	-	18,735	Technical Education Research C	1932854	18,735	-
Education And Human Resources	47.076	-	16,608	Technical Education Research C	1842278	16,608	-
Education And Human Resources	47.076	-	85,135	TERC	1742127	85,135	-
Education And Human Resources	47.076	-	64,009	University of Connecticut	137511	64,009	-
Office Of International Science And Engineering	47.079	25,117	-			25,117	-
Integrative Activities	47.083	756,495	-			756,495	126,8
Total National Science Found	lation	13,135,058	1,144,243			14,279,301	845,8
partment of Transportation Air Transportation Centers Of Excellence	20.109		1,707	Boston University	13-C-AJFE-BU-020	1,707	
Total Department Of Transport			1,707	Boston University	13-C-AJFE-BU-020	1,707	
	lation		1,707			1,707	
gency For International Development							
Usaid Foreign Assistance For Programs Overseas	98.001	5,569,814	-			5,569,814	2,568,86
Usaid Foreign Assistance For Programs Overseas	98.001	-	273,211	ACDI/VOCA	72061720LA00002	273,211	-
Usaid Foreign Assistance For Programs Overseas	98.001	-	1,865	Catholic Relief Services	MW.16.SRV.V1886-658	1,865	-
Usaid Foreign Assistance For Programs Overseas	98.001	-	135,679	Catholic Relief Services	MW.16.SRV.V1886-658.	135,679	-
Usaid Foreign Assistance For Programs Overseas	98.001	-	(190)	FHI360	G000093	(190)	-
Usaid Foreign Assistance For Programs Overseas	98.001	-	37,959	Mercy Corps International	AID-OFDA-A-17-00066	37,959	-
Usaid Foreign Assistance For Programs Overseas	98.001	_	277,047	MercyCorps International	33133S002S	277,047	_
Usaid Foreign Assistance For Programs Overseas	98.001	_	104,333	Rutgers University	7200AA18LA00003	104,333	-
Usaid Foreign Assistance For Programs Overseas	98.001	-	783,698	Save the Children	84004093	783,698	-
		-					-
Usaid Foreign Assistance For Programs Overseas Usaid Foreign Assistance For Programs Overseas	98.001 98.001	-	5,682 155,398	Texas A&M AgriLife Research University of Florida	06-S160677 UFDSP00011695	5,682 155,398	-
5 5		-					-
Agency For International Development, Contract	98.001	-	120,626	Catholic Relief Services	AID-FFP-A-17-00001	120,626	-
Food Aid Quality Review Phase 1	98.RD	445,948	-			445,948	116,87
Food Aid Quality Review Phase 1	98.RD	183,748	-			183,748	-
FAQR Phase III Program	98.RD	802,288	-			802,288	220,83
FAQR Phase III (Off-Campus)	98.RD	73,201	-			73,201	-
RLP IDIQ - TO2	98.RD	439,588	-			439,588	58,00
Total Agency For International Develop	oment	7,514,587	1,895,308			9,409,895	2,964,6
epartment of Veterans Affairs							
Novel Interventions for Gulf War Veterans	64.RD	(6,121)	-			(6.121)	-
Total Department Of Veterans A		(6,121)				(6,121)	
Total Research and Development Cluster		123,589,768	18,456,562			142,046,330	23,690,05

