

Financial Statements and Uniform Guidance
Supplementary Information Together with
Reports of Independent Certified Public Accountants

UNIVERSITY OF MASSACHUSETTS

June 30, 2017 and 2016

UNIVERSITY OF MASSACHUSETTS

TABLE OF CONTENTS

	Page(s)
Financial Statements	
Report of Independent Certified Public Accountants	1 - 3
Management's Discussion and Analysis (Unaudited)	4 - 13
Statements of Net Position	14
Statements of Revenues, Expenses and Changes in Net Position	15
Statements of Cash Flows	16
Notes to Financial Statements	17 - 49
Required Supplementary Information (Unaudited)	50
Supplemental Information	
Schedule of Expenditures of Federal Awards	52 - 81
Notes to Schedule of Expenditures of Federal Awards	82 - 83
Reports on Internal Control and Compliance	
Report of Independent Certified Public Accountants on Internal Control Over Financial Reporting and on Compliance and Other Matters Required By <i>Government Auditing Standards</i>	84 - 85
Report of Independent Certified Public Accountants on Compliance For Each Major Federal Program and on Internal Control Over Compliance Required by the Uniform Guidance	86 - 88
Schedule of Findings and Questioned Costs	89 - 94
Summary Schedule of Prior Year Audit Findings	95
Management's Corrective Action Plan	96

PART I
FINANCIAL STATEMENTS



Grant Thornton LLP
75 State Street, 13th Floor
Boston, MA 02109
T 617.723.7900
F 617.723.3640
www.GrantThornton.com
linkd.in/GrantThorntonUS
twitter.com/GrantThorntonUS

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Trustees of the
University of Massachusetts

Report on the financial statements

We have audited the accompanying financial statements of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts (the “University”), an enterprise fund of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the University’s basic financial statements as listed in the table of contents.

Management’s responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these 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 financial statements that are free from material misstatement, whether due to fraud or error.

Auditor’s responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the University’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the

circumstances, but not for the purpose of expressing an opinion on the effectiveness of the 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 financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts as of June 30, 2017 and 2016, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other matters

Required supplementary information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 4 through 13 and the Schedule of Funding Progress for the Pension, the Schedules of the University's Proportionate Share of the Net Pension Liability and the University's Contributions for the Massachusetts State Employees' Retirement System on page 50 be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. These limited procedures consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the University's basic financial statements. The schedule of expenditures of federal awards for the year ended June 30, 2017, as required by Title 2 *U.S. Code of Federal Regulations (CFR) Part 200*, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures. These additional procedures included comparing and reconciling the information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in

accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Emphasis of Matter

The financial statements of the University are intended to present the financial position, the changes in financial position and cash flows that are attributable to the transactions of the University. They do not purpose to, and do not present fairly the position of the Commonwealth of Massachusetts as of June 30, 2017 and 2016, the changes in its financial position, or where applicable, its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other reporting required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report, dated December 14, 2017, 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. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the University's 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.

A handwritten signature in cursive script that reads "Grant Thornton LLP".

Boston, Massachusetts
December 14, 2017

**University of Massachusetts
Management's Discussion and Analysis (unaudited)
June 30, 2017**

Introduction

The University of Massachusetts Annual Financial Report presents our discussion and analysis of the financial position and performance of the University and its component units during the fiscal year ended June 30, 2017 with comparative information as of June 30, 2016 and June 30, 2015. This discussion and analysis has been prepared by management along with the accompanying financial statements and related footnote disclosures and should be read in conjunction with, and is qualified in its entirety by, the financial statements and footnotes. The accompanying financial statements, footnotes and this discussion are the responsibility of management.

The University of Massachusetts is a state coeducational institution for higher education with separate campuses at Amherst, Boston, Dartmouth, Lowell and Worcester all located in the Commonwealth of Massachusetts. The University was established in 1863 in Amherst, under the provisions of the 1862 Morrill Land Grant Acts, as the Massachusetts Agricultural College. It became known as the Massachusetts State College in 1932 and in 1947 became the University of Massachusetts. The Boston campus was opened in 1965 and the Worcester campus, Medical School, was opened in 1970. The Lowell and Dartmouth campuses (previously the University of Lowell and Southeastern Massachusetts University, respectively) were made a part of the University by a legislative act of the Commonwealth, effective September 1, 1991.

The University's mission is to provide an affordable and accessible education of high quality and to conduct programs of research and public service that advance knowledge and improve the lives of the people of the Commonwealth, the nation and the world. In the fall of 2016, the University enrolled 63,978 full-time equivalent ("FTE") students. The University is committed to providing, without discrimination, diverse program offerings to meet the needs of the whole of the state's population. The University's five campuses are geographically dispersed throughout Massachusetts and possess unique and complementary missions.

Financial Highlights

The University's combined net position increased \$250 million from \$2.8 billion in fiscal year 2016 to \$3.1 billion in fiscal year 2017. Net position at June 30, 2015 was \$2.7 billion.

From fiscal year 2016 to fiscal year 2017, the University's operating revenues increased by \$39.5 million driven by an increase in tuition & fee and auxiliary revenue from both a rate increase and enrollment increases and grant revenue due to new government and private grant activity. Operating expenses increased by \$22.6 million primarily driven by a collective bargaining rate increase, a state fringe rate increase and depreciation associated with the University's capital plan. Non-operating revenues increased \$68.4 million primarily attributed to strong double-digit investment gains and two changes in state laws. The first allowed for the University to retain tuition revenue without remitting a portion back to the Commonwealth, and adjusted State Appropriations as a result. The second change in state law relates to learning contracts entered into by the Medical School and certain medical students. These contracts give students the option of deferring a portion of their tuition until after residency training, and cancelling all or a portion of their tuition if they practice primary care medicine in the Commonwealth for a prescribed time period. As a result of changes in legislation, outstanding balances from these learning contracts were recorded as non-operating income in 2017.

Using the Annual Financial Report

The Statement of Net Position, Statement of Revenues, Expenses and Changes in Net Position and the Statement of Cash Flows present financial information in a form similar to that used by private sector companies. The University's net position (the difference between assets and liabilities) is one indicator of the University's financial health. Over time, increases or decreases in net position is one indicator of the improvement or erosion of an institution's financial health when considered with non-financial facts such as enrollment levels, operating expenses, and the condition of the facilities.

The Statement of Net Position includes all assets and liabilities, as well as deferred inflows and outflows of resources of the University. It is prepared under the accrual basis of accounting, whereby revenues and assets are recognized when the services are provided and expenses and liabilities are recognized when services are incurred, regardless of when cash is exchanged. Net Position is further broken down into three categories: invested in capital assets-net of related debt, restricted and unrestricted. Amounts reported in invested in capital assets-net of related debt represent the historical cost of property and equipment, reduced by the balance of related debt outstanding and depreciation expense charged over the years. Net Position is reported as restricted when constraints are imposed by third parties, such as donors or enabling legislation. Restricted net position is either non-expendable, as in the case of endowment gifts to be held in perpetuity, or expendable, as in the case of funds to be spent on scholarships and research. All other

assets are unrestricted; however, they may be committed for use under contract or designation by the Board of Trustees.

The Statement of Revenues, Expenses and Changes in Net Position present the revenues earned or received and expenses incurred during the year. Activities are reported as either operating or non-operating. Operating revenues and expenses include tuition and fees, grant and contract activity, auxiliary enterprises and activity for the general operations of the institution not including appropriations from state and federal sources. Non-operating revenues and expenses include appropriations, capital grants and contracts, endowment, gifts, investment income, and non-operating federal grants (Pell Grants). With a public University's dependency on support from the state, Pell grants, and gifts, it is common for institutions to have operating expenses exceed operating revenues. That is because the prescribed financial reporting model classifies state appropriations, Pell grants, and gifts as non-operating revenues. The utilization of long-lived assets, referred to as capital assets, is reflected in the financial statements as depreciation expense, which amortizes the cost of a capital asset over its expected useful life.

Another important factor to consider when evaluating financial viability is the University's ability to meet financial obligations as they mature. The statement of cash flows presents information related to cash inflows and outflows summarized by operating, capital and non-capital, financing and investing activities.

The footnotes provide additional information that is essential to understanding the information provided in the financial statements.

Reporting Entity

The financial statements report information about the University as a whole using accounting methods similar to those used by private-sector companies. The financial statements of the University are separated between University (including its blended component units) and its discretely presented Component Unit activities. The University's discretely presented Component Units (or Related Organizations) are the University of Massachusetts Foundation, Inc., and the University of Massachusetts Dartmouth Foundation, Inc.

Condensed Statements of Net Position - University (excludes Related Organizations)

University of Massachusetts				
Condensed Statements of Net Position				
As of June 30, 2017, 2016, and 2015				
(in thousands of dollars)				
	University June 30, 2017	University June 30, 2016	FY17-16 Change	University June 30, 2015
ASSETS				
Current Assets	\$ 739,847	\$ 677,927	\$ 61,920	\$ 692,679
Noncurrent Assets				
Investment in Plant Net of Accumulated Depreciation	4,930,912	4,615,776	315,136	4,333,761
All Other Noncurrent Assets	1,283,546	1,294,028	(10,482)	1,501,421
Total Assets	6,954,305	6,587,731	366,574	6,527,861
DEFERRED OUTFLOWS OF RESOURCES	275,725	293,432	(17,707)	178,410
LIABILITIES				
Current Liabilities	619,250	774,837	(155,587)	856,460
Noncurrent Liabilities	3,522,756	3,294,183	228,573	3,133,710
Total Liabilities	4,142,006	4,069,020	72,986	3,990,170
DEFERRED INFLOWS OF RESOURCES	37,671	12,050	25,621	48,753
NET POSITION				
Invested in Capital Assets Net of Related Debt	2,204,001	2,013,966	190,035	1,887,941
Restricted				
Nonexpendable	27,443	18,384	9,059	18,378
Expendable	201,710	218,272	(16,562)	169,591
Unrestricted	617,199	549,471	67,728	591,438
Total Net Position	\$ 3,050,353	\$ 2,800,093	\$ 250,260	\$ 2,667,348

At June 30, 2017, total University net position was \$3.1 billion. The University's largest asset continues to be its net investment in its physical plant of \$4.9 billion at June 30, 2017, \$4.6 billion at June 30, 2016 and \$4.3 billion at June 30, 2015.

University liabilities totaled \$4.1 billion at June 30, 2017, an increase of \$73 million over fiscal year 2016. Long-term liabilities represent 85.0% of the total liabilities which primarily consist of bonds payable amounting to \$3.1 billion and net pension liability of \$429.9 million at June 30, 2017.

The University's current assets as of June 30, 2017 of \$739.8 million were above the current liabilities of \$619.3 million, and as a result the current ratio was \$1.19 in assets to every one dollar in liabilities. Current assets of \$677.9 million at June 30, 2016 were below the current liabilities of \$774.8 million, resulting in a current ratio of 0.9.

The unrestricted and restricted expendable net position totaled \$818.9 million in fiscal year 2017, which represents 26% of total operating expenditures of \$3.2 billion for fiscal year 2017. The unrestricted and restricted expendable net position totaled \$767.7 million in fiscal year 2016, which represented 24% of total operating expenditures of \$3.1 billion in 2016. The unrestricted and restricted expendable net position totaled \$761 million in fiscal year 2015, which represents 27% of total operating expenditures of \$2.9 billion in 2015.

Condensed Statements of Net Position - Related Organizations

University of Massachusetts				
Condensed Statements of Net Position for Related Organizations				
As of June 30, 2017, 2016, and 2015				
(in thousands of dollars)				
	University Related Organizations June 30, 2017	University Related Organizations June 30, 2016	FY17-16 Change	University Related Organizations June 30, 2015
ASSETS				
Current Assets	\$ 3,062	\$ 2,094	\$ 968	\$ 1,373
Noncurrent Assets				
Investment in Plant Net of Accumulated Depreciation	17,421	8,090	9,331	8,293
All Other Noncurrent Assets	535,829	472,478	63,351	478,645
Total Assets	556,312	482,662	73,650	488,311
LIABILITIES				
Current Liabilities	28,644	29,194	(550)	31,421
Noncurrent Liabilities	2,764	3,502	(738)	3,505
Total Liabilities	31,408	32,696	(1,288)	34,926
NET POSITION				
Invested in Capital Assets Net of Related Debt	17,421	8,090	9,331	8,293
Restricted				
Nonexpendable	385,856	374,566	11,290	330,301
Expendable	98,145	46,275	51,870	90,413
Unrestricted	23,482	21,035	2,447	24,378
Total Net Position	\$ 524,904	\$ 449,966	\$ 74,938	\$ 453,385

Statement of Revenues, Expenses and Changes in Net Position

Total operating revenues for fiscal year 2017 were \$2.4 billion. This represents a \$39.5 million (1.6%) increase from the \$2.4 billion in operating revenues in fiscal year 2016. The most significant sources of operating revenue for the University are tuition and fees, grants and contracts, auxiliary services and public service activities at the Worcester Medical School campus categorized in the chart as "Other Operating Revenues". While not classified on the financial statements as operating revenue, state appropriations serve as a primary source for funding the core mission of the University. State appropriation revenue, described in detail below, is used almost exclusively to fund payroll for University employees.

In fiscal year 2017, operating expenditures, including depreciation and amortization, totaled \$3.2 billion. Of this total, \$1.8 billion or 53% was used to support the academic core activities of the University, including \$447.4 million in research. The Academic Core represents functional expenses in the following categories: Instruction, Research, Public Service, Academic Support, and Student Services. In fiscal year 2016, operating expenditures, including depreciation and amortization, totaled \$3.1 billion.

Condensed Statements of Revenues, Expenses, and Changes in Net Position - University (excludes Related Organizations)

University of Massachusetts				
Condensed Statements of Revenues, Expenses, and Changes in Net Position				
For the Years Ended June 30, 2017, 2016 and 2015				
(in thousands of dollars)				
	University June 30, 2017	University June 30, 2016	FY17-16 Change	University June 30, 2015
Operating Revenues				
Tuition and Fees (net of scholarship allowances)	\$ 847,832	\$ 826,815	\$ 21,017	\$ 765,218
Grants and Contracts	560,081	528,352	31,729	510,741
Auxiliary Enterprises	400,822	383,281	17,541	362,193
Other Operating Revenues	634,245	665,048	(30,803)	474,632
Total Operating Revenues	2,442,980	2,403,496	39,484	2,112,784
Operating Expenses	3,163,322	3,140,753	22,569	2,782,297
Operating Loss	(720,342)	(737,257)	16,915	(669,513)
Nonoperating Revenues/(Expenses)				
Federal Appropriations	6,602	6,827	(225)	6,619
State Appropriations	720,817	669,748	51,069	621,200
Interest on Indebtedness	(110,069)	(105,276)	(4,793)	(100,332)
Other Nonoperating Income	114,437	90,443	23,994	74,892
Nonoperating Federal Grants	74,050	75,743	(1,693)	76,539
Net Nonoperating Revenues	805,837	737,485	68,352	678,918
Income Before Other Revenues, Expenses, Gains and Losses	85,495	228	85,267	9,405
Capital Appropriations, Grants and Other Sources	150,412	172,557	(22,145)	118,405
Disposal of Plant Facilities	(4,274)	(10,462)	6,188	(12,120)
Other Additions/(Deductions)	18,627	(29,578)	48,205	(27,731)
Total Other Revenues, Expenses, Gains and Losses	164,765	132,517	32,248	78,554
Total Increase in Net Position	250,260	132,745	117,515	87,959
Net Position				
Net Position at the Beginning of the Year	2,800,093	2,667,348	132,745	2,818,295
Cumulative effect of change in accounting principle **	-	-	-	(238,906)
Net Position at the Beginning of the Year, adjusted	2,800,093	2,667,348	132,745	2,579,389
Net Position at the End of the Year	\$ 3,050,353	\$ 2,800,093	\$ 250,260	\$ 2,667,348

** Adoption of GASB 68 for the year ended 6/30/2015

Condensed Statements of Revenues, Expenses, and Changes in Net Position - Related Organizations

University of Massachusetts				
Condensed Statements of Revenues, Expenses, and Changes in Net Position for University Related Organizations				
For the Years Ended June 30, 2017, 2016 and 2015				
(in thousands of dollars)				
	University Related Organizations June 30, 2017	University Related Organizations June 30, 2016	FY17-16 Change	University Related Organizations June 30, 2015
Operating Expenses	\$ 14,090	\$ 17,068	\$ (2,978)	\$ 16,709
Operating Loss	(14,090)	(17,068)	(2,978)	(16,709)
Nonoperating Revenues/(Expenses)				
Other Nonoperating Income	13,631	20,351	(6,720)	18,480
Net Nonoperating Revenues	13,631	20,351	(6,720)	18,480
Income Before Other Revenues, Expenses, Gains and Losses	(459)	3,283	(3,742)	1,771
Additions to Permanent Endowments	42,173	25,864	16,309	21,618
Other Additions/Deductions	33,224	(32,566)	65,790	(15,798)
Total Other Revenues, Expenses, Gains and Losses	75,397	(6,702)	82,099	5,820
Total Increase in Net Position	74,938	(3,419)	78,357	7,591
Net Position				
Net Position at the Beginning of the Year	449,966	453,385	(3,419)	445,794
Net Position at the End of the Year	\$ 524,904	\$ 449,966	\$ 74,938	\$ 453,385

Public Service Activities

Other operating revenues includes Public Service Activities and consists largely of sales and services provided to third parties by the UMass Medical School campus through its Commonwealth Medicine (“CWM”) programs, which provide public consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. In addition to CWM activities, Public Service Activities also includes payments received by the Medical School for educational services it provides to its clinical affiliate UMass Memorial Health Care, Inc. (“UMass Memorial”) as required by the enabling legislation enacted by the Commonwealth in 1997. Finally, Public Service Activity expenditures also include payments made to the Commonwealth of Massachusetts pursuant to requirements of legislation enacted by the State Legislature of Massachusetts. See footnote 1 for additional information regarding “Other Operating Revenues and Expenditures, Sales and Services, Public Service Activities”.

State Appropriations

	FY2017	FY2016	FY2015
Gross Commonwealth Appropriations	\$ 512,900	\$ 546,952	\$ 516,794
Plus: Fringe Benefits*	207,917	178,032	159,403
	720,817	724,984	676,197
Less: Mandatory Waivers	-	(24,653)	(23,942)
Less: Tuition Remitted	-	(30,583)	(31,055)
Net Commonwealth Support	\$ 720,817	\$ 669,748	\$ 621,200

**The Commonwealth pays the fringe benefits for University employees paid from Commonwealth operating appropriations. Therefore, such fringe benefit support is added to the "State Appropriations" financial statement line items as presented in the above table. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than Commonwealth operating appropriations.*

In July 2015, the Legislature passed and the Governor signed into law, provisions in the fiscal year 2016 State budget that would give the University the tools to adopt a new system of billing that conforms to national norms across higher education, known as tuition retention. The passage of this legislation allowed for 100% of tuition to be retained by the University (out of state tuition retention was granted in FY04). As a result, the gross appropriation was reduced in 2017 to reflect the \$30.6 million in tuition that the University retained. In addition, the amounts that were previously deducted from the appropriation in the form of mandatory waivers are now reflected in gross tuition revenue and the offsetting scholarship allowances.

In fiscal year 2017, state appropriations represented 22% of all operating and non-operating revenues. The level of state support is a key factor influencing the University's overall financial condition. Although the state appropriation is unrestricted revenue, nearly 100% of the state appropriation supports payroll and benefits for University employees. The net state appropriation for the University increased by \$51.1 million from fiscal year 2016, with the increase attributable to a higher level of State Appropriation and related fringe benefit support and a change in policy regarding the treatment of mandatory waivers and tuition remitted as a result of full Tuition Retention implemented in FY17 as discussed above. The Commonwealth pays the fringe benefits for University employees paid from Commonwealth operating appropriations. Therefore, such fringe benefit support is added to the "State Appropriations" financial statement line item as presented in the table above. The University pays the Commonwealth for the fringe benefit cost of the employees paid from funding sources other than Commonwealth operating appropriations (details of the payment are referenced in footnote 11). The table above details the Commonwealth operating appropriations and the change as a result of full tuition retention.

Capital Appropriations from the Commonwealth

The University faces a financial challenge to maintain and upgrade its capital assets including its infrastructure, buildings and grounds. In order to have a successful capital program, the University must rely on a combination of revenue sources to fund its investment. In fiscal year 2017, there was \$121.4 million of capital support provided to the University through appropriations and grants from the Commonwealth. This funding is attributed to the Commonwealth's Division of Capital Asset Management ("DCAM") which funded several large capital projects in fiscal year 2017 through the State's Higher Education Bond Bill and Life Sciences Bond Bill, which were passed in 2008 and have projects funded on each of the campuses. Major construction and deferred maintenance projects are underway at all five of the University's campuses. These projects are funded by a combination of University and State funds.

Grant and Contract Revenue

Most research at the University is externally funded, with the federal government providing a majority of the funding through the National Institutes of Health, the National Science Foundation, and other agencies. Among Massachusetts colleges and universities, UMass ranks third in research and development expenditures, behind only MIT and Harvard.

Collectively, the University's Amherst Campus and Medical School in Worcester account for 78% of University grant and contract activity. The following table details the University's grant and contract revenues:

	FY2017	FY2016	FY2015
Federal Grants and Contracts	\$ 354,110	\$ 329,403	\$ 313,754
State Grants and Contracts	78,417	75,306	70,871
Local Grants and Contracts	2,489	2,445	1,717
Private Grants and Contracts	125,065	121,198	124,399
Total Grants and Contracts	\$ 560,081	\$ 528,352	\$ 510,741

Discretely Presented Component Units

University of Massachusetts Foundation, Inc.