Other Sponsored Programs Department of State			Pass-Through	Pass-Through Entity	Number	Total Expenditures	Recipients
Bureau of International Security and Nonproliferation							
, ,	19.033	177,809				177,809	100.267
	19.033	8,524	-			8,524	109,367
Total Department Of State		186,333	-			186,333	109,367
Library of Congress							
	42.005		20.319	Fable Vision, Inc.	GA18C0107	20.319	
Total Library Of Congress		-	20,319		GAIOCUIUI	20,319	
	-					,	
National Endowment for the Humanities							
	45.169	20,777	-			20,777	-
Total National Endowment For The Humanities		20,777	-			20,777	-
Department of Housing and Urban Development							
General Research and Technology Activity	14.506	-	952	Johns Hopkins University	2002170664	952	-
Total Department of Housing and Urban Development		-	952			952	-
Agency for International Development							
• •	98.001	-	893,897	University of Minnesota	P004721401	893,897	-
Total Agency for International Development		-	893,897			893,897	-
Department of Education							
Department of Education COVID-19 - Higher Education Emergency Relief Fund Student	94 4055	1,067,642				1,067,642	
Aid Portion	04.425E	1,007,042	-			1,007,042	-
Total Department of Education		1,067,642	-			1,067,642	
Total Other Sponsored Programs		1,274,752	915,168			2,189,920	109,367
CDBG - Entitlement Grants Cluster							
	14.218	-	7,000	Malden Redevelopment Authority	HUDMalden2020	7,000	-
TOTAL CDBG - Entitlement Grants Cluster		-	7,000			7,000	-
Foreign Food Aid Donation Cluster							
Food For Peace Development Assistance Program (Dap)	98.007	-	502,603	Catholic Relief Services	72DFFP19CA00002	502,603	-
Food For Peace Development Assistance Program (Dap)	98.007	-	213,191	ACDI/VOCA	72DFFP18CA00008	213,191	-
Total Foreign Food Aid Donation Cluster		-	715,794			715,794	-
Student Financial Assistance Cluster							
	84.007	574,154	-			574,154	_
	84.032L	514,104	-			574,104	-
Outstanding Loans @ July 1, 2019	S ULL	2,717,279	-			2.717.279	-
New Loans issued during 2020		_,, ,,,,,210				-	-
	84.033	2,330,468	-			2,330,468	-
	84.063	3,402,429	-			3,402,429	-
	84.038	-,, -20				-,, 120	
Outstanding Loans @ July 1, 2019		9,217,130	-			9,217,130	-
New Loans issued during 2020		-				-	-
Administrative Cost Allowance		150,000				150,000	-

Cluster / Federal Program	CFDA#	Direct	Pass-Through	Pass-Through Entity	Pass-Through Entity Sponsor Number	Total Expenditures	Passed to Sub- Recipients
Student Financial Assistance Cluster, continued							
Federal Direct Student Loan	84.268	167,617,731	-			167,617,731	-
Health Professions Student Loans, Including Primary Care	94.342						-
Loans and Loans for Disadvantaged Students							
(HPSL/PCL/LDS)							
Outstanding Loans @ July 1, 2019		9,589,137	-			9,589,137	-
New Loans issued during 2020		1,279,900	-			1,279,900	-
Administrative Cost Allowance		-				-	-
Total Student Financial Assistance Cluste	r	196,878,228	-			196,878,228	-
Total Federal Award Expenditure		\$ 321.742.748	\$ 20.094.524			\$ 341,837,272	\$ 23.799.421

1. Basis of Presentation

The accompanying schedule of expenditures of federal awards (the "Schedule") is presented on the accrual basis of accounting. The purpose of this schedule is to present a summary of those activities of Tufts University and its subsidiaries (the "University") for the year ended June 30, 2020 which have been financed by the United States government ("federal awards"). For purposes of this Schedule, federal awards include all federal assistance entered into directly between the University and the federal government and subawards from nonfederal organizations made under federally sponsored agreements. The information in this Schedule is presented in accordance with the requirements of Title 2, *U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance).* Pass-through entity identification numbers and CFDA numbers have been provided where available. Negative amounts reflect adjustments made to amounts reported in prior years in the normal course of business.

2. Indirect Cost Rate

The University applies its predetermined approved facilities and administrative rate 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.

3. 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. Loans made by the University to eligible students under federal student loan programs during the year ended June 30, 2020 are summarized as follows:

Title	CFDA No.	Amo	ount Issued FY20
Perkins	84.038	\$	-
Primary Care - Medical LDS - Medical LDS - Dental HPSL - Dental	93.342 93.342 93.342 93.342		100,000 180,000 75,000 782,900
LDS - Veterinary HPSL - Veterinary	93.342 93.342		10,000 132,000
Total 93.342			1,279,900
Total Loans Issued		\$	1,279,900

The balance of loans outstanding at June 30, 2020 consists of:

Title	CFDA No.	Amount Outstanding at June 30, 2020		
Perkins	84.038	\$	6,772,561	
Primary Care - Medical	93.342		1,076,836	
LDS - Medical	93.342		914,327	
HPSL - Medical	93.342		63,654	
LDS - Dental	93.342		484,324	
HPSL - Dental	93.342		6,199,753	
LDS - Veterinary	93.342		67,450	
HPSL - Veterinary	93.342		658,593	
Total 93.342			9,464,937	
Total Loan Balances Outstanding		\$	16,237,498	

Tufts University participated in the School as Lender program (CFDA# 84.032L) beginning in fiscal year 2004 until the program terminated on July 1, 2008. There were no new loans distributed to students in connection with this program during the year ended June 30, 2020. At June 30, 2020, the University held \$2,278,385 in outstanding loans.