The combined University and Foundation endowment has increased to \$819.7 million at June 30, 2017 from \$734.2 million at June 30, 2016 and from \$768.4 million at June 30, 2015.

The Foundation utilizes the pooled investment concept whereby all invested funds are in one investment pool, except for investments of certain funds that are otherwise restricted. Pooled investment funds receive an annual distribution of 4% of the endowment fund's average market value for the preceding twelve quarters on a one-year lag. Only funds that exist during each quarter-end are included in the calculation. In addition, a prudence rule is utilized to limit spending from a particular endowment fund to no lower than 93% of its book value. The Foundation distributed \$28.4 million (4%) and \$27.3 million (4%) in fiscal year 2017 and 2016, respectively.

The total investment gain of the Foundation for fiscal year 2017 was \$104.6 million as compared to 2016, which was a net loss of \$39.1 million.

University of Massachusetts Dartmouth Foundation, Inc.

Total investments of the Dartmouth Foundation were \$57.7 million at June 30, 2017 up from \$52.7 million at June 30, 2016, which are held by the University of Massachusetts Foundation, Inc. The Dartmouth Foundation total investment gain for fiscal year 2017, including realized and unrealized investment activity, was a net gain of \$4.7 million as compared to a net loss of \$1.9 million in 2016.

Tuition and Fees

For academic year 2016-2017, tuition was raised an average 5.6% for in-state undergraduate students. For academic year 2015-2016, tuition was raised on average 7.2%, which included a new mandatory technology fee at each of the campuses. For academic years 2014-2015, the Board of Trustees voted to freeze the mandatory curriculum fee for in state undergraduate students based on the increase to the State appropriation. Affordability will continue to be a priority of the University and increases in fees will be considered in conjunction with State support on an annual basis.

Enrollment

Admission to the University is open to residents of the Commonwealth and non-residents on a competitive basis. In the fall 2017, semester, Massachusetts residents accounted for approximately 82.3% and 52.4% of the University's total undergraduate and graduate enrollment, respectively. Total enrollment in the fall of 2017 was 64,533 FTE (74,655 headcount students) an increase of 8.7%. Enrollments at the University have shown significant increases over the last five years (59,480 FTE in fall 2011). The enrollment growth is consistent with the University's efforts to increase its reach across the Commonwealth and to recruit non-resident students and is reflective of the quality education provided by the University of Massachusetts.

The online learning consortium of the University, UMassOnline, has also shown significant growth in enrollments, course offerings and revenue generation benefiting the campuses and raising the profile of the University throughout this important sector of the higher education market. UMassOnline provides marketing and technology support for UMass' online offerings that enable students, professionals, and lifelong learners to take courses anywhere, anytime. With over 160 undergraduate and graduate degree, certificate and professional development programs and more than 1,500 courses available from University faculty, UMassOnline is one of the largest accredited online programs available. For fiscal year 2017, UMassOnline and the Continuing Education units at the five campuses collaboratively generated tuition revenue in excess of \$104 million and supported 75,565 course enrollments, an increase of 9.2% for revenue and an increase of 6.6% for course enrollments as compared to fiscal year 2016.

Degrees Awarded

The University awards four levels of degrees, as follows: associate, bachelors, masters and doctoral/professional degrees. A total of 18,023 degrees were awarded in the 2015-2016 academic year reflecting a 1.0% increase from the previous year. Of these awards, 67.3% were at the undergraduate level and 21.0% were at the graduate level. The remaining were associates degrees and undergraduate certificates.

Bonds Payable

As of June 30, 2017, the University had outstanding bonds of \$3.1 billion. The principal issuer of the University's debt is the University of Massachusetts Building Authority. A relatively small portion of the total (\$46.8 million) was financed through the Massachusetts Health and Educational Facilities Authority ("MHEFA"), and \$8.0 million financed through the Worcester City Campus Corporation (the "WCCC Bonds"). Bonds payable is the University's largest liability at June 30, 2017.

The Building Authority's active projects include residence hall construction and renovation, renovation of general education buildings, replacement of core infrastructure, and construction of academic, laboratory, and research facilities. The proceeds from the UMass HEFA Bonds were used to create a revolving loan program and to fund the construction of two new campus centers at the Boston and Lowell campuses (funded jointly with the Commonwealth).

On January 31, 2017, the Building Authority issued \$165.1 million of tax-exempt Project Revenue Bonds, Senior Series 2017-1 (the "2017-1 Bonds"), \$19.5 million of federally taxable Project Revenue Bonds, Senior Series 2017-2 (the "2017-2 Bonds"), and \$187.7 million of Refunding Revenue Bonds, Senior Series 2017-3 (the "2017-3 Bonds"). The Series 2017-3 Bonds were issued to refinance a portion of the MHEFA's Revenue Bonds, University of Massachusetts Issue, Series D (2007), the MHEFA's Revenue Bonds, Worcester City Campus Corporation Issue (University of Massachusetts Project), Series E & F (2007), the University of Massachusetts Building Authority Project Revenue Bonds, Senior Series 2008-2, and the University of Massachusetts Building Authority Project Revenue Bonds, Senior Series 2009-1.

University Rating

The University is relying on a carefully planned and executed debt strategy to support master and strategic planning at the campuses and for the University as a whole. Bonds issued by the University of Massachusetts and the University of Massachusetts Building Authority are rated AA, Aa2 and AA- as rated by Fitch, Moody's and Standard & Poor's rating agencies, respectively.

Limitations on Additional Indebtedness

The University may, without limit, issue additional indebtedness or request the Building Authority to issue additional indebtedness on behalf of the University so long as such indebtedness is payable from all available funds of the University. However, the University may request that the Building Authority issue additional indebtedness not payable from all available funds of the University provided that the additional indebtedness is secured by certain pledged revenues and the maximum annual debt service on all revenue indebtedness does not exceed 8% of the University's available revenues.

The Building Authority is authorized by its enabling act to issue bonds with the unconditional guarantee of the Commonwealth of Massachusetts for the punctual payment of the interest and principal payments on the guaranteed bonds. The full faith and credit of the Commonwealth are pledged for the performance of its guarantee. The enabling act, as amended, presently limits to \$200 million the total principal amount of notes and bonds of the Building Authority that may be Commonwealth guaranteed and outstanding at any one time. The amount of bond obligations guaranteed by the Commonwealth at June 30, 2017 and 2016 was \$115.3 million and \$117.4 million, respectively.

Capital Plan

In September 2016, the University's Trustees approved a five-year (fiscal years 2017-2021) update to its capital plan with \$2.3 billion of projects approved to continue or commence over the next 24 months. The University generally has funded its capital plans through a combination of funding received from University operations, bonds issued by the University of Massachusetts Building Authority and MassDevelopment, Commonwealth appropriations, and private fundraising. The execution of certain projects from the University's capital plan is due to funding from the Commonwealth through the Higher Education and Life Sciences Bond Bills.

The University's five-year capital plan for fiscal years 2017-2021 includes major projects that were previously approved by the University Trustees in prior-year capital plans. In recent years, the University enhanced its policy regarding the approval of capital projects to ensure a clear process and to provide for multiple reviews during the process so that the President's Office, Building Authority and the Board of Trustees (the "Board") are actively involved. Since the capital program requires significant investment, the President's office and the Board wanted to ensure that the proper steps were in place for reviewing and approving projects so that the University continues to live within its current capital and debt policies.

In spite of investing more than \$3.5 billion on capital improvements over the last decade, the University's capital plan projects spending another \$2.2 billion over the next five years. The commitment of operating funds for servicing debt and/or funding capital expenditures has an ongoing impact on the overall financial position of the University. In order to support the University's capital plan, the University of Massachusetts Building Authority will be issuing new bonds and State funding will be utilized to fund renovations, new construction, and deferred maintenance projects as illustrated in the capital plan.

Factors Impacting Future Periods

There are a number of issues of University-wide importance that directly impact the financial operations of the University. Many of these issues, such as improving academic quality, realizing strong financial results, investing in capital assets, expanding fundraising capacity, operating more efficiently, being the most effective University for students and the Commonwealth given the available resources, and measuring performance are ongoing activities of continuous importance to the Board and University leadership that impact the financial and budget planning each year. The level of state support, the impact of collectively bargained wage increases, and the ability of student-fee supported activities to meet inflationary pressures determine the limits of program expansion, new initiatives and strategic investments, as well as the ability of the University to meet its core mission and ongoing operational needs.

Contacting the University

This financial report is designed to provide the University, the Commonwealth, the public and other interested parties with an overview of the financial results of the University and an explanation of the University's financial condition. If you have any questions about this report or require additional information, you can contact the University by calling the University Controller, Barbara Cevallos, at (617) 287-6017 or by email at bcevallos@umassp.edu.

University of Massachusetts
Consolidated Statements of Net Position
As of June 30, 2017 and 2016
(in thousands of dollars)

	University		University	
	June 30, 2017	Related Organizations June 30, 2017	June 30, 2016	Related Organizations June 30, 2016
ASSETS				
Current Assets				
Cash and Cash Equivalents	\$ 92,344	\$ 1,424	\$ 101,207	\$ 1,475
Cash Held by State Treasurer	15,114	-	8,888	-
Accounts, Grants and Loans Receivable, net	275,166	-	244,178	-
Pledges Receivable, net	7,091	1,515	7,464	371
Short-Term Investments	286,171	-	206,266	-
Inventories, net	19,137	-	18,006	-
Accounts Receivable from UMass Memorial	33,818	-	35,724	-
Due From Related Organizations	21	123	69	193
Other Assets	10,985	-	56,125	55
Total Current Assets	739,847	3,062	677,927	2,094
Noncurrent Assets				
Cash Held By State Treasurer	7,599	-	8,342	-
Cash and Securities Held by Trustees	438,585	-	486,015	-
Accounts, Grants and Loans Receivable, net	48,775	-	38,526	-
Pledges Receivable, net	13,346	737	17,595	1,690
Investments	766,392	532,605	734,205	468,260
Other Assets	8,849	2,487	9,345	2,528
Investment In Plant, net	4,930,912	17,421	4,615,776	8,090
Total Noncurrent Assets	6,214,458	553,250	5,909,804	480,568
Total Assets	\$ 6,954,305	\$ 556,312	\$ 6,587,731	\$ 482,662
DEFERRED OUTFLOWS OF RESOURCES				
Change in Fair Value of Interest Rate Swaps	\$ 37,768	\$ -	\$ 65,428	\$ -
Loss on Debt Refunding	79,772	-	80,851	-
Pensions	158,185	-	147,153	-
Total Deferred Outflows of Resources	275,725	-	293,432	-
LIABILITIES				
Current Liabilities				
Accounts Payable	\$ 111,808	\$ 53	\$ 105,652	\$ 64
Accrued Salaries and Wages	83,543	-	112,521	-
Accrued Compensated Absences	81,357	-	80,730	-
Accrued Workers' Compensation	2,640	-	3,252	-
Accrued Interest Payable	22,694	-	21,976	-
Bonds Payable	206,696	-	332,996	-
Capital Lease Obligations	203	-	169	-
Accelerated Variable Rate Debt, Current	-	-	5,000	-
Assets Held on behalf of Others	-	27,408	-	27,837
Accounts Payable to UMass Memorial	4,422	-	3,707	-
Due to Related Organizations	123	21	193	69
Unearned Revenues and Credits	44,128	1,162	44,041	1,224
Advances and Deposits	8,375	-	6,712	-
Other Liabilities	53,261	-	57,888	-
Total Current Liabilities	619,250	28,644	774,837	29,194
Noncurrent Liabilities				
Accrued Compensated Absences	30,395	-	35,671	-
Accrued Workers' Compensation	11,946	-	12,160	-
Bonds Payable	2,885,146	-	2,646,626	-
Capital Lease Obligations	389	-	429	-
Interest Rate Swaps	61,839	-	90,478	-
Net Pension Liability	429,871	-	408,418	-
Unearned Revenues and Credits	32,597	-	23,936	-
Advances and Deposits	29,140	-	27,705	-
Other Liabilities	41,433	2,764	48,760	3,502
Total Noncurrent Liabilities	3,522,756	2,764	3,294,183	3,502
Total Liabilities	\$ 4,142,006	\$ 31,408	\$ 4,069,020	\$ 32,696
DEFERRED INFLOWS OF RESOURCES				
Pensions	\$ 37,671	\$ -	\$ 12,050	\$ -
Net Position:				
Invested in Capital Assets Net of Related Debt Restricted	\$ 2,204,001	\$ 17,421	\$ 2,013,966	\$ 8,090
Nonexpendable	27,443	385,856	18,384	374,566
Expendable	201,710	98,145	218,272	46,275
Unrestricted	617,199	23,482	549,471	21,035
Total Net Position	\$ 3,050,353	\$ 524,904	\$ 2,800,093	\$ 449,966

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

University of Massachusetts
Consolidated Statements of Revenues, Expenses, and Changes in Net Position
For The Years Ended June 30, 2017 and 2016
(in thousands of dollars)

	University Related		University Related	
	University	Organizations	University	Organizations
	June 30, 2017	June 30, 2017	June 30, 2016	June 30, 2016
REVENUES				
Operating Revenues				
Tuition and Fees (net of scholarship allowances of \$288,708 at June 30, 2017 and \$244,025 at June 30, 2016)	\$ 847,832	\$ -	\$ 826,815	\$ -
Federal Grants and Contracts	354,110	-	329,403	-
State Grants and Contracts	78,417	-	75,306	-
Local Grants and Contracts	2,489	-	2,445	-
Private Grants and Contracts	125,065	-	121,198	-
Sales and Service, Educational	28,910	-	27,500	-
Auxiliary Enterprises	400,822	-	383,281	-
Other Operating Revenues:				
Sales and Service, Independent Operations	79,261	-	47,613	-
Sales and Service, Public Service Activities	418,726	-	476,831	-
Other	107,348	-	113,104	-
Total Operating Revenues	2,442,980	-	2,403,496	-
EXPENSES				
Operating Expenses				
Educational and General				
Instruction	824,042	-	794,691	-
Research	447,370	-	434,213	-
Public Service	68,083	11,278	71,457	16,502
Academic Support	177,173	-	181,057	-
Student Services	151,033	-	141,915	-
Institutional Support	247,740	-	248,379	-
Operation and Maintenance of Plant	240,501	-	228,406	-
Depreciation and Amortization	249,669	314	240,865	202
Scholarships and Fellowships	47,710	2,498	44,645	364
Auxiliary Enterprises	306,850	-	297,089	-
Other Expenditures				
Independent Operations	57,276	-	47,930	-
Public Service Activities	345,875	-	410,106	-
Total Operating Expenses	3,163,322	14,090	3,140,753	17,068
Operating Loss	(720,342)	(14,090)	(737,257)	(17,068)
NONOPERATING REVENUES/(EXPENSES)				
Federal Appropriations	6,602	-	6,827	-
State Appropriations	720,817	-	669,748	-
Gifts	26,253	3,620	42,415	7,396
Investment Income	28,756	(219)	29,381	182
Unrealized Gain/(Loss) on Investments	15,466	-	(7,633)	-
Endowment Income Distributed for Operations	26,877	-	24,740	1,386
Interest on Indebtedness	(110,069)	-	(105,276)	-
Nonoperating Federal Grants	74,050	-	75,743	-
Other Nonoperating Income	17,085	10,011	1,540	11,387
Net Nonoperating Revenues	805,837	13,412	737,485	20,351
Income Before Other Revenues, Expenses, Gains, and Losses	85,495	(678)	228	3,283
OTHER REVENUES, EXPENSES, GAINS, AND LOSSES				
Capital Appropriations	121,380	-	121,298	-
Capital Grants and Contracts	29,080	-	51,259	-
Endowment Return, Net of Amount Used for Operations	21,278	30,441	(28,958)	(36,524)
Additions to Permanent Endowments	-	42,173	-	25,864
Capital Contribution	-	-	2,985	-
Disposal of Plant Facilities	(4,274)	-	(10,462)	-
Other Additions/(Deductions)	(2,699)	3,002	(3,605)	3,958
Total Other Revenues, Expenses, Gains, and Losses	164,765	75,616	132,517	(6,702)
Total Increase in Net Position	250,260	74,938	132,745	(3,419)
NET POSITION				
Net Position at Beginning of Year	2,800,093	449,966	2,667,348	453,385
Net Position at End of Year	\$ 3,050,353	\$ 524,904	\$ 2,800,093	\$ 449,966

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

University of Massachusetts
Consolidated Statements of Cash Flows
For The Years Ended June 30, 2017 and 2016
(in thousands of dollars)

	University June 30, 2017	University June 30, 2016
CASH FLOWS FROM OPERATING ACTIVITIES		
Tuition and Fees	\$ 852,889	\$ 829,654
Grants and Contracts	814,018	791,533
Payments to Suppliers	(1,131,219)	(1,295,707)
Payments to Employees	(1,461,100)	(1,444,036)
Payments for Benefits	(401,143)	(354,120)
Payments for Scholarships and Fellowships	(47,675)	(44,635)
Loans Issued to Students and Employees	(8,105)	(5,596)
Collections of Loans to Students and Employees	6,989	7,099
Auxiliary Enterprises Receipts	357,968	369,715
Sales and Service, Educational	25,118	24,328
Sales and Service, Independent Operations	76,221	57,451
Sales and Service, Public Service Activities	428,012	493,461
Net Cash Used for Operating Activities	(488,027)	(570,853)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
State Appropriations	720,819	724,985
Tuition Remitted to the State	-	(30,583)
Federal Appropriations	6,602	6,827
Gifts and Grants for Other Than Capital Purposes	32,854	26,831
Nonoperating Federal Grants	74,050	75,743
Student Organization Agency Transactions	155	527
Net Cash Provided by Noncapital Financing Activities	834,480	804,330
CASH FLOWS FROM CAPITAL AND OTHER FINANCING ACTIVITIES		
Proceeds from Capital Debt	236,666	8,668
Bond Issuance Costs Paid	(620)	2
Capital Appropriations	121,333	121,297
Capital Grants and Contracts	9,332	58,759
Purchases of Capital Assets and Construction	(105,493)	(191,039)
Principal Paid on Capital Debt and Leases	(120,353)	(78,287)
Interest Paid on Capital Debt and Leases	(115,201)	(113,746)
Use of Debt Proceeds on Deposit with Trustees	(369,995)	(321,964)
Net Cash Used for Capital Financing Activities	(344,331)	(516,310)
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from Sales and Maturities of Investments	1,124,176	1,138,588
Interest on Investments	10,605	8,862
Purchase of Investments	(1,187,713)	(1,090,191)
Net Cash (Used for) Provided by Investing Activities	(52,932)	57,259
NET (DECREASE) IN CASH AND CASH EQUIVALENTS		
	(50,810)	(225,574)
Cash and Cash Equivalents - Beginning of the Year	604,452	830,026
Cash and Cash Equivalents - End of Year	\$ 553,642	\$ 604,452
RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES		
Operating Loss	\$ (720,342)	\$ (737,257)
Adjustments to reconcile loss to net cash used by Operating Activities:		
Depreciation and Amortization Expense	249,669	240,865
Changes in Assets and Liabilities:		
Receivables, net	(36,615)	(2,969)
Inventories	(1,131)	(534)
Due to Related Organizations	(118)	-
Accounts Receivable/Payable UMass Memorial	2,621	(17,341)
Other Assets	45,821	(44,077)
Accounts Payable (non-capital)	8,412	(17,821)
Accrued Liabilities	(34,453)	(5,835)
Deferred Revenue	8,748	(4,374)
Advances and Deposits	3,098	(395)
Other Liabilities	(13,737)	18,885
Net Cash Used for Operating Activities	\$ (488,027)	\$ (570,853)
SUPPLEMENTAL DISCLOSURE OF NONCASH ACTIVITIES:		
Bonds to refund existing debt	\$ 130,325	\$ -
Assets acquired and included in accounts payable and other liabilities	60,853	63,109

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

**University of Massachusetts
Notes to Consolidated Financial Statements
June 30, 2017 and 2016**

1. SUMMARY OF ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

ORGANIZATION

The consolidated financial statements herein present the financial position, results of operations, changes in net position, and cash flows of the University of Massachusetts ("University"), a federal land grant institution. The financial statements of the University include the Amherst, Boston, Dartmouth, Lowell and Worcester Medical School campuses, and the Central Administration office of the University, Worcester City Campus Corporation ("WCCC"), the University of Massachusetts Amherst Foundation ("UMass Amherst Foundation"), as well as the University of Massachusetts Building Authority (the "Building Authority").

The Building Authority is a public instrumentality of the Commonwealth created by Chapter 773 of the Acts of 1960 (referred to as the "Enabling Act"), whose purpose is to provide dormitories, dining commons, and other buildings and structures for use by the University. WCCC is a tax exempt organization founded to support research and real property activities for the University. The UMass Amherst Foundation was established in 2003 as a tax exempt organization founded to foster and promote the growth, progress, and general welfare of the University. These component units are included in the financial statements of the University because of the significance and exclusivity of their financial relationships with the University.

The University Related Organizations column in the accompanying financial statements includes the financial information of the University's discretely presented component units. The University of Massachusetts Foundation, Inc. ("Foundation") and the University of Massachusetts Dartmouth Foundation, Inc. ("Dartmouth Foundation") are related tax exempt organizations founded to foster and promote the growth, progress and general welfare of the University, and are reported in a separate column to emphasize that they are Massachusetts not-for-profit organizations legally separate from the University. These component units are included as part of the University's financial statements because of the nature and the significance of their financial relationship with the University. The financial statement presentation of the discretely presented component units has been reclassified to conform to the University presentation. The financial reports of all above mentioned component units are available upon request from the University.

The University is an enterprise fund of the Commonwealth of Massachusetts ("Commonwealth"). The financial balances and activities included in these financial statements are, therefore, also included in the Commonwealth's comprehensive annual financial report.

BASIS OF PRESENTATION

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") as prescribed by the Governmental Accounting Standards Board ("GASB") using the economic resources measurement focus and the accrual basis of accounting. These financial statements are reported on a consolidated basis, and all intra-University transactions are eliminated.

Operating revenues consist of tuition and fees, grants and contracts, sales and services of educational activities (including royalties from licensing agreements) and auxiliary enterprise revenues. Operating expenses include salaries, wages, fringe benefits, utilities, subcontracts on grants and contracts, supplies and services (including independent operations and public service activities), and depreciation and amortization. All other revenues and expenses of the University are reported as non-operating revenues and expenses including state general appropriations, federal appropriations, non-capital gifts, short-term investment income, endowment income used in operations, interest expense, and capital additions and deductions. Other revenues, expenses, gains and losses represent all capital items, other changes in long term plant, and changes in endowment net position. Revenues are recognized when earned and expenses are recognized when incurred with the exception of revenue earned on certain public service activities. Restricted grant revenue is recognized only when all eligibility requirements have been met. Contributions, including unconditional promises to give (pledges) for non-endowment or non-capital purposes, are recognized as revenues in the period received. Pledges to restricted non-expendable endowments are recognized as revenues in the period received. Conditional promises to give are not recognized until they become unconditional, that is when the conditions on which they depend are substantially met. The University applies restricted net assets first when an expense or outlay is incurred for purposes for which both restricted and unrestricted net assets are available.

The preparation of financial statements in accordance with US GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, and disclosures of contingencies at the date of the financial statements, revenues and expenditures recognized during the reporting period. Significant estimates include the accrual for employee compensated absences, and workers' compensation liability, the allowance for doubtful accounts, valuation of certain investments, valuation of derivatives, amounts recorded in connection with the pension obligation and the related defined inflows and outflows. Actual results could differ from those estimates.

The University reports its financial statements as a "business-type activity" ("BTA") under GASB Statement No. 35, *Basic Financial Statements - and Management's Discussion and Analysis - for Public Colleges and Universities (GASB 35)*. BTAs are defined as activities are financed in whole or in part by fees charged to external parties for goods or services. GASB 35 establishes standards for external financial reporting by public colleges and universities that resources be classified into the following net position categories:

- **Invested in capital assets, net of related debt:** Capital assets, at historical cost or fair market value on date of gift, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction or improvement of those assets.
- **Restricted Nonexpendable:** Resources subject to externally imposed stipulations that they be maintained permanently by the University.
- **Restricted Expendable:** Resources whose use by the University is subject to externally imposed stipulations. Such assets include restricted grants and contracts, the accumulated net gains/losses on true endowment funds, as well as restricted funds loaned to students, restricted gifts and endowment income, and other similar restricted funds.
- **Unrestricted:** The net position that is not subject to externally imposed restrictions governing their use are classified as unrestricted net position. The University's unrestricted net position may be designated for specific purposes by management or the Board of Trustees. Substantially all of the University's unrestricted net position is designated to support academic and research initiatives or programs, auxiliary enterprises, unrestricted funds functioning as endowments, or are committed to capital construction projects.

Revenues are reported net of discounts and allowances. As a result, student financial aid expenditures are reported as an allowance against tuition and fees revenue while stipends and other payments made directly to students are recorded as scholarship and fellowship expenditures on the statements of revenues, expenses, and changes in net position. Discounts and allowances for tuition and fees and auxiliary enterprises are calculated using the Alternate Method which reports tuition and fee revenue net of scholarship allowances.

NEW GASB PRONOUNCEMENTS

In June 2015, the GASB released Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. The University is required to adopt this standard in fiscal year 2018. Management is evaluating the impact this pronouncement will have on the University.

CLASSIFICATION OF ASSETS AND LIABILITIES

The University presents current and non-current assets and liabilities in the statements of net position. Assets and liabilities are considered current if they mature in one year or less, or are expected to be received, used, or paid within one year or less. Investments with a maturity of greater than one year and balances that have externally imposed restrictions as to use are considered non-current. Cash Held by State Treasurer includes balances with restrictions as to use and balances that may be rolled forward for use toward the restricted purposes in future years, and such balances are classified as non-current. Cash held by trustees is presented based upon its expected period of use and the restrictions imposed on the balances by external parties.

CASH AND CASH EQUIVALENTS AND INVESTMENTS

Cash and cash equivalents consist primarily of petty cash, demand deposit accounts, savings accounts, and money market accounts with a maturity of three months or less when purchased.

Investments are reported at their respective fair values. Short-term investments consist of deposits with original maturities of less than one year and are available for current use. Securities received as a gift are recorded at estimated fair value at the date of the gift.

Private equity and certain other non-marketable securities held by the Foundation are valued using current estimates of fair value by management based on information provided by the general partner or investment manager for the respective securities. The Foundation believes that the carrying amounts of these investments are a reasonable estimate of fair value, however, their estimated value is subject to uncertainty and therefore may differ from the value that would have been used had a ready market for such investment existed.

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

Investment income includes dividends and interest income and is recognized on the accrual basis. In computing realized gains and losses, cost is determined on a specific identification basis.

RESTRICTED GRANTS AND CONTRACTS

The University receives monies from federal and state government agencies under grants and contracts for research and other activities including medical service reimbursements. The University records the recovery of indirect costs applicable to research programs, and other activities which provide for the full or partial reimbursement of such costs, as revenue. Recovery of indirect costs for the years ended June 30, 2017 and 2016 was \$131.6 million and \$119 million, respectively, and is a component of grants and contracts revenue. The costs, both direct and indirect, charged to these grants and contracts are subject to audit by the granting agency. The University believes that any audit adjustments would not have a material effect on the University's financial statements.

PLEDGES AND ENDOWMENT SPENDING

Pledges for non-endowment purposes are presented net of amounts deemed uncollectible, and after discounting to the present value of the expected future cash flows. Because of uncertainties with regard to whether they are realizable, bequests and intentions and other conditional promises are not recognized as assets until the specified conditions are met.

The Foundation utilizes the pooled investment concept whereby all invested funds are in one investment pool, except for investments of certain funds that are otherwise restricted. Pooled investment funds will receive an annual distribution of 4% of the endowment fund's average market value for the preceding twelve quarters on a one year lag. Only funds that exist during each quarter-end are included in the calculation. In addition, a prudence rule will be utilized limiting spending from a particular endowment fund to no lower than 93% of its book value. The actual spending rate approved was 4% for 2017 and 2016. Future utilization of gains is dependent on market performance. Deficiencies for donor-restricted endowment funds resulting from declines in market value would be offset by an allocation from unrestricted net position to restricted expendable net position, and would be recorded in realized and unrealized gains (losses) on sale of investments. In fiscal years 2017 and 2016, the deficiencies were \$0.5 million and \$3.2 million, respectively. The Foundation believes that these adjustments are temporary and will not require permanent funding.

INVENTORIES

The University's inventories consist of books, general merchandise, central stores, vaccines, and operating supplies which are carried at the lower of cost (first-in, first-out and average cost methods) or market value.

INVESTMENT IN PLANT

Capital assets are stated at cost or fair value upon receipt as a gift. Net interest costs incurred during the construction period for major capital projects are capitalized. Repairs and maintenance costs are expensed as incurred, whereas major improvements that extend the estimated useful lives of the assets are capitalized as additions to property and equipment. Depreciation of capital assets is provided on a straight-line basis over the estimated useful lives of the respective assets. Prior to the fiscal year ended June 30, 2017, the University recorded a full year of depreciation in the year of acquisition. Beginning in the fiscal year ended June 30, 2017, to be consistent with the Building Authority, the University applied a half-year convention to the straight-line basis of depreciation. This change in accounting estimate is reported prospectively for all depreciable assets. Management estimates that the adoption of the half-year convention reduced depreciation expense by \$5 million in fiscal year 2017.

Following is the range of useful lives for the University's depreciable assets:

Buildings	15-50 years
Building Improvements	3-20 years
Equipment, Furniture and IT Infrastructure	3-15 years
Software	5 years
Land Improvements	20 years

COMPENSATED ABSENCES

Employees earn the right to be compensated during absences for annual vacation leave and sick leave. The accompanying statements of net position reflect an accrual for the amounts earned and ultimately payable for such benefits as of the end of the fiscal year. The accrual equates to the entire amount of vacation time earned and an actuarially determined liability for the sick leave component of compensated absences. Employees are only entitled to 20% of their sick leave balance upon retirement. The actuarial calculation utilized the probability of retirement for this estimate.

UNEARNED REVENUE

Unearned revenue consists of amounts billed or received in advance of the University providing goods or services. Unearned revenue is recognized as revenue as expenses are incurred and therefore earned.

ADVANCES AND DEPOSITS

Advances from the U.S. Government for Federal Perkins Loans to students are reported as part of advances and deposits. Future loans to students are made available only from repayments of outstanding principal amounts plus accumulated interest received thereon. Funding for the low-interest Federal Perkins Loan program will expire September 30, 2017. Universities and colleges are not allowed to make Federal Perkins Loans to new borrowers after this date.

TUITION AND STATE APPROPRIATIONS

The accompanying financial statements for the year ended June 30, 2016 present as tuition revenue \$30.6 million of in-state tuition received by the University and remitted to the State Treasurer's Office for the general fund of the Commonwealth of Massachusetts.

In July of 2015, the Legislature passed and the Governor signed into law provisions in the fiscal year 2016 State budget that would give the University the tools to adopt a new system of billing that conforms to national norms across higher education. The University restructured its tuition and fees in a way that is transparent and consistent with peer institutions across the nation. Beginning in the year ended June 30, 2017, the State Appropriation decreased to reflect the reduction in appropriation to offset the tuition that previously had been remitted to the State. Gross tuition and fees revenue and the related scholarship allowances on the Statement of Revenues, Expenses and Changes in Net Position increased to reflect the amounts previously credited as mandatory waivers as noted below.

Impact of Tuition Retention on State Appropriations

	Year Ended	
	2017	2016
Gross Commonwealth Appropriations	\$ 512,900	\$ 546,953
Plus: Fringe Benefits	207,919	178,032
	720,819	724,985
Less: Mandatory Waivers	-	(24,654)
Less: Tuition Remitted	-	(30,583)
Net Commonwealth Support	\$ 720,819	\$ 669,748

AUXILIARY ENTERPRISES

An auxiliary enterprise is an entity that exists to furnish a service to students, faculty or staff acting in a personal capacity, and that charges a fee for the use of goods and services. For the years ended June 30, 2017 and 2016, the University recognized Auxiliary Enterprise revenue of \$400.8 million and \$383.3 million, respectively.

OTHER OPERATING REVENUES AND EXPENDITURES, SALES AND SERVICES, PUBLIC SERVICE ACTIVITIES

Public Service Activities consist largely of sales and services provided to third parties by the UMass Medical School campus under its Commonwealth Medicine ("CWM") programs, which provide public consulting and services in health care financing, administration and policy to federal, state and local agencies and not-for-profit health and policy organizations. Included in this category of activities are Commonwealth Medicine revenues of \$296 million and \$283.8 million for the years ended June 30, 2017 and 2016, respectively. Included in expenditures are Commonwealth Medicine expenditures of \$248.8 million and \$244.1 million for the years ended June 30, 2017 and 2016, respectively.

Public Service Activities also include payments received by the Medical School for educational services it provides to its clinical affiliate, UMass Memorial, as required by the enabling legislation enacted by the Commonwealth in 1997. Educational services revenues included in public service revenues were \$140 million and \$209.9 million for the years ended June 30, 2017 and 2016, respectively. Finally, Public Service Activity expenditures include payments made to the Commonwealth of Massachusetts of \$96.5 million and \$166 million for the years ended June 30, 2017 and 2016, pursuant to requirements of legislation enacted by the State Legislature of Massachusetts.

Other non-operating income included revenue of \$15.2 million and \$ 0.5 million for the years ended June 30, 2017 and 2016, respectively. In 2017, other non-operating income consists of amounts due to the University Medical School campus for its learning contracts.

FRINGE BENEFITS FOR CURRENT EMPLOYEES AND POST EMPLOYMENT OBLIGATIONS - PENSION AND NON-PENSION

The University participates in the Commonwealth's Fringe Benefit programs, including active employee and post - employment health insurance, unemployment compensation, pension, and workers' compensation benefits. Health insurance and pension costs for active employees and retirees are paid through a fringe benefit rate charged to the University by the Commonwealth. Workers' compensation costs are assessed separately based on actual University experience.

In addition to providing pension benefits, under Chapter 32A of the Massachusetts General Laws, the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth, housing authorities, redevelopment authorities, and certain other governmental agencies. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Eligible retirees are required to contribute a specified percentage of the health care benefit costs which is comparable to contributions required from employees. The Commonwealth is reimbursed for the cost of benefits to retirees of the eligible authorities and non-state agencies.

The Commonwealth's Group Insurance Commission ("GIC") was established by the Legislature in 1955 to provide and administer health insurance and other benefits to the Commonwealth's employees and retirees, and their dependents and survivors. The GIC also covers housing and redevelopment authorities' personnel, certain authorities and other offline agencies, retired municipal teachers from certain cities and towns and municipalities as an agent multiple employer program, accounted for as an agency fund activity of the Commonwealth, not the University.

The GIC administers a plan included within the State Retiree Benefits Trust Fund, an irrevocable trust. Any assets accumulated in excess of liabilities to pay premiums or benefits or administrative expenses are retained in that fund. The GIC's administrative costs are financed through Commonwealth appropriations and employee investment returns. The Legislature determines employees' and retirees' contribution ratios.

The GIC is a quasi-independent state agency governed by an eleven-member body (the "Commission") appointed by the Governor. The GIC is located administratively within the Executive Office of Administration and Finance, and is responsible for providing health insurance and other benefits to the Commonwealth's employees and retirees and their survivors and dependents. During the fiscal years that ended on June 30, 2017 and 2016, respectively, the GIC provided health insurance for its members through indemnity, PPO, and HMO plans. The GIC also administered carve-outs for the pharmacy benefit and mental health and substance abuse benefits for certain of its health plans. In addition to health insurance, the GIC sponsors life insurance, long-term disability insurance (for active employees only), dental and vision coverage for employees not covered by collective bargaining, a retiree discount vision plan and retiree dental plan, and finally, a pre-tax health care spending account and dependent care assistance program (for active employees only).

Pursuant to the provisions of Paragraph (e), Section 5 of Chapter 163 of the Acts of 1997 and consistent with the September 22, 1992 Memorandum of Understanding between the Commonwealth of Massachusetts Executive Office of Administration and Finance and the University of Massachusetts, the University's Medical School campus has assumed the obligation for the cost of fringe benefits provided by the Commonwealth to University Medical School employees (other than those employees paid from state appropriated funds) for all periods on or after July 1, 1989.

The Medical School determines the actual costs for the health insurance benefits and actuarially calculates the incurred service costs for pensions and retiree health insurance.

INCOME TAX STATUS

The University and the Building Authority are component units of the Commonwealth of Massachusetts and are exempt from Federal and state income tax under the doctrine of intergovernmental tax immunity found in the U.S. Constitution. The University qualifies as a public charity eligible to receive charitable contributions under Section 170(b)(1)(A)(ii) of the Internal Revenue Code, as amended (the "Code"). The Building Authority qualifies as a public charity under Section 170(b)(1)(A)(iv) of the Code.

The WCCC and the University Related Organizations are organizations described in Section 501(c)(3) of the Code, and are generally exempt from income taxes pursuant to Section 501(a) of the Code. WCCC and the University Related Organizations are required to assess uncertain tax positions and have determined that there were no such positions that are material to the financial statements.

COMPARATIVE INFORMATION AND RECLASSIFICATIONS

The University's financial statements include prior year comparative information. Certain reclassifications were made in prior year to conform to current year presentation.

2. CASH AND CASH EQUIVALENTS AND INVESTMENTS

The University's investments are made in accordance with the Investment Policy and Guidelines Statement Operating Cash Portfolio adopted in May 2005 and later amended in June 2009 by the Board of Trustees (the "Investment Policy") and the Statement of Investment and Spending Policies of the University of Massachusetts Foundation, Inc. The goals of these documents are to preserve capital, provide liquidity, and generate investment income. The University of Massachusetts has statutory authority under Massachusetts General Laws Chapter 75 to collect, manage, and disburse trust funds of the University.

Investments are reported at their respective fair values. The values of publicly traded fixed income and equity securities are based upon quoted market prices at the close of business on the last day of the fiscal year. Private equities and certain other non-marketable securities are valued using current estimates in fair value by management based on information provided by the general partner or investment manager for the respective securities. Investments in units of non-publicly traded pooled funds are valued at the unit value determined by the fund's administrator based on quoted market prices of the underlying investments. Private equities and other non-marketable securities represent 18.7% and 23.5% of the University's investments at June 30, 2017 and 2016, respectively.

Custodial Credit Risk - Custodial Credit Risk is the risk that, in the event of a failure of the counterparty, the University would not be able to recover the value of its deposits, investments or collateral securities that were in the possession of an outside party. The University does not have a formal policy related to mitigation of custodial credit risk. Deposits are exposed to custodial risk if they are uninsured and uncollateralized. Investment securities are exposed to custodial credit risk if they are uninsured or not registered in the name of the University and are held by either the counterparty or the counterparty's trust department or agent but not in the University's name. As of June 30, 2017 and 2016, all cash and investment accounts were held on behalf of the University by the Trustees, in the Trustees' name.

The University maintains depository, payroll, disbursement, receipt, and imprest accounts. In addition to bank account deposits, the University held money market instruments which are classified as investments. Interest bearing and money market accounts carry Federal Deposit Insurance Corporation ("FDIC") insurance up to \$250,000 per account. None of the accounts are collateralized above the FDIC insured amounts.

At June 30, 2017 and 2016, the carrying amounts of bank balances with uninsured or uncollateralized operating cash deposits were \$293.9 million and \$246.9 million, respectively.

At June 30, 2017, the University held a carrying and fair market value of \$778.0 million in non-money market investments compared to a carrying and fair market value of \$737.3 million at June 30, 2016. In the event of negligence due to the University's custodian and/or investment manager(s), it is expected that investment balances of \$778.0 million and \$737.3 million at June 30, 2017 and 2016, respectively, would be fully recovered. However, these amounts are subject to both interest rate risk and credit risk.

Concentration of Credit Risk - Concentration of credit risk is assumed to arise when the amount of investments that the University has with one issuer exceeds 5% or more of the total value of the University's investments. The University does not have a formal policy for concentration of credit risk.

As of June 30, 2017 and 2016, there is no concentration of investments with one issuer of the University portfolio, excluding U.S. Government guaranteed obligations, which exceed 5% of the portfolio.

Credit Risk - Credit risk is the risk that the University will lose money because of the default of the security issuer or investment counterparty. The University's Investment Policy and Guidelines Statement allows each portfolio manager full discretion within the parameters of the investment guidelines specific to that manager.

The table below presents the fair value (in thousands) and average credit quality of the fixed income component of the University's investment portfolio as of June 30, 2017 and 2016, respectively:

Asset Class	2017		2016	
	Fair Value	Average Credit Quality	Fair Value	Average Credit Quality
Short Duration	\$ 356,026	AAA	\$ 270,117	AAA
Intermediate Duration	249,365	A	239,218	A

The table below presents the fair value (in thousands) by credit quality of the rated debt investments component, which includes cash and cash equivalents, of the University's investment portfolio as of June 30, 2017 and 2016, respectively:

Rated Debt Investments - 2017
(in thousands)

	S&P Quality Ratings								
	Fair Value	AAA	AA	A	BBB	BB	B	<B	Unrated
U.S. Agencies	\$ 432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 432
U.S. Government	52,217	-	-	-	-	-	-	-	52,217
Certificates of Deposit	10,500	-	-	-	-	-	-	-	10,500
Corporate Debt	91,358	16,243	3,178	23,990	34,951	195	-	-	12,801
Municipal/Public Bonds	4,149	427	1,773	459	1,490	-	-	-	-
Bond Mutual Funds	161,355	61,128	25,099	18,617	27,621	13,038	5,683	1,225	8,944
Money Market Funds	285,380	31,276	-	-	-	-	-	269	253,835
	<u>\$ 605,391</u>	<u>\$ 109,074</u>	<u>\$ 30,050</u>	<u>\$ 43,066</u>	<u>\$ 64,062</u>	<u>\$ 13,233</u>	<u>\$ 5,683</u>	<u>\$ 1,494</u>	<u>\$ 338,729</u>

Rated Debt Investments - 2016
(in thousands)

	S&P Quality Ratings								
	Fair Value	AAA	AA	A	BBB	BB	B	<B	Unrated
U.S. Agencies	\$ 535	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 535
U.S. Government	34,641	-	-	-	-	-	-	-	34,641
Certificates of Deposit	20,500	-	-	-	-	-	-	-	20,500
Corporate Debt	107,428	20,736	7,017	28,393	38,718	-	-	-	12,564
Municipal/Public Bonds	5,455	442	1,875	2,040	1,098	-	-	-	-
Bond Mutual Funds	151,385	65,982	19,627	14,766	23,002	13,016	6,717	1,592	6,683
Money Market Funds	189,391	21,038	-	-	-	-	-	-	168,353
	<u>\$ 509,335</u>	<u>\$ 108,198</u>	<u>\$ 28,519</u>	<u>\$ 45,199</u>	<u>\$ 62,818</u>	<u>\$ 13,016</u>	<u>\$ 6,717</u>	<u>\$ 1,592</u>	<u>\$ 243,276</u>

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates will adversely affect the fair market value of an investment. The University's Investment Policy and Guidelines Statement establishes targets for the preferred duration of the fixed income component of the investment portfolio by asset class by limiting investments through targeted allocations to different asset classes.