Part II 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 of Tufts 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 Tufts University and its subsidiaries (the "University") which comprise the consolidated statement of financial position as of June 30, 2020, 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 November 5, 2020, which included an emphasis of matter paragraph related to the University changing the manner in which it accounts for restricted cash or cash equivalents within the consolidated statements of cash flows in fiscal year 2020, as discussed in Note 2.

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") as a basis for designing 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 financial statements. 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.

Pricewoterhouse Coopers LLP

November 5, 2020



Report of the 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 of Tufts University

Report on Compliance for Each Major Federal Program

We have audited Tufts 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, 2020. The University's major federal programs are identified in the summary of auditor's 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, 2020.

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Boston, MA 02210 T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us

Other Matters

The results of our auditing procedures disclosed an instance of noncompliance, which is required to be reported in accordance with the Uniform Guidance and which is described in the accompanying schedule of findings and questioned costs as item 2020-001. Our opinion on each major federal program is not modified with respect to this matter.

The University's response to the noncompliance finding identified in our audit is described in the accompanying schedule of findings and questioned costs and management's views and 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 with a type of compliance over compliance is a 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 with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

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

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

Pricewoterhouse Coopers LLP

May 20, 2021

Part III Findings

Tufts University Schedule of Findings and Questioned Costs Year Ended June 30, 2020

Summary of Auditor's Results

I.

Financial Statements				
Type of auditor's report issued		Unmodified opinion		
Internal control over financial reporting Material weakness(es) identified? Significant deficiency(ies) identified tha	t are	yes	<u>x</u> no	
not considered to be material weaknes		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? Significant deficiency(ies) identified that are		yes	<u>x</u> no	
not considered to be material weaknes		yes	<u>x</u> none reported	
Type of auditor's report issued on complia programs	ance for major	Unmodified	l opinion	
Any audit findings that are required to be reported in accordance with 2 CFR 200.516(a)?		<u>x</u> yes	no	
Identification of Major Programs				
CFDA Number(s)	Name of F	Name of Federal Program/Cluster		
Various 84.032L 84.425E	Federal Fa Higher Ed	Research and Development Cluster Federal Family Education Loan Program Higher Education Emergency Relief Funds - (HEERF) Student Aid Portion		
Dollar threshold used to distinguish betwo Type B programs	een Type A and	d \$ 3,000	,000	
		<u>x</u> yes		

II. Financial Statement Findings

None noted.

III. Federal Award Findings and Questioned Costs

2020-001 Subrecipient Monitoring – Evidence of review of terms and conditions within certain subaward agreements

Cluster: Research & Development

Grantor: National Institutes of Health; Agency For International Development; Department of Army Research and Material Command; Department Of State, Bureau Of Educational And Cultural Affairs **Award Name:** National Center for Advancing Translational Sciences; USAID Foreign Assistance for Programs Overseas; Military Medical Research and Development; Aging Research; Global Threat Reduction

Award Year: FY2020 CFDA Numbers: 93.350; 98.001; 12.420; 93.866; 19.033

Criteria

2 CFR § 200.332 includes information that is required to be identified to a subrecipient in their subaward, including any additional requirements that the pass-through entity imposes on the subrecipient and any additional terms and conditions that are deemed appropriate. As part of the University's policies and procedures a Risk Assessment Questionnaire is completed to evidence a review of the financial and performance risks associated with each subrecipient award, which includes the review of the subaward terms and conditions. If it is determined that the University's standard subaward terms should be modified, the justification for the modification must be reviewed by an Associate Director or Director and evidence of this review maintained in the Risk Assessment Questionnaire. Additionally, subrecipients determine if additional terms should be added to the subaward agreement. Documentation is required to be maintained evidencing whether or not additional terms were added and the Pre-Award Director or Associate Director are required to sign-off on this determination.

Condition

Through our testing of subrecipient monitoring for 25 subrecipients, which included the review of the University's Risk Assessment Questionnaires, we noted the following specific to the documentation of review of certain terms and conditions within the subawards:

- Two foreign subrecipients had amendments to the original terms and conditions within their subaward agreements where justification and review by the Associate Director or Director pertaining to the amendments were not evidenced per the University's policy.
- Three subrecipients in the sample were deemed medium or high risk, triggering a potential need for adding additional terms to the formal agreements. Additional terms were not added, however, the Risk Assessment Questionnaire did not include the rationale for not adding or modifying the standard terms per the University's policy, including the Pre-Award Director or Associate Director's approval.