The table below shows the allocation for each asset class and the fair value (in thousands) for each as of June 30, 2017 and 2016, respectively:

<u>Asset Class</u>	<u>2017</u>		<u>2016</u>	
	<u>Allocation</u>	<u>Fair Value</u>	<u>Allocation</u>	<u>Fair Value</u>
Short Duration	34%	\$ 356,026	29%	\$ 270,117
Intermediate Duration	24%	249,365	25%	239,218
Alternatives	18%	196,376	23%	220,543
Commodities	1%	8,330	1%	9,108
Equities	21%	224,437	20%	183,027
Real Estate	2%	18,029	2%	18,458
	100%	\$ 1,052,563	100%	\$ 940,471

The table below presents the fair value (in thousands) by investment maturity of the rated debt investments component, which includes cash and cash equivalents, of the University's investment portfolio as of June 30, 2017 and 2016, respectively:

INVESTMENTS - 2017

(in thousands)

Investment Type:	Investment Maturity (in Years)				
Debt Securities	Fair Value	Less than 1	1 to 5	6 to 10	More than 10
U.S. Agencies	\$ 432	\$ 296	\$ 136	\$ -	\$ -
U.S. Government	52,217	448	47,233	4,536	-
Certificates of Deposit	10,500	10,500	-	-	-
Corporate Debt	91,358	30,648	55,812	4,486	412
Municipal/Public Bonds	4,149	4,003	146	-	-
Bond Mutual Funds	161,355	24,751	81,212	44,488	10,904
Money Market Funds	285,380	285,380	-	-	-
Sub Total Debt Securities	\$ 605,391	\$ 356,026	\$ 184,539	\$ 53,510	\$ 11,316
Other Investments					
Alternative Assets	\$ 196,376				
Equity Securities - International	128,458				
Equity Securities - Domestic	95,979				
Commodities	8,330				
Real Estate	18,029				
Grand Total	\$ 1,052,563				

INVESTMENTS - 2016

(in thousands)

Investment Type:	Investment Maturity (in Years)				
Debt Securities	Fair Value	Less than 1	1 to 5	6 to 10	More than 10
U.S. Agencies	\$ 535	\$ 343	\$ 192	\$ -	\$ -
U.S. Government	34,641	1,180	29,935	3,526	-
Certificates of Deposit	20,500	20,500	-	-	-
Corporate Debt	107,428	34,560	67,054	5,814	-
Municipal/Public Bonds	5,455	5,455	-	-	-
Bond Mutual Funds	151,385	18,688	82,901	36,419	13,377
Money Market Funds	189,391	189,391	-	-	-
Sub Total Debt Securities	\$ 509,335	\$ 270,117	\$ 180,082	\$ 45,759	\$ 13,377
Other Investments					
Alternative Assets	\$ 220,543				
Equity Securities - International	106,102				
Equity Securities - Domestic	76,925				
Commodities	9,108				
Real Estate	18,458				
Grand Total	\$ 940,471				

Fair Value Measurements - GASB No. 72 *Fair Value Measurements and Application* sets forth the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under GASB No. 72 are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the University has the ability to access.

Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly and include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value measurement. Unobservable inputs are developed based on the best information available in the circumstances and may include the University's own data.

The following table presents the investments carried at fair value, as of June 30, 2017, by the GASB No. 72 valuation hierarchy defined above (in thousands):

	2017	Fair Value Measurements Determined Using:		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities				
U.S. Treasury Securities	\$ 49,198	\$ 49,198	\$ -	\$ -
Government Agency Bonds	432	-	432	-
Asset-Backed Securities	20,571	-	20,571	-
Commercial Mortgage-Backed Securities	5,771	-	5,771	-
Government Issued Commercial Mortgage-Backed Securities	253	-	253	-
Government Mortgage-Backed Securities	3,047	-	3,047	-
Non Government Backed CMO's	886	-	886	-
Corporate Bonds	63,866	-	63,629	237
Municipal and Provincial Bonds	4,149	-	4,149	-
Other Fixed Income	161,353	147,948	13,405	-
Total Debt Securities	309,526	197,146	112,143	237
Equity Securities				
Domestic Equities	95,979	94,729	-	1,250
International Equities	128,458	128,458	-	-
Total Equity Securities	224,437	223,187	-	1,250
Other Securities				
Commodities	8,330	8,330	-	-
REITS	18,029	18,029	-	-
Total Other Securities	26,359	26,359	-	-
Total Investments by Fair Value Level	\$ 560,322	\$ 446,692	\$ 112,143	\$ 1,487
Investments Measured at the Net Asset Value ("NAV")				
Multi-Strategy Hedge Funds				
Equity	\$ 46,681			
Long/Short	12,640			
Fixed Income	48,196			
Absolute Return	50,623			
Real Assets	11,784			
Private Equity	3,402			
Private Debt	19,221			
Private Real Estate	3,829			
Total Investments Measured at the NAV	196,376			
Total Investments Measured at Fair Value	\$ 756,698			
Cash and Cash Equivalents	295,865			
Total Investments Per Financial Statements	\$ 1,052,563			

The following table presents the investments carried at fair value, as of June 30, 2016, by the GASB No. 72 valuation hierarchy defined above (in thousands):

	2016	Fair Value Measurements Determined Using:		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities				
U.S. Treasury Securities	\$ 31,873	\$ 31,873	\$ -	\$ -
Government Agency Bonds	535	-	535	-
Asset-Backed Securities	23,951	-	23,951	-
Commercial Mortgage-Backed Securities	11,552	-	11,552	-
Government Issued Commercial Mortgage-Backed Securities	421	-	421	-
Government Mortgage-Backed Securities	3,911	-	3,911	-
Non Government Backed CMO's	404	-	404	-
Corporate Bonds	71,756	-	71,598	158
Municipal and Provincial Bonds	5,455	-	5,455	-
Other Fixed Income	151,386	137,608	13,778	-
Total Debt Securities	301,244	169,481	131,605	158
Equity Securities				
Domestic Equities	76,925	76,074	-	851
International Equities	106,102	106,102	-	-
Total Equity Securities	183,027	182,176	-	851
Other Securities				
Commodities	9,108	9,108	-	-
REITS	18,458	18,458	-	-
Total Other Securities	27,566	27,566	-	-
Total Investments by Fair Value Level	\$ 511,837	\$ 379,223	\$ 131,605	\$ 1,009
Investments Measured at the NAV				
Multi-Strategy Hedge Funds				
Equity	\$ 41,970			
Long/Short	28,614			
Fixed Income	59,131			
Absolute Return	59,139			
Real Assets	12,055			
Private Equity	1,147			
Private Debt	14,989			
Private Real Estate	3,498			
Total Investments Measured at the NAV	220,543			
Total Investments Measured at Fair Value	\$ 732,380			
Cash and Cash Equivalents	208,091			
Total Investments Per Financial Statements	\$ 940,471			

3. CASH HELD BY STATE TREASURER

Accounts payable, accrued salaries and outlays for future capital projects to be funded from state-appropriated funds totaled \$14.4 million at June 30, 2017 and \$17.3 million at June 30, 2016. The University has recorded a comparable amount of cash held by the State Treasurer for the benefit of the University, which will be subsequently utilized to pay for such liabilities. The cash is held in the State Treasurer's pooled cash account. The Commonwealth requires all bank deposits in excess of insurance coverage by the FDIC to be collateralized with a perfected pledge of eligible collateral. Eligible collateral must be pledged in an amount equal to 102% of the amount of the deposits that exceed FDIC insurance. Sufficient collateral to cover total Commonwealth deposits in excess of the FDIC insured amount must be pledged and held in safekeeping by a custodian that is approved by and under the control of the Treasurer and Receiver - General.

4. CASH AND SECURITIES HELD BY TRUSTEES

Cash and securities held by trustees consist primarily of unspent bond proceeds, amounts held for the future payment of debt service on such borrowings and designated funds from the Building Authority. At June 30, 2017 and 2016, there was \$1 million and \$0.9 million, respectively, available from the Revolving Loan Fund established with 2000 Series A bond proceeds issued to acquire and implement enterprise resource planning technology along with other projects (see Note 8) and \$438.6 million and \$485.1 million, respectively, held by trustees related to the Building Authority.

Pursuant to Trust Agreements between the Building Authority and its bond trustees, all funds deposited with those trustees (\$438.6 million at June 30, 2017 and \$437.6 million at June 30, 2016) shall be continuously maintained for the benefit of the Building Authority and Registered owners of the Bonds. All investments shall be (a) held with a bank or trust company approved by the Trustees and the Building Authority, as custodians, or (b) in such other manner as may be required or permitted by applicable state and Federal laws and regulations. Investments shall consist of (a) direct obligations of, or obligations which are unconditionally guaranteed by the United States of America, or any other agency or corporation which has been created pursuant to an act of Congress of the United States as an agency or instrumentality thereof; or (b) other marketable securities eligible as collateral for the deposit of trust funds under regulations of the Comptroller of the Currency having a market value not less than the amount of such deposit. Direct obligations of, or obligations which are unconditionally guaranteed by the United States of America or any other agency or corporation which has been created pursuant to an act of Congress of the United States as an agency or instrumentality thereof, may be subject to repurchase upon demand by the owner pursuant to a repurchase agreement with a bank or trust company.

Cash Deposits - Custodial Credit Risk - The Building Authority holds a majority of its cash and cash equivalents in high quality money market mutual funds that invest in securities that are permitted investments under the Building Authority's Enabling Act or in money market mutual funds that have been specifically permitted by state legislation. The Building Authority's cash and cash equivalents consisted of the following as of June 30 (in thousands):

	<u>2017</u>	<u>2016</u>
Cash	\$ 5,553	\$ 4,577
Permitted money market accounts ("MMA")	426,797	475,240
Total cash and cash equivalents	<u>\$ 432,350</u>	<u>\$ 479,817</u>

Custodial credit risk is the risk that, in the event of a bank failure, the University will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The University does not have a deposit policy for custodial credit risk. As of June 30, 2017 and June 30, 2016, the bank balances of uninsured deposits totaled \$5.1 million and \$4.1 million, respectively. For purposes of disclosure under GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, money market accounts investing in debt securities are considered investments and therefore, are included in the investment disclosures that follow.

Interest Rate Risk - The Building Authority has a formal investment policy that establishes minimum credit quality of certain instruments, outlines investment procedures, and provides for periodic reporting. Generally, the Building Authority holds its investments until maturity.

Credit Risk - Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. The risk is measured by the assignment of a rating by a nationally recognized statistical rating organization.

The Enabling Act specifies the permitted investments of the Building Authority. These permitted investments include direct obligations of or obligations which are unconditionally guaranteed by the United States of America ("Treasuries"), obligations of an agency or organization created pursuant to an act of Congress of the United States as an agency or instrumentality thereof ("Agencies"), time deposits or certificate of deposits fully secured by Treasuries or Agencies, and Treasuries and Agencies subject to repurchase agreements. Other legislation allows the Building Authority to invest in the Massachusetts Municipal Depository Trust (the "MMDT"), a money market account sponsored by the Treasurer of the Commonwealth and managed by Federated Investors, Inc. Additionally, the Building Authority's Bond Trustee invests some of the Building Authority's funds in money market accounts that are permitted and collateralized by Treasuries.

No credit risk disclosures are required under GASB 40 relating to the Building Authority's investment in Treasuries. The Building Authority's investments in repurchase agreements are not rated but are fully collateralized by Treasuries and Agencies. MMDT is unrated.

Custodial Credit Risk the Building Authority's Enabling Act does not contain legal or policy requirements that would limit the exposure to custodial credit risk except that interest-bearing time deposits or certificates of deposit of banking institutions or trust companies must be continuously and fully secured by Treasuries or Agencies.

Custodial credit risk generally applies only to direct investments in marketable securities. Custodial credit risk does not apply to indirect investment in securities through the use of mutual funds or government investment pools, such as MMDT. Direct investments in marketable securities are held by the Building Authority's Bond Trustee as the Building Authority's agent. In accordance with the Building Authority's repurchase agreements, collateral for the agreements is held in segregated accounts with market values between 100% and 105% of the repurchase price, depending on the type of asset used as security and the specific repurchase agreement.

Concentrations of Credit Risk the Building Authority places no limit on the amount it may invest in any one issuer. As of June 30, 2017, the Building Authority had 98.8% of its investments in MMDT. As of June 30, 2016, the Building Authority had 98% of its investments in MMDT.

5. ACCOUNTS, GRANTS AND LOANS RECEIVABLE

Accounts, grants and loans receivable as of June 30, 2017 and 2016 are as follows (in thousands):

	2017	2016
Student Accounts Receivable	\$ 58,065	\$ 56,661
Less allowance for uncollectible accounts	(20,258)	(23,077)
	<u>37,807</u>	<u>33,584</u>
Grants and Contracts Receivable	94,583	98,383
Less allowance for uncollectible accounts	(1,189)	(2,108)
	<u>93,394</u>	<u>96,275</u>
Student Loans Receivable	63,660	44,760
Less allowance for uncollectible accounts	(4,499)	(303)
	<u>59,161</u>	<u>44,457</u>
Commonwealth Medicine	76,093	69,489
Less allowance for uncollectible accounts	(2,029)	(500)
	<u>74,064</u>	<u>68,989</u>
Other	60,304	39,996
Less allowance for uncollectible accounts	(789)	(597)
	<u>59,515</u>	<u>39,399</u>
Total, net	323,941	282,704
Less current portion, net	(275,166)	(244,178)
Long-term, net	<u>\$ 48,775</u>	<u>\$ 38,526</u>

UMASS MEMORIAL

The University and UMass Memorial have the following ongoing agreements:

- UMass Memorial has been granted the right to occupy portions of the University's Worcester Medical School campus for a period of 99 years and UMass Memorial has agreed to share responsibility for various capital and operating expenses relating to the occupied premises. UMass Memorial has also agreed to contribute to capital improvements to shared facilities.
- UMass Memorial has agreed to make certain payments to the University and its related organizations, including: 1) an annual fee of \$12 million (plus an inflation adjustment), for 99 years as long as the University continues to operate a medical school; and 2) a participation payment based on a percentage of net operating income of UMass Memorial for which revenue is recognized by the University when the amounts are received.

The University is reimbursed by, and reimburses UMass Memorial for shared services, cross-funded employees, and other agreed upon activities provided and purchased. For the years ended June 30, 2017 and 2016, the reimbursements for services provided to UMass Memorial were \$147.7 million and \$125.2 million, respectively. Included in these amounts are payroll paid by the University on behalf of UMass Memorial in an agency capacity in the amount of \$89.2 million and \$71.3 million for fiscal years 2017 and 2016, respectively. At June 30, 2017 and 2016, the University has recorded a receivable in the amount of \$33.8 million and \$35.7 million, respectively from UMass Memorial which includes \$19.4 million and \$22.9 million, respectively, in payroll and related fringe charges. The University has recorded a payable of \$4.4 million and \$3.6 million at June 30, 2017 and 2016, respectively, primarily for cross-funded payroll.

6. RELATED ORGANIZATIONS

Related party activity with the Foundation includes loan agreements and investments of the University's endowment assets and Intermediate Term Investment Fund ("ITIF") with the Foundation.

As of June 30, 2017, the net position of the Foundation included as related organization in the accompanying financial statements of the University is \$538.6 million, of which \$500.2 million are restricted funds and \$38.4 million are unrestricted funds. During the fiscal year ended June 30, 2017, the University received \$33.0 million from the Foundation, and transferred \$11.6 million to the Foundation of which \$1.6 million related to the establishment of quasi-endowment. At June 30, 2017, the University's investments include \$331.5 million of endowment funds held in a custodial relationship at the Foundation, and \$301.1 million in ITIF.

As of June 30, 2016, the net position of the Foundation included as related organization in the accompanying financial statements of the University is \$465.8 million, of which \$438.9 million are restricted funds and \$26.9 million are unrestricted funds. During the fiscal year ended June 30, 2016, the University received \$29.7 million from the Foundation, and transferred \$14.7 million to the Foundation. At June 30, 2016, the University's investments include \$309 million of endowment funds held in a custodial relationship at the Foundation, and \$283.2 million in ITIF.

The Building Authority and the Commonwealth have entered into various lease agreements under which the Commonwealth leases to the Building Authority certain property for nominal amounts.

7. INVESTMENT IN PLANT

Investment in plant activity for the year ended June 30, 2017 is comprised of the following (in thousands):

University:

	Beginning Balance	Additions	Retirements	Ending Balance
Buildings and Improvements	\$ 5,691,000	\$ 456,293	\$ (14,652)	\$ 6,132,641
Equipment and Furniture	658,968	80,119	(45,586)	693,501
Software	136,503	4,272	(29,737)	111,038
Library Books	65,978	-	(5,834)	60,144
	6,552,449	540,684	(95,809)	6,997,324
Accumulated Depreciation	(2,697,213)	(249,974)	82,907	(2,864,280)
Sub-Total	3,855,236	290,710	(12,902)	4,133,044
Land	84,161	14,394	(895)	97,660
Construction in Progress	676,379	478,566	(454,737)	700,208
Sub-Total	760,540	492,960	(455,632)	797,868
Total	\$ 4,615,776	\$ 783,670	\$ (468,534)	\$ 4,930,912

University Related Organizations:

	Beginning Balance	Additions	Ending Balance
Buildings and Improvements	\$ 7,942	\$ 7,900	\$ 15,842
Equipment and Furniture	168	7	175
	8,110	7,907	16,017
Accumulated Depreciation	(1,439)	(315)	(1,754)
Sub-Total	6,671	7,592	14,263
Land	1,419	1,650	3,069
Total	\$ 8,090	\$ 9,242	\$ 17,332

Investment in plant activity for the year ended June 30, 2016 is comprised of the following (in thousands):

University:

	Beginning Balance	Additions	Retirements	Ending Balance
Buildings and Improvements	\$ 5,447,343	\$ 251,688	\$ (8,031)	\$ 5,691,000
Equipment and Furniture	634,270	59,330	(34,632)	658,968
Software	136,570	1,052	(1,119)	136,503
Library Books	74,576	-	(8,598)	65,978
	<u>6,292,759</u>	<u>312,070</u>	<u>(52,380)</u>	<u>6,552,449</u>
Accumulated Depreciation	<u>(2,494,718)</u>	<u>(240,957)</u>	<u>38,462</u>	<u>(2,697,213)</u>
Sub-Total	<u>3,798,041</u>	<u>71,113</u>	<u>(13,918)</u>	<u>3,855,236</u>
Land	71,579	12,582	-	84,161
Construction in Progress	464,142	428,789	(216,552)	676,379
Sub-Total	<u>535,721</u>	<u>441,371</u>	<u>(216,552)</u>	<u>760,540</u>
Total	<u>\$ 4,333,762</u>	<u>\$ 512,484</u>	<u>\$ (230,470)</u>	<u>\$ 4,615,776</u>

University Related Organizations:

	Beginning Balance	Additions	Ending Balance
Buildings and Improvements	\$ 7,942	\$ -	\$ 7,942
Equipment and Furniture	168	-	168
	<u>8,110</u>	<u>-</u>	<u>8,110</u>
Accumulated Depreciation	<u>(1,238)</u>	<u>(201)</u>	<u>(1,439)</u>
Sub-Total	<u>6,872</u>	<u>(201)</u>	<u>6,671</u>
Land	1,419	-	1,419
Total	<u>\$ 8,291</u>	<u>\$ (201)</u>	<u>\$ 8,090</u>

The University has capitalized interest on borrowings, net of interest earned on related debt reserve funds, during the construction period of major capital projects. Capitalized interest is added to the cost of the underlying assets being constructed, and is amortized over the useful lives of the assets. For the years ended June 30, 2017 and 2016, the University capitalized net interest costs of \$20.5 million and \$22.1 million, respectively.

On November 8, 2016, the Building Authority entered into an agreement whereby the Building Authority sub-leased property on the University of Boston campus to Provident Commonwealth Educational Resources Inc., a Massachusetts not-for-profit corporation. The land is leased to the Authority by the Commonwealth. Provident Commonwealth Educational Resources, Inc. will engage a contractor to construct a 1,082 bed student housing facility on the site. The Building Authority will sub-lease the property to Provident Commonwealth Educational Resources Inc. for a term of approximately 40 years. Commencing approximately one year following the completion of the project (estimated completion August 2018), the annual rental amount payable to the Building Authority under the ground lease will be \$1.0 million.

Pursuant to the Dining Facility Sublease dated November 8, 2016 between Provident Commonwealth Education Resources Inc., as sub-lessor and the Building Authority, as sub-lessee, Provident Commonwealth Educational Resources Inc. shall lease the dining facility, located within the residential hall, to the Building Authority and the Building Authority shall operate the Dining Facility.

8. BONDS PAYABLE

Amounts outstanding at June 30, 2017 are as follows (in thousands)

Issue Borrowing	Original Borrowing	Maturity Date	Interest Rate	Amount Outstanding
University of Massachusetts Building Authority:				
Series 2008-A	26,580	2038	variable	19,145
Series 2008-1	232,545	2038	variable	171,430
Series 2008-2	120,560	2038	4.00-5.00%	3,065
Series 2009-1	247,810	2039	3.00-5.00%	28,400
Series 2009-2	271,855	2039	6.42-6.57%	271,855
Series 2009-3	28,570	2039	5.82-6.17%	25,685
Series 2010-1	118,985	2020	5.00%	59,230
Series 2010-2	430,320	2040	3.80-5.45%	430,320
Series 2010-3	3,005	2040	5.75%	2,730
Series 2011-1	135,040	2034	variable	126,540
Series 2011-2	101,700	2034	variable	96,115
Series 2013-1	212,585	2043	2.00-5.00%	198,655
Series 2013-2	71,970	2043	0.43-2.69%	65,090
Series 2013-3	24,640	2043	4.00 - 5.00%	24,640
Series 2014-1	293,890	2044	3.00 - 5.00%	293,015
Series 2014-2	14,085	2019	0.44-2.10%	8,555
Series 2014-4	157,855	2025	0.20 - 3.38%	122,125
Series 2014-3	67,635	2029	2.00-5.00%	61,640
Series 2015-1	298,795	2036	4.00 - 5.00%	298,795
Series 2015-2	191,825	2036	3.00 - 5.00%	191,825
Series 2017-1	165,130	2047	3.25-3.77%	165,130
Series 2017-2	19,510	2027	1.58-3.37%	19,510
Series 2017-3	35,945	2038	3.00-5.00%	187,680
				<u>2,871,175</u>
			Unamortized Bond Premium	<u>164,887</u>
			SUBTOTAL	<u>3,036,062</u>
University of Massachusetts HEFA/MDFA:				
2000 Series A	\$ 20,000	2030	variable	20,000
Series 2011	29,970	2034	2.50-4.00%	25,925
				<u>45,925</u>
			Unamortized Bond Premium	<u>870</u>
				<u>46,795</u>
WCCC HEFA/MDFA:				
Series 2005-D	\$ 99,325	2029	5.00-5.25%	715
Series 2011	10,495	2023	2.00-5.00%	6,690
				<u>7,405</u>
			Unamortized Bond Premium	<u>624</u>
			SUBTOTAL	<u>8,029</u>
MDFA:				
Clean Renewable Energy Bonds	\$ 1,625	2027	3.50%	<u>956</u>
			TOTAL	<u>\$ 3,091,842</u>

Bond Payable activity for the year ended June 30, 2017 is summarized as follows (in thousands):

	Beginning Balance	Additions	Retirements/ Repayment/ Amortization	Ending Balance
University of Massachusetts Building Authority:				
Series 2004-1	\$ 1,515	\$ -	\$ (1,515)	\$ -
Series 2008-A	20,105	-	(960)	19,145
Series 2008-1	179,425	-	(7,995)	171,430
Series 2008-2	63,025	-	(59,960)	3,065
Series 2009-1	108,365	-	(79,965)	28,400
Series 2009-2	271,855	-	-	271,855
Series 2009-3	26,235	-	(550)	25,685
Series 2010-1	72,310	-	(13,080)	59,230
Series 2010-2	430,320	-	-	430,320
Series 2010-3	2,785	-	(55)	2,730
Series 2011-1	128,245	-	(1,705)	126,540
Series 2011-2	97,265	-	(1,150)	96,115
Series 2013-1	203,420	-	(4,765)	198,655
Series 2013-2	67,335	-	(2,245)	65,090
Series 2013-3	24,640	-	-	24,640
Series 2014-1	293,465	-	(450)	293,015
Series 2014-2	11,330	-	(2,775)	8,555
Series 2014-4	149,975	-	(27,850)	122,125
Series 2014-3	64,470	-	(2,830)	61,640
Series 2015-1	298,795	-	-	298,795
Series 2015-2	191,825	-	-	191,825
Series 2017-1	-	165,130	-	165,130
Series 2017-2	-	19,510	-	19,510
Series 2017-3	-	187,680	-	187,680
Plus: unamortized bond premium	122,146	55,987	(13,246)	164,887
Subtotal	2,828,851	428,307	(221,096)	3,036,062
UMass HEFA/MDFA:				
2000 Series A	20,000	-	-	20,000
2007 Series D	8,645	-	(8,645)	-
Series 2011	26,940	-	(1,015)	25,925
Plus: unamortized bond premium	949	-	(79)	870
Subtotal	56,534	-	(9,739)	46,795
WCCC HEFA/MDFA:				
WCCC 2005 Series D	1,335	-	(620)	715
WCCC 2007 Series E	31,250	-	(31,250)	-
WCCC 2007 Series F	51,890	-	(51,890)	-
Series 2011	7,495	-	(805)	6,690
Plus: unamortized bond premium	1,215	-	(591)	624
Subtotal	93,185	-	(85,156)	8,029
MDFA:				
Clean Renewable Energy Bonds	1,052	-	(96)	956
Total	\$ 2,979,622	\$ 428,307	\$ (316,087)	\$ 3,091,842

Principal and interest, which is estimated using rates in effect at June 30, 2017, on bonds payable for the next five fiscal years and in subsequent five-year periods are as follows (in thousands):

<u>Fiscal Year</u>	<u>Principal</u>	<u>Interest</u>
2018	\$ 94,314	\$ 120,128
2019	100,271	116,960
2020	103,931	113,481
2021	107,866	109,470
2022	100,356	105,462
2023-2027	519,043	469,016
2028-2032	514,595	364,839
2033-2037	493,775	263,926
2038-2042	554,865	138,095
2043-2047	316,045	32,583
2048-2052	20,400	536
Total	<u>\$ 2,925,461</u>	<u>\$ 1,834,496</u>

Bond payable activity for the year ended June 30, 2016 is summarized as follows (in thousands):

	<u>Beginning Balance</u>	<u>Retirements/ Repayments/ Amortization</u>	<u>Ending Balance</u>
University of Massachusetts Building Authority:			
Series 2004-A	\$ 2,340	\$ (2,340)	\$ -
Series 2004-1	8,300	(6,785)	1,515
Series 2005-1	2,805	(2,805)	-
Series 2005-2	16,005	(16,005)	-
Series 2008-A	21,035	(930)	20,105
Series 2008-1	187,125	(7,700)	179,425
Series 2008-2	65,835	(2,810)	63,025
Series 2009-1	120,575	(12,210)	108,365
Series 2009-2	271,855	-	271,855
Series 2009-3	26,755	(520)	26,235
Series 2010-1	84,775	(12,465)	72,310
Series 2010-2	430,320	-	430,320
Series 2010-3	2,835	(50)	2,785
Series 2011-1	129,690	(1,445)	128,245
Series 2011-2	98,220	(955)	97,265
Series 2013-1	208,060	(4,640)	203,420
Series 2013-2	69,570	(2,235)	67,335
Series 2013-3	24,640	-	24,640
Series 2014-1	293,890	(425)	293,465
Series 2014-2	14,085	(2,755)	11,330
Series 2014-4	153,800	(3,825)	149,975
Series 2014-3	67,365	(2,895)	64,470
Series 2015-1	298,795	-	298,795
Series 2015-2	191,825	-	191,825
Plus: unamortized bond premium	133,429	(11,283)	122,146
Subtotal	2,923,929	(95,078)	2,828,851
UMass HEFA/MDFA:			
2000 Series A	20,000	-	20,000
2007 Series D	9,025	(380)	8,645
Series 2011	27,925	(985)	26,940
Plus: unamortized bond premium	895	54	949
Subtotal	57,845	(1,311)	56,534
WCCC HEFA/MDFA:			
WCCC 2005 Series D	1,785	(450)	1,335
WCCC 2007 Series E	33,945	(2,695)	31,250
WCCC 2007 Series F	54,830	(2,940)	51,890
Series 2011	8,270	(775)	7,495
Plus: unamortized bond premium	1,499	(284)	1,215
Subtotal	100,329	(7,144)	93,185
MDFA:			
Clean Renewable Energy Bonds	1,147	(95)	1,052
Total	\$ 3,083,250	\$ (103,628)	\$ 2,979,622

University of Massachusetts Building Authority

The bond agreements related to the Building Authority bonds generally provide that the net revenues of the Building Authority are pledged as collateral on the bonds and also provide for the establishment of bond reserve funds, bond funds, and maintenance reserve funds.

The University is obligated under its contracts for financial assistance, management and services with the Building Authority to collect rates, rents, fees and other charges with respect to such facilities sufficient to pay principal and interest on the Building Authority's bonds and certain other costs such as insurance on such facilities.

Pursuant to the authority given by the Building Authority's enabling act, the Commonwealth, acting by and through the Trustees of the University, has guaranteed the payment of principal and interest on the Building Authority's bonds. (The guarantee is a general obligation of the Commonwealth to which the full faith and credit of the Commonwealth are pledged. As is generally the case with other general obligations of the Commonwealth, funds with which to honor the guarantee, should it be called upon, will be provided by Commonwealth appropriation). The Building Authority's enabling act provides that the outstanding principal amount of notes and bonds of the Building Authority guaranteed by the Commonwealth cannot exceed \$200 million. The amount of bond obligations guaranteed by the Commonwealth was \$115.3 million and \$117.4 million at June 30, 2017 and 2016, respectively.

When the Building Authority no longer has any bonds outstanding, its properties revert to the Commonwealth, and all its funds (other than funds pledged to bondholders) are required to be paid into the Treasury of the Commonwealth.

Variable Rate Bonds On April 15, 2016, the Authority entered into a standby purchase agreement with Barclays Bank PLC ("Barclays") which requires Barclays to purchase bonds that are tendered and not remarketed. Under the terms of the Barclays standby bond purchase agreement, the Authority is required to pay Barclays in quarterly installments a facility fee in the amount of 29 basis points (or higher, under certain circumstances) of the commitment amount. In fiscal years 2017 and 2016 the Authority incurred fees in connection with the Barclays agreement in the amount of \$0.7 million and \$0.1 million, respectively. The agreement expires on April 22, 2019 and may be extended if a mutual interest exists between the Authority and Barclays. Previously, the 2008-1 bonds were supported with a standby purchase agreement with J.P. Morgan Chase Bank, N.A. ("J.P. Morgan"). Fees incurred by the Authority in connection with J.P. Morgan totaled \$0.4 million for the year ended June 30, 2016.

The 2008-A bonds are supported by a standby bond purchase agreement with Barclays which requires Barclays to purchase bonds that are tendered and not remarketed. Under the terms of the Barclays standby bond purchase agreement, the Authority was required to pay Barclays in quarterly installments a facility fee in the amount of 32.5 basis points (or higher, under certain circumstances) of the commitment amount. The agreement expired in April 2016. The Authority and Barclays executed a first amendment to the agreement and extended the agreement until April 15, 2019. Under the first amendment to the standby purchase agreement, the Authority is required to pay Barclays in quarterly installments a facility fee in the amount of 27.5 basis points (or higher, under certain circumstances) of the initial commitment and may be extended if a mutual interest exists between both the Authority and Barclays. Fees incurred by the Authority in connection with the Barclays agreement totaled \$0.1 million for the years ended June 30, 2017 and June 30, 2016.

The 2011-1 bonds are supported by a standby bond purchase agreement with Wells Fargo Bank, N.A. ("Wells") which requires Wells to purchase bonds tendered and not remarketed in an amount not to exceed the principal on the bonds plus accrued interest up to 185 days at an annual interest rate not to exceed 12%. Under the agreement, the Authority was required to pay Wells in quarterly installments a facility fee in the amount of 40 basis points (or higher, under certain circumstances) of the initial commitment. The initial commitment under the agreement was set at \$143.3 million and was subject to adjustment from time to time in accordance with the provisions of the agreement. The standby bond purchase agreement expired on June 9, 2014. The Authority and Wells executed a first amendment to the standby bond purchase agreement to extend the agreement until June 9, 2017. Under the first amendment to the standby purchase agreement, the Authority is required to pay Wells in quarterly installments a facility fee in the amount of 25 basis points (or higher, under certain circumstances) of the initial commitment. The initial commitment under the first amendment to the standby bond purchase agreement was set at \$139.1 million and is subject to adjustment from time to time in accordance with the provisions of the agreement. On May 17, 2017, the agreement was extended with Wells until June 9, 2019. The facility fee under the extended agreement is 32 basis points. Fees incurred by the Authority in connection with the Wells agreement totaled \$0.4 million and \$0.4 million for the years ended June 30, 2017 and 2016, respectively.

Window Bonds In fiscal year 2011, the Authority issued its 2011-2 bonds in a variable rate Window Bond mode. As with the Authority's other variable rate bonds, the Window Bondholders can tender the bonds at any time. However, unlike the Authority's other variable rate bonds, where the bondholders will receive payment on any tendered bonds 7 days from the tender, Window Bondholders are not required to receive funds for the tender until after a 30 day remarketing period and an additional 180 day funding window period. Due to this 210 day funding period, the Authority is not required to obtain any type of liquidity support for the 2011-2 bonds and the bonds are considered supported with self-liquidity. Window Bondholders receive an interest rate on the Window Bonds at a fixed spread over the Securities Industry and Financial Markets Association Municipal Swap Index™ ("SIFMA"). The initial spread to the SIFMA index is 9 basis points.

Bond Refundings In fiscal year 2017, the Authority issued \$187.7 million of Refunding Revenue Senior Series 2017-3 Bonds which advance refunded \$77.3 million of the WCCC Series 2007-E and 2007-F Bonds and \$8.3 million of Lowell bonds issued under the Massachusetts Health and Academic Facilities Authority (MHEFA) Series 2007-D. The Series 2017-3 bonds also refunded \$57.0 million of the Authority's 2008-2 bonds and \$65.0 million of the Authority's 2009-1 bonds. The Authority deposited into trust accounts funds sufficient to provide for all future debt service payments on the refunded bonds until the bonds are called. These advanced refunded bonds are considered defeased and, accordingly, the liability for the bonds payable and the assets held to repay the debt are not recorded in the University's financial statements.

In connection with the Authority's refundings, the Authority recorded a difference between the reacquisition price and the net carrying amount of the refunded debt of \$5.8 million. This balance is being reported as a component of deferred outflows, loss on debt refunding, and will be amortized as an increase in interest expense over the remaining term of the original life of the refunded bonds. These refundings reduced the Authority's debt service payments in future years by \$30.2 million and resulted in an economic gain (the present value of the savings) of \$21.4 million.

There were no refundings of bonds in fiscal year 2016.

Bond Premium and Issuance Expenses In fiscal year 2017, the Authority received premiums at issuance totaling \$56.0 million. The Authority amortizes the premiums received as a reduction in interest expense over the life of the respective bond issue. There were no new bond issues in fiscal year 2016, thus no bond premiums were recorded in 2016.

In connection with the Authority's bond issues in fiscal 2017, the Authority incurred certain issuance costs associated with the bond offerings. In fiscal year 2017, these costs amounted to \$2.3 million and were expensed in accordance with the provisions of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*.

Debt Covenants There were no financial debt covenants related to the above debt instruments.

Interest Rate Swaps The Authority uses derivative instruments to manage the impact of interest rate changes on its cash flows and net position by mitigating its exposure to certain market risks associated with operations, and does not use derivative instruments for trading or speculative purposes.

The Authority's contracts are evaluated pursuant to GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* ("GASB 53") to determine whether they meet the definition of derivative instruments, and if so, whether they effectively hedge the expected cash flows associated with interest rate risk exposures. The Authority applies hedge accounting for derivative instruments that are deemed effective hedges and under GASB No. 53 are referred to as hedging derivative instruments. Under hedge accounting, changes in the fair value of a hedging derivative instrument are reported as a deferred inflow or deferred outflow in the statement of net position until the contract is settled or terminated.

All settlement payments or receipts for hedging derivative instruments are recorded as interest expense in the period settled.

The Authority's hedging derivative instruments at June 30, 2017 and 2016 were as follows (in thousands):

	Derivative Instruments - Liability June 30, 2016	Net Change in Liability	Derivative Instruments - Liability June 30, 2017	Type of Hedge	Financial Statement Classification for Changes in Liability
Series 2008-1 Swap	\$ (38,227)	\$ 12,960	\$ (25,267)	Cash Flow	Deferred Outflow of Resources
Series 2008-A Swap	(4,338)	1,454	(2,884)	Cash Flow	Deferred Outflow of Resources
Series 2006-1 Swap	(47,913)	14,225	(33,688)	Cash Flow	Deferred Outflow of Resources
Total	<u>\$ (90,478)</u>	<u>\$ 28,639</u>	<u>\$ (61,839)</u>		

The terms of the Authority's financial derivative instruments that were outstanding at June 30, 2017 are summarized in the table below (in thousands):

	Type	Effective Date	Termination Date	Rate Authority Pays	Authority Receives	Original Notional Value
Series 2008-1 Swap	Synthetic Fixed	May 1, 2008	May 1, 2038	3.39 %	70% of 1-Month LIBOR	\$ 232,545
Series 2008-A Swap	Synthetic Fixed	Nov 13, 2008	May 1, 2038	3.38 %	70% of 1-Month LIBOR	\$ 26,580
Series 2006-1 Swap	Synthetic Fixed	Apr. 20, 2006	Nov. 1, 2034	3.48 %	60% of 3-Month LIBOR + .18%	\$ 243,830

Fair Values - GASB 72 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between swap counterparties at the measurement date, which includes the non-performance risk. The Authority engaged an independent party to perform the valuations. The expected swap cash flows are calculated using the zero-coupon discounting method which takes into consideration the prevailing interest rate environment, the specific terms and conditions of a given transaction, and assumes that the current forward rates implied by the yield curve are the market's best estimate of future spot interest rates. The income approach is then used to obtain the fair value of the swaps, where future amounts (the expected swap cash flows) are converted to a single current (discounted) amount, using a rate of return that takes into account the relative risk of non-performance associated with the cash flows, and time value of money. Where applicable under the income approach, the option pricing model technique, such as the Black-Derman-Toy model, or other appropriate option pricing model is used. As the interest rate swaps are valued using the LIBOR swap rate observed at commonly quoted intervals for the full term of the swaps, the measurement results in the swap fair values being categorized as Level 2.

Credit risk - As of June 30, 2017 and 2016, the Authority was not exposed to credit risk on the swaps as the fair value was negative. Since changes in interest rates affect the fair values of swap agreements, it is possible that the swap agreements with negative fair values become positive which would expose the Authority to credit risk. To mitigate the potential for credit risk, when a counterparty has a positive fair value and if the counterparty's credit quality falls below A3/A/A, the fair value of the swap will be fully collateralized by the counterparty with U.S. Government Securities or U.S. Government Agency Securities. Collateral posted by the counterparty will be held by a third-party custodian.

The credit ratings for the Authority's counterparties at June 30, 2017 are as follows:

	Credit Ratings		
	Moody's	S&P	Fitch
UBS AG	A1	A	A
Deutsche Bank AG	Baa2	A-	A-
Citibank NA	A1	A+	A+

Basis risk - The Authority is exposed to basis risk on its pay-fixed interest rate swaps because the variable-rate payment received by the Authority (a percent of LIBOR) on these hedging derivative instruments is based on indexes other than the actual interest rates the Authority pays on its hedged variable rate debt. Should the relationship between LIBOR and the actual variable rate interest payments on the bonds converge, the expected cost savings may not materialize. The terms of the related hedging fixed rate swap transactions are summarized in the chart at the top of this page.

Termination risk - The Authority's swaps are governed under the International Swap Dealers Association Master Agreement (the "Master Agreement"), which includes standard termination events, such as failure to pay and bankruptcy. Additionally, the Master Agreement was amended so that the swap may be terminated by the Authority if the counterparty's credit quality rating falls below certain levels or the counterparty fails to have a rating. Further, the swap may be terminated by the counterparties if the long-term, unsecured, unenhanced senior debt rating of any bonds issued by the Authority is withdrawn, suspended or falls below certain levels or the Authority fails to have a rating. The Authority or the counterparties may terminate the swaps if the other party fails to perform under the terms of the contract. The Authority may also terminate the swaps at its option. If the swap is terminated, the variable-rate bonds would no longer carry a synthetic fixed interest rate and the Authority's interest payment will be based solely upon the rate required by the related bonds as issued. When a termination event occurs, a mark-to-market (or "fair market value") calculation is performed to determine whether the Authority is owed or must pay cash to close out the swap position. A negative fair value means the Authority would incur a loss and need to make a termination payment to settle the swap position. A positive fair value means the Authority would realize a gain and receive a termination payment in settlement of the swap position.

Contingencies - All of the Authority's swaps include provisions that require the Authority to post collateral in the event its credit rating falls below certain levels. In the event the Authority is rated A2 by Moody's Investors Service or A by Standard & Poor's, the Authority would need to post collateral equal to amounts above the fair value of its swaps in liability positions above \$10.0 million. In the event the Authority is not rated or rated below A3 by Moody's Investors Service or below A- by Standard & Poor's, the Authority must post collateral in the amount of the fair value of the swaps in liability positions. The collateral posted is to be in the form of cash obligations guaranteed by the U.S. Treasury, or negotiable debt obligations issued by the Federal Home Loan Mortgage Association or the Federal National Mortgage Association. If the Authority does not post collateral, the derivative instrument may be terminated by the counterparty. The Authority's credit rating is Aa2 from Moody's Investors Service, AA from Fitch Ratings, and AA- from Standard and Poor's at June 30, 2015; therefore, no collateral was required to be posted.

Termination of hedge accounting - In June of 2011, the Authority undertook an advance refunding of the 2008-3 and 2008-4 variable rate bonds hedged by the Series 2006-1 Swap. As part of the refunding, the Series 2006-1 swap was re-assigned to a new underlying notional (the 2011-1 and 2011-2 Bonds) with identical terms. This refunding and reassignment effectively terminated the original hedge. At June 30, 2011, the Series 2006-1 Swap was considered a hedging derivative instrument. In accordance with GASB No. 53, at the time of a termination event related to an advance refunding of the hedged debt, the balance of the amounts in deferred outflows is to be included in the net carrying amount of the refunded debt for the purposes of calculating the deferred loss on refunding. The balance of the deferred outflows that was included in the net carrying amount of the refunded debt at the time of the refunding was \$22.2 million. The change in fair value of the Series 2006-1 Swap from the refunding date to June 30, 2017 is reported as a deferred outflow as the swap was determined to be effective at June 30, 2017.