Cause

The preparer of the risk assessment in error did not properly document the amendments or rationale in the risk assessment to trigger a review of the Director or Associate Director, as was required per University policies and procedures.

Effect

Lack of review of subaward agreements could lead to incomplete agreements that could impact the level of subrecipient monitoring completed by the University.

Questioned Costs

None noted.

Recommendation

We recommend the pre-award group implement a control whereby prior to sign-off on the final Risk Assessment Questionnaire, the completeness of all reviews throughout the questionnaire are validated. This should include reviewing the subaward agreements to ensure in situations where additional terms and conditions were added review was evidenced and for medium or high risk rated subawards that the documentation evidences review regardless of whether additional terms were added. We also recommend training be provided with pre-award staff to ensure they understand the workflow requirements for subaward agreements prior to execution.

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 status of prior audit findings.

2019-001 Unsubsidized Direct Loan Annual Limits (Eligibility)

Cluster: Student Financial Assistance Grantor: Department of Education Award Name: Federal Direct Student Loans (Direct Loan) Award Year: 2018-2019 CFDA Numbers: 84.268

PwC noted through eligibility testing of 25 students at the School of Dental Medicine, 4 instances where students were awarded unsubsidized direct loans totaling \$47,167, which exceeded the prorated annual limit of \$44,944 for a program covering 11 months by \$2,223.

PwC recommended that the School of Dental Medicine complete more robust testing of the packaging formulas to ensure all cohorts are calculated appropriately within the student financial aid system prior to commencing the packaging process and perform periodic subsequent checks throughout the payment periods to ensure that direct loan annual limits are calculating appropriately. It was also recommended that The School of Dental Medicine review all students that were impacted by this issue and determine what amount in the aggregate should be returned to the Department of Education.

Status Update

The Dental School's 2018-19 financial aid audit finding was related to an error in the students selection process in the financial aid system, Powerfaids, that failed to differentiate between the Doctor of Dental Medicine (DMD) students and those enrolled in the Advanced Standing for Dental International Students (DIS) who had the same academic level of "Prof 3" as the DMD students but are eligible for a lower annual Federal Unsubsidized Direct Loan than the DMD students.

Following the audit finding, Tufts University's Financial Aid Office implemented the actions listed below immediately:

- The Dental School Financial Aid Office returned the ineligible funding to the US Dept. of Education having repackaged students who were affected and notified the students accordingly.
- Prior to 2019-20 packaging process in Powerfaids, new selection sets were created for each financial aid program. The student selection process has been thoroughly tested by 2 members of the Financial Aid Office.
- Financial aid staff receive additional training to reinforce maximum annual Federal Direct Loan limits for their respective cohorts. This training is conducted prior to the start of new academic year when most of the financial aid packaging takes place.
- Staff are required to proof award notices manually prior to releasing them to students. Since the annual limits are based on the length of the cohorts' academic year dates, errors are easily identified.
- Federal Direct Loan annual limit charts have been created and made accessible to staff on a shared drive to ensure this information is readily available. Charts are constantly reviewed to maintain accuracy and updated when we are notified of a change in class academic year dates. Staff are also notified separately of any changes.
- Queries were developed in Powerfaids in order to identify any awards that exceeded the Federal Direct Loan limit for class cohorts. These queries are run on a monthly basis.



Management's Views and Corrective Action Plan

<u>RE: 2020-001 Subrecipient Monitoring – Evidence of review of terms and conditions within certain</u> subaward agreements (year ended June 30, 2020)

After this audit has been completed, and to address the above referenced finding, an instructor-led training refresher has been conducted focused on the workflow requirements for subaward agreements prior to execution. The training took place in November 2020 and all members of the team that have a role in the subrecipient risk assessment and issuance of the subawards participated in the session. The training specifically targeted managing subrecipient risk using Pre-Award's subrecipient risk assessment process and the workflow requirements for subaward agreements prior to execution. The training materials continue to be available in Tufts Learning System should any members of the team wish to review them again.

Additionally, Tufts is completing the review of its end-to-end subrecipient monitoring lifecycle in the spring of 2021 and will incorporate the recommendations from this audit into the updated workflow that will be developed following the review. Please do not hesitate to contact me for information about these corrective actions at <u>zoya.hamilton@tufts.edu</u> or 617-636-6709.

Sincerely,

Z. Davis Houten

Zoya Davis-Hamilton, EDD, CRA Associate Vice Provost Research Administration & Development