Swap payments and associated debt - Using rates as of June 30, 2017, the debt service requirements of the variable-rate debt and net swap payments, assuming current interest rates remain the same for their term, were as follows (in thousands):

Fiscal Year Ending June 30,	Interest Rate			Total
	Principal	Interest	Swaps, Net	
2018	\$ 11,770	\$ 378	\$ 10,446	\$ 22,594
2019	12,215	369	10,145	22,729
2020	12,720	360	9,831	22,911
2021	28,390	341	9,315	38,046
2022	29,545	314	8,586	38,445
2022-2026	158,250	1,109	30,831	190,190
2027-2031	124,330	427	12,313	137,070
2032-2036	35,035	52	1,435	36,522
2037-2038	825	1	21	847
Total	<u>\$ 413,080</u>	<u>\$ 3,351</u>	<u>\$ 92,923</u>	<u>\$ 509,354</u>

MassDevelopment

University of Massachusetts Series A, D and 2011

The University, through the Massachusetts Development Finance Agency (“MassDevelopment”), has issued bonds in order to construct new student centers on the Boston and Lowell campuses; to create a pool of funds to acquire telecommunications, electronics, computer, office, research, equipment and administrative systems; and to fund the related renovation costs and to refund previously issued bonds.

Variable Rate Debt In March 2000, the University issued \$20.0 million of MHEFA Variable Rate Demand Revenue Bonds, University of Massachusetts Issue, Series A (the “Series A Bonds”) to create a pool of funds from which the University could finance and refinance the acquisition of certain equipment and related renovation costs at the various University campuses on a revolving basis throughout the term of the Series A Bonds. The Series A Bonds were remarketed on April 1, 2016 and now bear interest at the long term rate of 1.2%. The newest long term rate period will end on March 31, 2019 and the Remarketed Series A Bonds will be subject to mandatory tender for purchase on April 1, 2019. The purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, the University will be obligated to purchase the bonds tendered, up to an aggregate principal amount of \$20.0 million. The Remarketed Series A Bonds will mature on November 1, 2030 and are subject to mandatory purchase prior to maturity as described above. Interest on the Remarketed Series A Bonds in the newest long-term rate period is payable on October 1 and April 1. The Remarketed Series A Bonds are considered a reissuance for federal tax purposes. The Remarketed Series A Bonds are not supported by any insurance policy, liquidity facility or other credit enhancement. The Remarketed Series A Bonds are a general obligation of the University payable from all funds of the University permitted to be applied thereto. The University’s unrestricted net position secures the obligations of the University with respect to the Remarketed Series A Bonds. The University is required to certify annually that there are sufficient funds in the unrestricted net position to cover the debt service on the Remarketed Series A Bonds.

Debt covenants The University of Massachusetts Series A and 2011 bonds include a covenant for the maintenance of a debt service fund as outlined in the related debt agreement. The University is required to make deposits in this debt service fund on or before the twenty-fifth day of each March and September. As of June 30, 2017 and 2016, the University is in compliance with this covenant.

Refundings In November 2011, the University issued \$30 million of Massachusetts Development Finance Agency Revenue Refunding Bonds (the “Series 2011 Bonds”). The University deposited the proceeds into an irrevocable trust fund to provide for payment of the MHEFA Revenue Bonds, University of Massachusetts Issue, 2002 Series C (the “Series C Bonds”). This payment was made as a lump sum in October 2012. The Series 2011 bonds were issued at a premium of \$1.2 million. As a result of the change in future payments, the University will reduce its aggregate debt service payments by \$4.8 million and achieve an economic gain of \$3.4 million.

In January 2007, the University issued \$10.4 million of MHEFA Revenue Bonds, University of Massachusetts Issue Series D. The proceeds from this issuance were used to advance refund a portion of the MHEFA Revenue Bonds, University of Massachusetts Issue, 2001 Series B (the “Series B Bonds”). These advance refunded bonds were

included in the University's financial statements. The Series D Bonds were refunded in 2017 using proceeds from Series 2017-3.

Worcester City Campus Corporation Series D, E, F and 2011

The WCCC through MassDevelopment has issued bonds to finance the construction or acquisition of the Lazare Research Building, South Road parking garage, Ambulatory Care Center ("ACC"), two buildings housing the operations of MassBiologics, One Innovation Drive, 373, 377 and 381 Plantation Street, Worcester and to refund previously issued bonds. WCCC is obligated under the terms of indebtedness to make debt service payments from revenues received from certain facility leases. Total applicable pledged revenues were \$5.9 million and \$6.5 million for fiscal years 2017 and 2016, respectively.

9. LEASES

The University leases certain equipment and facilities under operating leases with terms exceeding one year, which are cancelable at the University's option with 30 day notice. The rent expense related to these operating leases amounted to \$24.6 million and \$27.1 million for the years ended June 30, 2017 and 2016, respectively. The master leases primarily consist of telecommunications, software, and co-generation systems. The University also leases space to third-party tenants. During 2017 and 2016, the amount reported as rental income was \$18.9 million and \$18.3 million, respectively.

The following presents a schedule of future minimum payments under non-cancelable operating leases for the next five years and in subsequent five-year periods for the University as of June 30, 2017(in thousands):

<u>Year</u>	<u>Operating Leases</u>
2018	\$ 26,770
2019	25,413
2020	24,602
2021	24,049
2022	22,719
2023 and thereafter	<u>134,557</u>
Total Payments	<u>\$ 258,110</u>

10. OTHER LONG-TERM LIABILITIES

During the year ended June 30, 2017, the following changes occurred in long-term liabilities as recorded in the statements of net position (in thousands):

	<u>Beginning Balance</u>	<u>Additions/ Adjustments</u>	<u>Reductions/ Adjustments</u>	<u>Ending Balance</u>
University:				
Capital lease obligations	\$ 429	\$ 180	\$ (220)	\$ 389
Compensated absences	35,671	-	(5,276)	30,395
Workers' compensation	12,160	-	(214)	11,946
Unearned revenues and credits	23,936	24,391	(15,596)	32,731
Advances and deposits	27,705	1,834	(399)	29,140
Other liabilities	48,760	800	(8,127)	41,433
University Related Organization:				
Other liabilities	\$ 3,502	\$ -	\$ (738)	\$ 2,764

During the year ended June 30, 2016, the following changes occurred in long-term liabilities as recorded in the statement of net position (in thousands):

	Beginning Balance	Additions/ Adjustments	Reductions/ Adjustments	Ending Balance
University:				
Capital lease obligations	\$ 562	\$ 198	\$ (331)	\$ 429
Compensated absences	31,813	3,858	-	35,671
Workers' compensation	10,886	1,274	-	12,160
Unearned revenues and credits	26,822	13,049	(15,935)	23,936
Advances and deposits	28,621	1,056	(1,972)	27,705
Other liabilities	41,583	8,536	(1,359)	48,760
University Related Organization:				
Other liabilities	\$ 3,505	\$ -	\$ (3)	\$ 3,502

11. FRINGE BENEFITS

Expenditures for the years ended June 30, 2017 and 2016 include \$329.3 million and \$295.1 million, respectively, for the employer portion of fringe benefit costs (pension expense, health insurance for active employees and retirees, and terminal leave) that was paid directly by the Commonwealth of Massachusetts. Of this amount, \$123.8 million for 2017 and \$117.1 million for 2016 was reimbursed to the Commonwealth and \$205.5 million and \$178 million, respectively, is included in revenue as state appropriations.

12. PENSIONS

The Massachusetts State Employees' Retirement System ("MSERS") is a public employee retirement system ("PERS") that administers a cost-sharing multi-employer defined benefit plan as defined by Governmental Accounting Standards Board ("GASB") Statement No. 67, *Financial Reporting for Pension Plans*, covering substantially all employees of the Commonwealth. Management of MSERS is vested in the Massachusetts State Retirement Board (the MSRB) which consists of five members- two elected by current and active MSERS members, one by the remaining members of the MSRB, one who is appointed by the State Treasurer and the State Treasurer, who serves as ex-officio and is the Chair of the MSRB.

MSERS provides retirement, disability, survivor and death benefits to members and their beneficiaries. Massachusetts General Laws ("MGL") establishes uniform benefit and contribution requirements for all contributory PERS. These requirements provide for superannuation retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation. For employees hired after April 1, 2012, retirement allowances are calculated on the basis of the last five years or any five consecutive years, whichever is greater in terms of compensation. Benefit payments are based upon a member's age, length of creditable service, and group creditable service, and group classification. The authority for amending these provisions rests with the Legislature.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of twenty years of creditable service or upon reaching the age of 55 with ten years of service. Normal retirement for most employees occurs at age 65; for certain hazardous duty and public safety positions, normal retirement is at age 55. Most employees who joined the system after April 1, 2012 cannot retire prior to age 60.

The MSERS' funding policies have been established by Chapter 32 of MGL. The Legislature has the authority to amend these policies. The annuity portion of the MSERS retirement allowance is funded by employees, who contribute a percentage of their regular compensation. Costs of administering the plan are funded out of plan assets.

Member contributions for MSERS vary depending on the most recent date of membership:

<u>Hire Date</u>	<u>% of Compensation</u>
Prior to 1975	5% of regular compensation
1975-1983	7% of regular compensation
1984 to 6/30/1996	8% of regular compensation
7/1/1996-present	9% of regular compensation
1979 to present	An additional 2% of regular compensation in excess of \$30,000

The University makes contributions on behalf of the employees through a fringe benefit charge assessed by the Commonwealth. The fringe benefit charge amounted to \$89.9 million and \$84.5 million for the years ended June 30, 2017 and 2016, respectively. Annual covered payroll was 75.8% and 75.8% for the years ended June 30, 2017 and 2016, respectively of annual total payroll for the University. The amount of pension expense included in the fringe charge was \$26.3 million and \$25.1 million for the years ended June 30, 2017 and 2016, respectively.

Actuarial Assumptions The total pension liability for the June 30, 2016 measurement date which is the date reported in the June 30, 2017 financial statements, was determined by an actuarial valuation as of January 1, 2016 rolled forward to June 30, 2016. This valuation used the following assumptions:

1. (a) 7.5% investment rate of return, (b) 3.5% discount rate credited to an annuity savings fund and (c) 3.00% cost of living increase per year.
2. Salary increases are based on analyses of past experience but range from 4.0% to 9.0% depending on group and length of service.
3. Chapter 176 of the Acts of 2011 created a one-time election for eligible members of the Optional Retirement Plan ("ORP") to transfer to the State Employees' Retirement System ("SERS") and purchase service for the period while members of the ORP. As a result, the total pension liability of SERS has increased by \$400 million as of June 30, 2016.
4. Mortality rates were as follows:
 - a) Pre-retirement - reflects RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct)
 - b) Post-retirement - reflects RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct)
 - c) Disability - the mortality rate is assumed to be in accordance with the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct)
5. Experience studies were performed as follows:
 - Dated February 27, 2014 and encompasses the period January 1, 2006 to December 31, 2011

The total pension liability for the June 30, 2015 measurement date was determined by an actuarial valuation as of January 1, 2015 rolled forward to June 30, 2015. This valuation used the following assumptions:

1. (a) 7.5% investment rate of return, (b) 3.5% interest rate credited to an annuity savings fund and (c) 3.0% cost of living increase per year.
2. Salary increases are based on analyses of past experience but range from 3.5% to 9.0% depending on group and length of service.
3. In May 2015, Chapter 19 of the Acts of 2015 created an Early Retirement Incentive ("ERI") for certain members of SERS who upon election of the ERI retired effective June 30, 2015. As a result, the total pension liability for SERS has increased by \$230 million as of June 30, 2015.

4. Mortality rates were as follows:

- a. Pre-retirement - reflects RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- b. Post-retirement - reflects RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct)
- c. Disability - the mortality rate is assumed to be in accordance with the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct)

Investment assets of MSERS are with the Pension Reserves Investment Trust (“PRIT”) Fund. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage.

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund’s target asset allocation as of June 30, 2016 are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Global Equity	40.00%	6.90%
Core Fixed Income	13.00%	1.60%
Private Equity	10.00%	8.70%
Real Estate	10.00%	4.60%
Value Added Fixed Income	10.00%	4.80%
Hedge Funds	9.00%	4.00%
Portfolio Completion Strategies	4.00%	3.60%
Timber/Natural Resources	4.00%	5.40%
Total	<u>100.00%</u>	

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund’s target asset allocation as of June 30, 2015 are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Global Equity	40.00%	6.90%
Core Fixed Income	13.00%	2.40%
Private Equity	10.00%	8.50%
Real Estate	10.00%	6.50%
Value Added Fixed Income	10.00%	5.80%
Hedge Funds	9.00%	5.80%
Portfolio Completion Strategies	4.00%	5.50%
Timber/Natural Resources	4.00%	6.50%
Total	<u>100.00%</u>	

Discount Rate The discount rate used to measure the total pension liability was 7.5% at June 30, 2016 and June 30, 2015. The projection of cash flows used to determine the discount rate assumed that plan member’s contributions will be made at the current contribution rates and the Commonwealth’s contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the

net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity Analysis The following illustrates the sensitivity of the collective net pension liability to changes in the discount rate. In particular, the table presents the University net collective pension liability assuming it was calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the current discount rate (amounts in thousands):

Fiscal Year Ended	1% Decrease to 6.5%	Current Discount Rate 7.5%	1% Increase to 8.5%
June 30, 2017	\$ 609,836	\$ 429,871	\$ 347,731
June 30, 2016	\$ 606,780	\$ 408,418	\$ 308,037

Pension Liabilities, Pension Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions The University reported a liability of \$429.9 and \$408.4 million for its proportionate share of MSERS's net pension liability as of June 30, 2017 and 2016, respectively. The net pension liability was measured as of June 30, 2016 and 2015 and the total pension liability was used to calculate the net pension liability which was determined by an actuarial valuation as of that date. The University's proportion of the net pension liability was based on a projection of the University's long-term share of contributions to the pension plan relative to the total projected contributions of all participating entities, actuarially determined. There were no changes of assumptions or other inputs that affected measurement of the total pension liability during the measurement period. There were no changes of benefit terms that affected measurement of the total pension liability during the measurement period.

The following table shows the components of pension expense as of June 30, 2017 and 2016 (in thousands):

	2017	2016
Proportionate Share of Plan Pension Expense	\$ 58,723	\$ 45,628
Net Amortization of Deferred Amounts from Change in Proportion	2,935	11,224
Employer Contributions after Measurement Date	(25,618)	(22,386)
Pension Expense	\$ 36,040	\$ 34,466

At June 30, 2017, the University reported its proportionate share of MSERS's deferred outflows of resources and deferred inflows of resources related to pension from the following sources (in thousands):

	Deferred Inflows of Resources	Deferred Outflows of Resources
Changes of Assumptions	\$ -	\$ 47,670
Changes in Proportion Due to Internal Allocation	-	35,625
Employer Contributions after Measurement Date	-	25,618
Differences Between Expected and Actual Experience	-	20,418
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	-	28,854
Changes in Proportion From Commonwealth	37,671	-
	\$ 37,671	\$ 158,185

At June 30, 2016, the University reported its proportionate share of MSERS's deferred outflows of resources and deferred inflows of resources related to pension from the following sources (in thousands):

	Deferred Inflows of Resources	Deferred Outflows of Resources
Changes of Assumptions	\$ -	\$ 70,730
Changes in Proportion Due to Internal Allocation	-	45,965
Employer Contributions after Measurement Date	-	22,386
Differences Between Expected and Actual Experience	-	8,072
Net Difference Between Projected and Actual Investment		
Earnings on Pension Plan Investments	11,736	-
Changes in Proportion From Commonwealth	314	-
	<u>\$ 12,050</u>	<u>\$ 147,153</u>

The net amounts of the employer's balances of deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

Year Ending June 30:		
2018	\$	21,201
2019		21,201
2020		32,788
2021		18,758
2022		951
Thereafter		-
	<u>\$</u>	<u>94,899</u>

Non-vested faculty and certain other employees of the University can opt out of MSERS and participate in a defined contribution plan, the Massachusetts Optional Retirement Program ("ORP"), administered by the Commonwealth's Department of Higher Education. At June 30, 2017 and 2016, there were 1,674 and 1,626 University employees, respectively participating in ORP. Employees contribute at the same rate as members in SERS do and the Commonwealth matches 5% of employee contributions. The Commonwealth contributed \$7.2 million and \$8.3 million in 2017 and 2016, respectively. University employees contributed \$15.8 million and \$24.4 million in 2017 and 2016, respectively.

The MSERS and ORP retirement contributions of employees who become members of MSERS or ORP after January 1, 2011 are subject to a state compensation limit. Effective January 1, 2011, the University established a defined contribution plan, the University of Massachusetts 401(a) Retirement Gap Plan, administered by the University's Treasury Office. Employees with MSERS or ORP membership dates after January 1, 2011 are eligible employees for the Gap Plan. Eligible employees begin participation in the Gap Plan when their regular compensation exceeds the state compensation limit in effect for the plan year, at which point their contributions to MSERS or ORP are required to stop for the remainder of the plan year. Employee contributions to the Gap Plan are mandatory and at the same rate as MSERS and ORP; the University contributes 5%. At June 30, 2017 and 2016 plan assets totaled \$2.5 million and \$1.5 million, respectively.

13. CONCENTRATION OF CREDIT RISK (Other than Cash and Investments)

The receivable from UMass Memorial Medical Center ("UMMMC") which is uncollateralized represents a potential concentration of credit risk for the University. The receivable from UMass Memorial represents 9.4% and 11.2% of total accounts receivable for the University at June 30, 2017 and 2016, respectively. The University also had uncollateralized receivables from the Executive Office of Health and Human Services comprising 11.5% of the total outstanding receivables at June 30, 2017 and uncollateralized receivables from The Executive Office of Health and Human Services comprising 12% of the total outstanding receivables at June 30, 2016.

14. COMMITMENTS AND CONTINGENCIES

The Building Authority, University, and WCCC have outstanding purchase commitments under construction contracts and real estate agreements of \$283.6 million and \$157.3 million at June 30, 2017 and 2016, respectively. In connection with the investments in certain limited partnership agreements, the Foundation has \$92.9 million and \$84.7 million in committed calls as of June 30, 2017 and 2016, respectively, which are scheduled to be funded over a number of years. The University has entered an Energy Performance Contract that is being managed by the Commonwealth's Division of Capital Asset Management ("DCAM") under its Clean Energy Investment Program. This project includes 32 energy conservation measures. The installation costs will be incurred over 2 phases with Phase 1 being \$18 million and Phase 2 being \$13.5 million. The term of these transactions is 20 years. The University has a commitment to the Commonwealth for Clean Energy Investment Program Funds used through June 30, 2017 and 2016 in the amount of \$27.1 million and \$28.2 million, respectively.

The University, as an agency of the Commonwealth, is self-insured for property loss exposure, subject to appropriation from the state legislature. However, properties owned by the University of Massachusetts Building Authority located on a campus of the University, such as the Mullins Center, dining commons, and most dormitories, are insured by the Building Authority. In addition, certain properties owned by other University Related Organizations and leased to the University are insured by the related organization. The University and its employees are protected against tort claims through sovereign immunity under Chapter 258 of the Massachusetts General Laws. The University maintains certain liability insurance policies, including Commercial General Liability, leased Automotive Liability, Directors and Officers and Comprehensive Crime policies. Employees of the University are covered for Worker's Compensation protection under Chapter 152 of the Massachusetts General Laws. The University has recorded a liability for future expected costs of its workers' compensation claims of \$15.2 million as of June 30, 2017 and \$15.4 million as of June 30, 2016. Estimated future payments related to such costs have been discounted at a rate of 4.0%.

The University is a defendant in various lawsuits and is subject to various contractual matters; however, University management is of the opinion that the ultimate outcome of all litigation or potential contractual obligations will not have a material effect on the financial position, financial results or cash flows of the University.

From time to time the University and/or its affiliated organizations are subject to audits of programs that are funded through either federal and/or state agencies. The University is aware that the Office of the Inspector General for the U.S. Department of Health and Human Services performed an audit of Medicaid Supplemental Revenues ("MSR") received by UMMMC, the final report for which was issued December 2009. Portions of this report continue to be contested and the final outcome of this audit is currently unknown. Dependent on the final outcome, UMMMC may be required to repay any MSR received deemed to be disallowed as a result of the audit. Dependent on that outcome, the University, consistent with the Agreement for Medical Educational Services, made part of the Definitive Agreement between the University and UMMMC, and its subsequent amendments and the indemnification provisions in these Agreements, may be required to indemnify UMMMC for a portion of any amounts due. Although the final outcome of this audit is currently unknown, and management believes that as of the date of the financial statements it is not probable that a liability exists, management concludes it is reasonably possible that amounts could be repaid and that those amounts may be material to the University's financial position and results of operations.

15. SUBSEQUENT EVENTS

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to June 30, 2017 through December 14, 2017, the date on which the financial statements were available to be issued and determined that there are no other matters requiring recognition or disclosure to the accompanying financial statements.

The University of Massachusetts
Required Supplementary Information - Unaudited
Last 10 Years¹

**SCHEDULE OF THE UNIVERSITY'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**

	<u>6/30/2017</u>	<u>6/30/2016</u>	<u>6/30/2015</u>
University's proportion of the net pension liability	3.394%	3.922%	3.489%
University's proportionate share of the net pension liability	\$ 429,871	\$ 408,418	\$ 237,134
University's covered-employee payroll	\$ 1,156,082	\$1,139,719	\$1,061,132
University's proportionate share of the net pension liability as a percentage of its covered-employee payroll	37.18%	35.83%	22.35%
Plan fiduciary net position as a percentage of total pension liability	63.48%	67.87%	76.32%

**SCHEDULE OF THE UNIVERSITY'S CONTRIBUTIONS
MASSACHUSETTS STATE EMPLOYEES' RETIREMENT SYSTEM**

	<u>6/30/2017</u>	<u>6/30/2016</u>	<u>6/30/2015</u>
Contractually required contribution	\$ 25,618	\$ 22,386	\$ 22,870
Contributions in relation to the contractually required contribution	<u>(25,618)</u>	<u>(22,386)</u>	<u>(22,870)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
University's covered-employee payroll	\$ 1,156,082	\$1,139,719	\$1,061,132
Contributions as a percentage of covered-employee payroll	2.22%	1.96%	2.16%

¹ Until a full 10-year trend is compiled, the University is presenting only information for years for which information is available.

SUPPLEMENTAL INFORMATION

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Research and Development Cluster				
Department Of Agriculture				
AGRICULTURAL RESEARCH SERVICE	10.001		\$ -	\$ 159,558
ANIMAL AND PLANT HEALTH INSPECTION SERV	10.025		-	266,407
ANIMAL AND PLANT HEALTH INSPECTION SERV	10.U01	14-8130-0472-CA	9,814	12,471
BRIGHAM YOUNG UNIVERSITY	10.310	15-0422	-	18,262
CORNELL UNIVERSITY	10.200	73375-10301	-	93
CORNELL UNIVERSITY	10.304	2016-37620-25852	-	5,002
CORNELL UNIVERSITY	10.304	67826-9928	-	4,079
CORNELL UNIVERSITY	10.310	2016-67017-26462	-	18,865
CORNELL UNIVERSITY	10.310	79850-10737	-	49,365
CORNELL UNIVERSITY	10.329	73984-10394	-	951
CORNELL UNIVERSITY	10.U02	73375-10288	-	(24)
CT AGRICULTURAL EXPERIMENT STATION	10.310	CAES-AC-2011-04	-	2,605
CT AGRICULTURAL EXPERIMENT STATION	10.329	2014-70006-22484	-	2,151
JOHNS HOPKINS UNIVERSITY	10.250	2003016257	-	5,609
LOUISIANA STATE UNIVERSITY	10.310	2017-67013-26165	-	4,346
MA DEPT OF AGRICULTURAL RESOURCES	10.170	14SPECUMAFODSAFETY0	-	39,382
MA DEPT OF AGRICULTURAL RESOURCES	10.170	F15SCBGPMA	-	34,652
MA DEPT OF AGRICULTURAL RESOURCES	10.170	116-1923	-	2,038
MA DEPT OF CONSERVATION AND RECREATION	10.664	4CTDCR3760CUMASSUNIV	-	16,053
MA DEPT OF ELEMENTARY & SECONDARY ED	10.560	CT DOE 15CT75UMASSAMHRSTERI	-	257,390
MA DEPT OF TRANSITIONAL ASSISTANCE	10.331	WEL 4400 3081 UMS 16A	-	101,527
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.202		-	374,833
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.203		-	1,973,861
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.207		-	2,740
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.303		2,905	164,407
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.309		330,522	308,847
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.310		123,606	1,748,391
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.328		-	52,374
NATURAL RESOURCES CONSERV SERVICES	10.025		-	444
NATURAL RESOURCES CONSERV SERVICES	10.902		-	14,769
NATURAL RESOURCES CONSERV SERVICES	10.903		-	9,958
NORTH CAROLINA STATE UNIVERSITY	10.310	2015-68004-23179	-	20,653
PURDUE UNIVERSITY	10.255	59-5000-5-0011	-	12,545
RUTGERS UNIVERSITY	10.200	5735-NER15OHP	-	3,545
RUTGERS UNIVERSITY	10.200	5782-NER15OHP	-	763
SOUTH CAROLINA STATE UNIVERSITY	10.216	0000003248	-	20,079
TENNESSEE STATE UNIVERSITY	10.310	332-77-16-642	-	20,805
U.S. DEPARTMENT OF AGRICULTURE	10.001		-	6,528
U.S. DEPARTMENT OF AGRICULTURE	10.025		-	6,878
U.S. DEPARTMENT OF AGRICULTURE	10.202		-	75,436
U.S. DEPARTMENT OF AGRICULTURE	10.203		-	281,026
U.S. DEPARTMENT OF AGRICULTURE	10.207		-	4,524
U.S. DEPARTMENT OF AGRICULTURE	10.310		208,495	779,338
U.S. DEPARTMENT OF AGRICULTURE	10.329		-	203,809
U.S. DEPARTMENT OF AGRICULTURE	10.458		24,000	132,996

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Agriculture, continued				
U.S. DEPARTMENT OF AGRICULTURE	10.912		\$ -	\$ 28,622
U.S. DEPARTMENT OF AGRICULTURE	10.U03	15-IE-53300-001	18,460	71,796
U.S. DEPARTMENT OF AGRICULTURE	10.U04	14-JV-11242306-117	-	10,510
U.S. FOREST SERVICE	10.652		-	277,410
U.S. FOREST SERVICE	10.664		-	36,481
U.S. FOREST SERVICE	10.680		-	193,393
U.S. FOREST SERVICE	10.693		-	73,710
U.S. FOREST SERVICE	10.U05	FS 13-JV-11242307-075 Mod 8	-	184,595
U.S. FOREST SERVICE	10.U06	FS 15-JV-11242307-097	-	211,788
UNIVERSITY OF ILLINOIS	10.310	2015-07319-01	-	9,150
UNIVERSITY OF MARYLAND	10.329	30430-Z5750002	-	2,450
UNIVERSITY OF VERMONT	10.215	2014-38640-22161	-	1,634
UNIVERSITY OF VERMONT	10.215	2015-38640-23777	21,174	37,499
UNIVERSITY OF VERMONT	10.215	GNE14-078-27806	-	12,702
UNIVERSITY OF VERMONT	10.215	LNE12-315	-	10,803
UNIVERSITY OF VERMONT	10.215	LNE15-340-29994	15,670	39,156
UNIVERSITY OF VERMONT	10.215	ONE 16-281C-29994	-	5,581
UNIVERSITY OF VERMONT	10.215	SARE LNE15-339-29994/DARBY	-	35,893
UNIVERSITY OF VERMONT	10.215	SNE-16-04-29994	-	10,188
UNIVERSITY OF VERMONT	10.215	SNE15-04-29001	-	5,140
UNIVERSITY OF VERMONT	10.215	SARE GNE16-114-29994	-	8,205
UNIVERSITY OF WISCONSIN	10.310	649K950	-	5,403
WORLD FARMERS	10.U07	2015-70017-24102	-	15,151
Department Of Agriculture Total			<u>754,646</u>	<u>8,509,036</u>
Department Of Commerce				
COLUMBIA UNIVERSITY	11.431	4GG012355	\$ -	\$ 92,450
COLUMBIA UNIVERSITY	11.431	5-23220	-	7,814
GLOBAL SCIENCE AND TECHNOLOGY, INC.	11.432	Task 002 OSTA / SA16-UMB01	-	93,886
GLOBAL SCIENCE AND TECHNOLOGY, INC.	11.U02	SA15-UOM01	-	22,408
GULF OF MAINE RESEARCH INSTITUTE	11.427	NA14NMF4270014	-	3,671
GULF OF MAINE RESEARCH INSTITUTE	11.427	NA14NMF4270085	-	27,930
GULF OF MAINE RESEARCH INSTITUTE	11.427	NA15NMF42702612	-	13,276
GULF OF MAINE RESEARCH INSTITUTE	11.472	NA15NMF4720108	-	1,429
HAZEN AND SAWYER, P.C.	11.431	31235-000	-	33,681
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	11.417	NA147OAR4170077	21,298	21,576
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	11.417	NA14OAR417007	-	87,935
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	11.417	NA14OAR4170077	53,553	288,263
MISSISSIPPI STATE UNIVERSITY	11.432	NA11OAR4320199	-	11,553
NATIONAL INSTITUTE OF STANDARDS	11.609		91,401	426,496
NATIONAL INSTITUTE OF STANDARDS	11.619		142,216	260,969

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Commerce, continued				
NATIONAL MARINE FISHERIES SERVICE	11.432		\$ -	\$ 22,673
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.011		-	20,291
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.427		1,024	690,144
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.431		19,730	118,686
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.454		-	216,535
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.459		-	63,651
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.463		-	5,000
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.472		163,568	209,881
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.482		-	26,743
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.U03	EE-133F-15-SE-1587	-	45,642
NATIONAL OCEANIC AND ATMOSPHERIC ADMIN	11.U04	WE-133F-15-SE-1480	-	53,781
NE REG ASSOC OF COASTAL OCEAN OBSERV SYS	11.012	NA11NOS0120034	-	11,464
NE REG ASSOC OF COASTAL OCEAN OBSERV SYS	11.012	NA16NOS0120023	-	61,937
NEW ENGLAND AQUARIUM	11.427	NA15NMF4270281	-	10,769
NEW ENGLAND AQUARIUM	11.427	NA15NMF4270284	-	18,243
NORTHEAST CONSORTIUM	11.441	FMA10NMF4410008	-	10,878
RUTGERS UNIVERSITY	11.012	NA11NOS0120038	-	50,041
RUTGERS UNIVERSITY	11.012	NA16NOS0120020	-	110,910
UNIVERSITY OF NEW HAMPSHIRE	11.441	PRGM 14-03	2,800	19,251
UNIVERSITY OF PUERTO RICO	11.417	2104-2015-012	-	8,246
UNIVERSITY OF PUERTO RICO	11.417	NA14OAR4170068	-	16,912
UNIVERSITY OF SOUTHERN MISSISSIPPI	11.432	NA11OAR4320199	-	2,911
UNIVERSITY OF WASHINGTON	11.011	NA16OAR0110196	-	3,942
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.417	NA14OAR4170074	-	62,566
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.417	NA14OAR4170074, Project R/O-52s	-	41,679
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.417	NA14OAR4170077	-	50,042
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.417	NA16NMF4270239	-	30,313
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.419	NA14NOS4190145	-	19,019
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.432	NA14OAR4320158	-	207,909
WOODS HOLE OCEANOGRAPHIC INSTITUTION	11.483	NA13OAR4830233	-	27,685
Department Of Commerce Total			495,590	3,630,904
Department Of Defense				
ACADEMY OF APPLIED SCIENCE	12.U01	Rsch-Eng Apprentice Pgm	\$ -	\$ 4,000
AEROSPACE CORPORATION	12.U02	FA8802-14-C-0001	-	17,365
AIR FORCE CIVIL ENGINEER CENTER	12.U03	21695	-	43,444
AIR FORCE OFFICE OF SCIENTIFIC RESEARCH	12.800		-	1,154,849
AIR FORCE RESEARCH LABORATORY	12.300		-	1,201,132
AIR FORCE RESEARCH LABORATORY	12.630		-	38,169
AIR FORCE RESEARCH LABORATORY	12.800		-	155,829
ARIZONA STATE UNIVERSITY	12.300	N00014-16-1-2532	-	41,435
ARMY RESEARCH INSTITUTE	12.U04	W5J9CQ-11-C-0047	167,541	317,274
ARMY RESEARCH LAB	12.431		-	63,174
AZIMUTH CORPORATION	12.U05	117-0365	-	32,413
BAE SYSTEMS	12.U06	901131	-	82,247
BAE SYSTEMS	12.U07	906704 / 961574	-	190,591

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Defense, continued				
BOSTON ENGINEERING	12.U08	W31P4Q-13-C-0136	\$ -	\$ (4,414)
BROWN UNIVERSITY	12.431	00000822	-	259,104
CALIFORNIA INSTITUTE OF TECHNOLOGY	12.910	HROOI 11720035	-	26,185
CARNEGIE MELLON UNIVERSITY	12.300	1150139-354945	-	92,835
CDM SMITH	12.U09	W9126G-11-D-0027 DB01	-	30,173
COLORADO SCHOOL OF MINES	12.431	400231	-	(32,200)
CORNELL UNIVERSITY	12.431	66220-9902	-	182,610
DCS CORP	12.U10	PO 161511	-	316,611
DEFENSE ADV RESEARCH PROJECTS AGENCY	12.910		1,530,659	6,087,039
DEFENSE ADV RESEARCH PROJECTS AGENCY	12.U11	IPA #237	-	266,853
DEFENSE LOGISTICS AGENCY	12.002		-	311,483
DEFENSE THREAT REDUCTION AGENCY	12.351		97,190	273,399
DEPARTMENT OF THE ARMY MEDICAL DIVISION	12.420		527,346	2,418,826
DUKE UNIVERSITY	12.431	313-0589	-	203,738
ENERGY RESEARCH CONSULTANTS	12.U12	FA865 0-1 6-C-2723	-	12,025
ENGILITY CORPORATION	12.U13	14463-PETTT	-	41,481
FTL LABS CORPORATION	12.U14	D15PC00145	-	(47)
FTL LABS CORPORATION	12.U15	D16PC00092	-	39,044
FTL LABS CORPORATION	12.U16	FA8501-14-P-0032	-	864
GE GLOBAL RESEARCH	12.U17	401039445	-	59,688
GOVERNMENT OF ISRAEL	12.U18	4440672138	-	76,222
HENRY M. JACKSON FOUNDATION	12.420	PR: W81XWH-15-2-0079 / SB: 857395 PO: 3170	-	569,314
HEWLETT PACKARD ENTERPRISE COMPANY	12.U19	CW417995 PO# HPE272806	-	249,983
HYPRES, INC.	12.U20	Hybrid Temperature Heterogenous Technology Data	-	150,589
HYPRES, INC.	12.U21	Hybrid Temperature Heterogenous Technology Data	-	4,134
IBM CORPORATION	12.630	5004950716	-	118,487
KARAGOZIAN & CASE	12.U22	FA8651-15-M-0229	-	(502)
KARAGOZIAN & CASE	12.U23	FA8651-16-C-0230	-	15,521
LAWRENCE LIVERMORE NATL LAB U-CALIFORNIA	12.351	No. B602042	-	133,931
LEIDOS, INC.	12.U24	P010184242	-	393,349
LOWELL DIGISONDE INTERNATIONAL, LLC	12.U25	FA8650-16-C-9104	-	251,731
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	12.800	5710003633	-	106,546
MICROBIOTIX	12.U26	19865	-	38,030
MIT LINCOLN LABORATORY	12.U27	7000296667	-	11,090
MIT LINCOLN LABORATORY	12.U28	7000344518	-	5,081
MIT LINCOLN LABORATORY	12.U29	7000344532	-	56,180
MIT LINCOLN LABORATORY	12.U30	FA8721-05-C0002	-	15,683
MONTANA STATE UNIVERSITY	12.431	W911NF-16-1-0463	-	38,753
NANO-BIO MANUFACTURING CONSORTIUM	12.U31	Project # 16-10	55,464	223,423
NATIONAL SECURITY AGENCY	12.900		-	58,258
NATIONAL SECURITY AGENCY	12.905		-	22,769
NATL INST OF AEROSPACE	12.431	W911NF-16-2-0229	-	12,353
NAVAL AIR WARFARE CENTER	12.U32	N00421-16-P-0521	-	88,860
NAVAL RESEARCH LABORATORY	12.300		-	47,789
NAVAL RESEARCH LABORATORY	12.U33	N00173-16-P-0747	-	30,849

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Defense, continued				
NEXTFLEX	12.U34	FA8650-15-2-5401	\$ 61,628	\$ 496,449
NORTHEASTERN UNIVERSITY	12.431	504062-78051	-	98,767
NORTHEASTERN UNIVERSITY	12.431	504081-78050A	-	99,922
NORTHEASTERN UNIVERSITY	12.431	504081-78050B	-	407,828
OCEAN STATE RESEARCH INSTITUTE, INC.	12.420	PR: W81XWH-16-2-0065 / SB: 292206	-	173,084
OFFICE OF NAVAL RESEARCH	12.300		36,223	2,994,079
OFFICE OF NAVAL RESEARCH	12.431		85,712	301,182
OFFICE OF NAVAL RESEARCH	12.630		-	95,194
PHOTON SPOT, INC	12.U35	702-1	-	47,844
PRAXIS, INC.	12.U36	N00173-05-C-2084	-	666
RADECT CO.	12.U37	FA8051-15-P0010	-	33,045
RAYTHEON BBN TECHNOLOGIES CORP	12.431	13765021	-	250,984
RAYTHEON BBN TECHNOLOGIES CORP	12.910	500013240	-	82,640
RAYTHEON BBN TECHNOLOGIES CORP	12.U38	HROO 111 7C0049	-	9,068
RAYTHEON BBN TECHNOLOGIES CORP	12.U39	W911NF09D0006	-	27,788
RAYTHEON COMPANY	12.U40	FA8650-12-2-7230	-	99,576
RIVERSIDE RESEARCH	12.U41	DRC.CO1299P.UMASS.IDIQ.15	-	12,324
SARNOFF CORP.	12.U42	206000031	-	37,646
SI2 TECHNOLOGIES, INC.	12.U43	N68335-16-C0045	-	147,361
SI2 TECHNOLOGIES, INC.	12.U44	FA8650-15-2-5401	-	41,776
SI2 TECHNOLOGIES, INC.	12.U45	W31P4Q-16-C-0122	-	19,900
SILICON SPACE TECHNOLOGY	12.U46	FA9453-09-C0029	-	3,360
SOLID STATE SCIENTIFIC CORPORATION	12.116	W911NF-14-P-0024	-	(4,526)
SOLID STATE SCIENTIFIC CORPORATION	12.800	1504-09	-	64,556
SPAWAR SYSTEMS CENTER PACIFIC	12.910		171,740	427,471
SRI INTERNATIONAL	12.U47	D11PC20155	-	5,298
SYSTEMS & TECHNOLOGY RESEARCH	12.U48	2014-1047	-	386,046
TEQNOVATIONS LLC	12.U49	702-1	-	19,818
TRITON SYSTEMS, INC.	12.U50	W911QY-14-C-0078	-	45,685
U.S. ARMY CORPS OF ENGINEERS	12.300		-	63,672
U.S. ARMY CORPS OF ENGINEERS	12.U51	W912HQ-14-C-0035 P00006	199,903	406,629
U.S. ARMY CORPS OF ENGINEERS	12.U52	W912HQ-12-C-0035	9,952	13,526
U.S. ARMY CORPS OF ENGINEERS	12.U53	W912HQ-15-C-0052	182,472	307,630
U.S. ARMY MEDICAL RESEARCH	12.420		-	816,917
U.S. ARMY NATICK SOLDIER RD&E CENTER	12.431		34,379	757,792
U.S. ARMY NATICK SOLDIER RD&E CENTER	12.U54	W911QY-13-2-0002	-	(1)
U.S. ARMY NATICK SOLDIER RD&E CENTER	12.U55	W911QY-16-P-0235	-	31,737
U.S. ARMY NATICK SOLDIER RD&E CENTER	12.U56	W911QY-15-C-0068	-	69,071
U.S. ARMY RESEARCH OFFICE	12.431		399,247	2,079,270
U.S. DEPARTMENT OF DEFENSE	12.420		89,112	1,575,697
U.S. DEPARTMENT OF DEFENSE	12.U57	W912HQ-13-C-0067	-	71,516
U.S. DEPARTMENT OF INTERIOR	12.910		-	85,866
U.S. DEPARTMENT OF THE ARMY	12.910		-	91,953
U.S. DEPARTMENT OF THE ARMY	12.U58	W911W5-11-C-0010	-	1,016,376
U.S. DEPARTMENT OF THE ARMY	12.U59	NAFBA1-13-M-0323	-	6
U.S. DEPARTMENT OF THE ARMY	12.U60	W911W5-16-C-0006	-	3,187,410

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Defense, continued				
UES, INC.	12.U61	FA8650-15-D-5405	\$ -	\$ 8,385
UES, INC.	12.U62	FA8650-11-D-5801	-	133,732
UNITED TECHNOLOGIES RESEARCH CENTER	12.U63	N66001-16-C-4050	-	31,699
UNIVERSITY OF CALIFORNIA	12.910	W91CRB-10-1-0006	-	(1,393)
UNIVERSITY OF CALIFORNIA SANTA BARBARA	12.800	KK1235	-	102,109
UNIVERSITY OF CONNECTICUT	12.420	UCH6-74814610	-	69,085
UNIVERSITY OF MISSOURI	12.431	W911NF-14-1-0359	-	192,865
UNIVERSITY OF RHODE ISLAND	12.800	PR: W81XWH-16-2-0031 / SB: 0005427/102316	-	128,415
UNIVERSITY OF SOUTHERN CALIFORNIA	12.431	W911NF-11-1-0268	-	(18,964)
UNIVERSITY OF TEXAS AT AUSTIN	12.910	FA8750-13-2-0026	-	40,578
UNIVERSITY OF WASHINGTON	12.420	W81XWH-11-1-0588	-	(31,550)
UNIVERSITY OF WASHINGTON	12.431	UWSC8585	-	6,666
UNIVERSITY OF WISCONSIN	12.800	FA95501410128	-	131,999
VECTOR CONTROLS, INC.	12.U64	N00014-11-C-0475	-	63,997
WORCESTER POLYTECHNIC INSTITUTE	12.420	PR: W81XWH-12-10541 / SB: 14-215700-00	-	6,193
WORCESTER POLYTECHNIC INSTITUTE	12.431	16-TMP-00-215461	-	21,845
WORCESTER POLYTECHNIC INSTITUTE	12.431	W911NF1520024	-	230,814
WYSS INST FOR BIOLOGICALLY INSPIRED ENG	12.910	HR0011-13-C-0025	-	26,561
YALE UNIVERSITY	12.431	C17J12516 (J00255)	-	106,844
Department Of Defense Total			<u>3,648,568</u>	<u>34,895,420</u>
Department Of Housing And Urban Development				
CITY OF LOWELL, DIV. OF PLANNING & DEV.	14.900	FR-5700-N-04	\$ 610	\$ 15,414
CITY OF LOWELL, DIV. OF PLANNING & DEV.	14.900	PO# 32750303	-	4,763
HEALTHY HOUSING SOLUTIONS, INC.	14.U01	DU203NP-15-D-06	-	90
MA DEPARTMENT OF PUBLIC HEALTH	14.906	INTF3056HH2500224031	-	3,191
PIONEER VALLEY PLANNING COMMISSION	14.228	00775	-	14,171
PIONEER VALLEY PLANNING COMMISSION	14.228	115-1241	-	31,175
U.S. DEPT OF HOUSING & URBAN DEVELOPMENT	14.906		<u>23,328</u>	<u>215,799</u>
Department Of Housing And Urban Development Total			<u>23,938</u>	<u>284,603</u>
Department Of The Interior				
ARKANSAS GAME AND FISH COMMISSION	15.634	T41-01	\$ -	\$ 485
BUREAU OF OCEAN ENERGY MANAGEMENT	15.424		-	67,321
BUREAU OF SAFETY AND ENVIRON ENFORCEMENT	15.U01	E16PC00008	-	32,134
MA DEPARTMENT OF FISH & GAME	15.634	1434-HQ-11-RU-01575	-	160,957
MA DEPARTMENT OF FISH & GAME	15.634	UM16COOP0000000000	-	1,632
MA DIV OF ECOLOGICAL RESTORATION (DER)	15.153	42671 / FC. A062	-	41,394
MA DIVISION OF FISHERIES AND WILDLIFE	15.608	1434-HQ-11-RU-01575	22,214	22,350
MA DIVISION OF FISHERIES AND WILDLIFE	15.634	1434-HQ-11-RU-01575	-	95,224
MA DIVISION OF FISHERIES AND WILDLIFE	15.U02	F17AP00015	-	35,053
NATIONAL FISH AND WILDLIFE FOUNDATION	15.663	NFWF45607	-	16,619
NATIONAL PARK SERVICE	15.945		-	211,569
NATIONAL PARK SERVICE	15.954		-	(217)
NATIONAL WRITING PROJECT	15.954	P14AC01415	-	4,800
PORTLAND STATE UNIVERSITY	15.232	L14AC00157	-	17,980
SPERO DEVICES, INC.	15.U03	D16PC0084	-	26,475

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of The Interior, continued				
U.S. DEPARTMENT OF INTERIOR	15.914		\$ -	\$ (12,149)
U.S. DEPARTMENT OF INTERIOR	15.945		-	19,237
U.S. DEPARTMENT OF INTERIOR	15.946		-	(1,068)
U.S. DEPARTMENT OF INTERIOR	15.954		-	459,047
U.S. DEPARTMENT OF INTERIOR	15.U04	Task Agrmt P11AT40829 (Coop Agrmt H1780070004)	-	9,326
U.S. FISH AND WILDLIFE SERVICE	15.650		15,000	102,306
U.S. FISH AND WILDLIFE SERVICE	15.655		-	204,473
U.S. FISH AND WILDLIFE SERVICE	15.669		-	257,642
U.S. FISH AND WILDLIFE SERVICE	15.672		-	16,233
U.S. FISH AND WILDLIFE SERVICE	15.677		97,941	263,570
U.S. FISH AND WILDLIFE SERVICE	15.678		-	27,427
U.S. GEOLOGICAL SURVEY	15.805		30,000	76,352
U.S. GEOLOGICAL SURVEY	15.808		-	212,129
U.S. GEOLOGICAL SURVEY	15.810		34,947	61,252
U.S. GEOLOGICAL SURVEY	15.812		-	45,445
U.S. GEOLOGICAL SURVEY	15.814		-	1,205
U.S. GEOLOGICAL SURVEY	15.820		775,922	1,956,457
UNIVERSITY OF CALIFORNIA DAVIS	15.232	201501679-02	-	22,422
WILDLIFE MANAGEMENT INSTITUTE	15.664	F15AC01052-0001-LCC0	-	49,908
WILDLIFE MANAGEMENT INSTITUTE	15.664	NALCC 2015-06	-	32,406
Department Of The Interior Total			<u>976,024</u>	<u>4,537,396</u>
Department Of Justice				
ADMINISTRATIVE OFFICE OF THE TRIAL COURT	16.812	2015-RW-BX-0006	\$ -	\$ 1,946
BOSTON PUBLIC HEALTH COMMISSION	16.730	2011-MU-MU_K003 / 14013684	-	1,779
CITY OF SPRINGFIELD	16.817	2013-AJ-BX-0007	-	20,969
ESSEX COUNTY SHERIFF'S DEPARTMENT	16.812	2014-RW-BX-01	-	26,485
FEDERAL BUREAU OF INVESTIGATION	16.U01	FBI DJF-17-1200-D-0000377	-	42,580
FEDERAL BUREAU OF INVESTIGATION	16.U02	FBI DJF-15-1200-D-0000828	-	3,967
FEDERAL BUREAU OF INVESTIGATION	16.U03	FBI DJF-16-1200-D-0001522	-	398,403
JOHN FINN INSTITUTE FOR PUBLIC SAFETY	16.560	2013-IJ-CX-0018	-	2,325
MA DEPARTMENT OF PUBLIC HEALTH	16.589	INTF3222M04W40188034	-	42,309
MA EXEC OFC OF PUBLIC SAFETY & SECURITY	16.U04	2015 LARP	-	15,014
MA OFFICE FOR VICTIM ASSISTANCE	16.575	VOCA2016EVWC00000000	-	1,967
NATIONAL 4-H COUNCIL	16.726	4-H COUNCIL 2015	-	109,616
NATIONAL 4-H COUNCIL	16.726	DOJ2016JUF0022	-	4,208
SPECTRUM HEALTH SYSTEMS, INC.	16.812	OJJDP-2013-3637	-	(201)
TOWN OF AMHERST	16.U05	13001125	-	9,969
TOWN OF AMHERST	16.U06	2610-15	-	92,714
U.S. DEPARTMENT OF JUSTICE	16.525		-	89,842
U.S. DEPARTMENT OF JUSTICE	16.540		-	99,422
U.S. DEPARTMENT OF JUSTICE	16.541		-	54,933
U.S. DEPARTMENT OF JUSTICE	16.560		532,913	818,464
U.S. DEPARTMENT OF JUSTICE	16.566		32,860	84,278
U.S. DEPARTMENT OF JUSTICE	16.726		33,003	18,526
UNIVERSITY OF IOWA HEALTH CARE	16.560	W000630365	-	19,681
WELLESLEY COLLEGE	16.560	2015-IJ-CX-0009	-	62,372
Department Of Justice Total			<u>598,776</u>	<u>2,021,568</u>

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Labor				
U.S. DEPARTMENT OF LABOR	17.791		\$ -	\$ 3,858
Department Of Labor Total			-	3,858
Department Of State				
BEDFORD VA MEDICAL CENTER	19.440	Schutt-IPA	\$ -	\$ 12,436
INSTITUTE FOR TRAINING AND DEVELOPMENT	19.408	S-ECAGD-15-CA-1078	-	20,701
INSTITUTE FOR TRAINING AND DEVELOPMENT	19.408	S-ECAGD-16-CA-1084	-	10,844
INSTITUTE FOR TRAINING AND DEVELOPMENT	19.U01	S-ECAGD-14CA-1149	-	22,157
INT'L RESEARCH AND EXCHANGES BOARD	19.021	SIZ-100-15-GR025	-	49,618
INT'L RESEARCH AND EXCHANGES BOARD	19.408	S-ECAGD-16-CA-1019	-	205,507
MITRE CORPORATION	19.U02	SAQMMMA13C0255	-	14,470
U.S. DEPARTMENT OF STATE	19.033		-	128,299
U.S. EMBASSY IN MOSCOW, RUSSIA	19.900		-	31,415
Department Of State Total			-	495,447
Department Of Transportation				
EARTH SCIENCE SYSTEMS, LLC	20.U01	117-0607	\$ -	\$ 22,311
FEDERAL AVIATION ADMINISTRATION	20.108		-	72,017
FEDERAL HIGHWAY ADMINISTRATION	20.215		-	34,991
FEDERAL MOTOR CARRIER SAFETY ADMIN	20.232		-	189,531
FEDERAL RAILROAD ADMINISTRATION	20.U02	DTRFR5316C00020	-	84,454
MA DEPARTMENT OF TRANSPORTATION	20.200	76826 PARS# YM139092P12	46,480	52,318
MA DEPARTMENT OF TRANSPORTATION	20.U03	92801	-	111,354
MA DEPARTMENT OF TRANSPORTATION	20.U04	94445	-	55,764
MA DEPT OF STATE POLICE	20.218	ISAPOL81000212UMS16A	-	45,088
MA DEPT OF STATE POLICE	20.218	ISAPOL81002010UMS17A	-	13,598
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5700003804	-	81,899
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003604	-	209,828
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003798	-	64,958
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003799	-	29,489
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003800	-	89,482
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003801	-	61,838
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003802	-	64,440
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	20.701	5710003803	-	59,769
OHIO STATE UNIVERSITY	20.701	60040605	-	176,627
PENNSYLVANIA STATE UNIVERSITY	20.U05	DTRFR5316C00023	-	13,234
U.S. DEPARTMENT OF TRANSPORTATION	20.931		203,931	328,618
UNIVERSITY OF IOWA HEALTH CARE	20.701	W000546107	-	406,369
UNIVERSITY OF VERMONT	20.U06	26014SUB51981	-	74,860
Department Of Transportation Total			250,411	2,342,837
National Aeronautics And Space Administration				
AURORA FLIGHT SCIENCES CORPORATION	43.U01	NNX15VJ13C	\$ -	\$ 107,778
BAE SYSTEMS	43.U02	NNX14AG86G	-	63,811
BERMUDA INSTITUTE OF OCEAN SCIENCES	43.001	NNX16AB05G	-	116,602
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	1545132	-	12,084
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	NNN12AAO1C	-	40,986
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	[JPL]: 1560781	-	46,219

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
National Aeronautics And Space Administration, continued				
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U03	[JPL]: 1377297	\$ -	\$ 2,471
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U04	[JPL]: 1366741	-	1,483
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U05	[JPL]: 1509300	-	1,105
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U06	[JPL]: 1440160	-	88
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U07	[JPL]: 1472817	-	92
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U08	[JPL]: 1472831	-	6,117
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U09	[JPL]: 1479338	-	1
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U10	[JPL]: 1486198	-	67,280
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U11	[JPL]: 1489384	-	158
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U12	[JPL]: 1539558	-	32,214
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U13	108-0446	-	1,262
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.U14	[JPL]: 1429075	-	5,278
DELAWARE STATE UNIVERSITY	43.008	NNX15AP84A	-	142,057
GEORGIA STATE UNIVERSITY	43.001	NNX16AB77G	-	13,219
MICHIGAN TECHNOLOGICAL UNIVERSITY	43.001	NNX14AB80G	-	9,744
MIT LINCOLN LABORATORY	43.U15	7000377396	-	29,310
MIT LINCOLN LABORATORY	43.U16	7000336186	-	49,177
MOUNT HOLYOKE COLLEGE	43.001	GD8861	-	86,759
MOUNT HOLYOKE COLLEGE	43.U17	GD8761	-	59,859
NASA GODDARD SPACE FLIGHT CENTER	43.001		99,363	1,270,991
NASA GODDARD SPACE FLIGHT CENTER	43.008		-	14,672
NASA GODDARD SPACE FLIGHT CENTER	43.012		-	151,133
NATIONAL AERO AND SPACE ADMINISTRATION	43.001		651,125	3,014,864
NATIONAL AERO AND SPACE ADMINISTRATION	43.003		-	337,387
NATIONAL AERO AND SPACE ADMINISTRATION	43.007		-	201,770
NATIONAL AERO AND SPACE ADMINISTRATION	43.008		-	55,515
NATIONAL AERO AND SPACE ADMINISTRATION	43.U18	NNX12AO23G	-	9,334
NATL INST OF AEROSPACE	43.008	NNL09AA00A	-	70,204
NORTHEASTERN UNIVERSITY	43.012	NNX16AC48A	-	94,509
OHIO STATE UNIVERSITY	43.001	60050055	-	50,048
SETI INSTITUTE	43.001	SC 3153	-	2,517
SETI INSTITUTE	43.001	SC3139	-	13,844
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	NAS8-03060	-	47,243
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	TM3-14006X	-	48,048
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-AR-14299.001-A	-	42,271
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-13342.002-A	-	23,585
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-14066.004-A	-	25,928
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-14227.003-A	-	17,794
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-14460.003-A	-	5,345
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-14653.004-A	-	33,972
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	NAS5-26555	-	14,011
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	STSI: HST-AR-14285.001-A	-	53,501
SPACE TELESCOPE SCIENCE INSTITUTE	43.002	HST-AR-13924.003-A	-	5,195
SPACE TELESCOPE SCIENCE INSTITUTE	43.002	HST-GO-12060.16-A	-	5,724
SPACE TELESCOPE SCIENCE INSTITUTE	43.002	HST-GO-13309.007-A	-	3,479

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
National Aeronautics And Space Administration, continued				
SPACE TELESCOPE SCIENCE INSTITUTE	43.002	HST-GO-13364.01-A	\$ -	\$ 42,523
SPACE TELESCOPE SCIENCE INSTITUTE	43.U19	HST-AR-13894.002-A	-	21,118
SPACE TELESCOPE SCIENCE INSTITUTE	43.U20	HST-GO-13743.004-A	-	24,359
SPACE TELESCOPE SCIENCE INSTITUTE	43.U21	HST-GO-13773.005-A	-	8,868
SPACE TELESCOPE SCIENCE INSTITUTE	43.U22	STSI: HST-GO-13846.001-A	-	67,548
SPACE TELESCOPE SCIENCE INSTITUTE	43.U23	STSI: HST-HF2-51368.001 A	-	115,515
TUFTS UNIVERSITY	43.001	NNX15AH85G	-	7,526
UNIVERSITY OF CALIFORNIA REGENTS	43.001	NNX14AD86G	-	(332)
UNIVERSITY OF COLORADO	43.001	1551866	-	38,632
UNIVERSITY OF MICHIGAN	43.001	3003766302	-	15,473
UNIVERSITY OF NEW HAMPSHIRE	43.001	NNX16AN34G	-	9,871
UNIVERSITY OF SOUTH FLORIDA	43.001	NNX14AM63G	-	72,572
WOODS HOLE OCEANOGRAPHIC INSTITUTION	43.001	NNX14AR71G	-	1,657
National Aeronautics And Space Administration Total			<u>750,488</u>	<u>6,933,368</u>
National Endowment For The Humanities				
AMERICAN COUNCIL OF LEARNED SOCIETIES	45.160	115-1629	\$ -	\$ 26,078
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.149		-	1,002
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.160		-	7,116
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.161		-	190,958
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.163		-	89,682
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.169		<u>24,736</u>	<u>105,852</u>
National Endowment For The Humanities Total			<u>24,736</u>	<u>420,688</u>
National Science Foundation				
AMERICAN ASSOC FOR THE ADVMNT OF SCIENCE	47.049	WIRC for MSI	\$ -	\$ (101)
AMERICAN PHYSICAL SOCIETY	47.049	PHY-0808790	4,600	15,876
ASSOCIATION OF PUBLIC & LAND-GRANT UNIV	47.U01	115-0977	-	129,041
BLACK HILLS STATE UNIVERSITY	47.076	BP1100005	-	66,360
BRANDEIS UNIVERSITY	47.049	MRSEC	-	71,783
BROWN UNIVERSITY	47.070	CCF-1408745	-	105,386
BROWN UNIVERSITY	47.075	SES-1338751	-	3,883
CAST, INC.	47.076	DRL-1620904	-	51,119
CENTRAL MICHIGAN UNIVERSITY	47.050	OCE-1230261	-	(46)
CIVILIAN RESEARCH & DEVELOPMENT FDN	47.079	OISE-9531011	-	28,529
CIVILIAN RESEARCH & DEVELOPMENT FDN	47.079	USB1-31149-XX-13	-	69,068
COLD SPRING HARBOR LABORATORY	47.074	IOS-1546837	-	45,017
COLUMBIA UNIVERSITY	47.050	111-1227	-	178,156
COLUMBIA UNIVERSITY	47.050	OCE 1450528	-	14,630
CORNELL UNIVERSITY	47.070	CCF1522054	-	39,919
EDUCATION DEVELOPMENT CENTER, INC.	47.076	CNS-1339300	-	40,464
HARVARD FOREST	47.074	DEB-1617075	-	81,404
HARVARD UNIVERSITY	47.070	123777-5065147	-	15,351
HARVARD UNIVERSITY	47.075	SES-1430505	-	(122)
HARVARD UNIVERSITY	47.075	SES-1559125	-	16,378
HOLYOKE COMMUNITY COLLEGE HCC	47.076	DUE 1400500	-	73,660
KANSAS STATE UNIVERSITY	47.049	DMS-1265228	-	24,805
MARINE BIOLOGICAL LABORATORY	47.050	OCE-1637630	-	17,664

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
National Science Foundation, continued				
NATIONAL SCIENCE FOUNDATION	47.041		\$ 249,490	\$ 8,204,916
NATIONAL SCIENCE FOUNDATION	47.049		210,481	6,763,257
NATIONAL SCIENCE FOUNDATION	47.050		376,381	4,055,611
NATIONAL SCIENCE FOUNDATION	47.070		794,767	12,555,386
NATIONAL SCIENCE FOUNDATION	47.074		391,421	5,085,074
NATIONAL SCIENCE FOUNDATION	47.075		35,031	1,518,651
NATIONAL SCIENCE FOUNDATION	47.076		1,895,943	9,617,701
NATIONAL SCIENCE FOUNDATION	47.078		-	107,898
NATIONAL SCIENCE FOUNDATION	47.079		-	62,823
NATIONAL SCIENCE FOUNDATION	47.U02	AST-1517503	-	52,112
NATIONAL SCIENCE FOUNDATION	47.U03	HP- 1560913	-	18,842
NATIONAL SCIENCE FOUNDATION	47.U04	CNS- 1740558	-	88,001
NATIONAL SCIENCE FOUNDATION	47.U05	IOS-1539803-001	-	141,008
NATIONAL SCIENCE FOUNDATION	47.U06	CBET-1619792	-	302,857
NATIONAL SCIENCE FOUNDATION	47.U07	CSE-1523309-002	-	436,641
NEW YORK UNIVERSITY	47.070	CNS-1405927	-	41,435
NORTHEASTERN UNIVERSITY	47.041	CMMI-112039	-	6,699
OREGON STATE UNIVERSITY	47.070	1125228-IIS	-	5,334
PURDUE UNIVERSITY	47.070	CNS-1111512	-	2,285
RAYTHEON BBN TECHNOLOGIES CORP	47.070	CNS-1536090	-	101,186
RAYTHEON COMPANY	47.070	CNS 1346688	5,488	8,637
SMITH COLLEGE	47.076	SC 636522	-	66,498
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	47.049	AST 1440254	-	196,058
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	47.076	12-SUBC-400-SV2-82003	-	(1,420)
SOLARGASOLINE LLC	47.041	1549710	-	43,427
SOUTHERN CALIFORNIA EARTHQUAKE CENTER	47.050	Y86198	-	45,880
SPRINGFIELD TECHNICAL COMMUNITY COLLEGE	47.076	1223460	-	53,148
THE BROAD INSTITUTE	47.050	PR: 226231 / SB: 5400000052	-	2,077
TUFTS UNIVERSITY	47.076	DRL-1657218	-	2
UNIQUARTA, INC.	47.U08	IIP 1632387	-	83,110
UNIVERSITY OF ARIZONA	47.050	EAR-1338553	-	63,868
UNIVERSITY OF CALIFORNIA	47.041	EEC-1449305	-	52,900
UNIVERSITY OF CALIFORNIA DAVIS	47.074	1344187	-	34,833
UNIVERSITY OF CONNECTICUT	47.076	116-0727	-	21,676
UNIVERSITY OF CONNECTICUT	47.076	PR: 1619629 / SB: 135339	-	29,197
UNIVERSITY OF FLORIDA	47.075	SMA-1540888	-	85,344
UNIVERSITY OF GEORGIA	47.074	1564366	-	95,482
UNIVERSITY OF ILLINOIS	47.041	1542864	-	74,950
UNIVERSITY OF MARYLAND	47.074	DBI- 1458748	-	6,798
UNIVERSITY OF MARYLAND	47.074	PR: IOS-1355119 / SB: 23108-Z4229001	-	(4,508)
UNIVERSITY OF MARYLAND	47.076	1463898	-	13,381
UNIVERSITY OF MICHIGAN	47.070	CNS-1405612	-	6,297
UNIVERSITY OF MINNESOTA	47.050	1246761	-	53,607
UNIVERSITY OF MINNESOTA	47.075	1539833	-	27,004
UNIVERSITY OF NEW HAMPSHIRE	47.041	CBET-1231326	-	3,060

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
National Science Foundation, continued				
UNIVERSITY OF NORTH TEXAS	47.041	CMMI-1266251	\$ -	\$ 4,148
UNIVERSITY OF OKLAHOMA	47.075	SES-1421580	-	15,638
UNIVERSITY OF TENNESSEE AT CHATTANOOGA	47.070	CNS-1229213	-	6,329
UNIVERSITY OF TEXAS AT ARLINGTON	47.070	CCf-1442735	-	68,158
UNIVERSITY OF UTAH	47.049	DMS-1552238	-	26,180
UNIVERSITY OF UTAH	47.070	CNS-1 419199	-	146,512
UNIVERSITY OF WISCONSIN	47.076	DUE-1231286	-	13,288
WASHINGTON STATE UNIVERSITY	47.041	120239 G003229	-	67,163
WOODS HOLE OCEANOGRAPHIC INSTITUTION	47.050	AGS-1518503	-	29,939
WOODS HOLE OCEANOGRAPHIC INSTITUTION	47.050	OCE-1332666	-	43,453
WORCESTER POLYTECHNIC INSTITUTE	47.070	PR: IIS-1065298 / SB: 12-202760-00-03	-	6,262
WORCESTER POLYTECHNIC INSTITUTE	47.076	DGE1144804	-	11,722
National Science Foundation Total			<u>3,963,602</u>	<u>51,756,039</u>
Small Business Administration				
SMALL BUSINESS ADMINISTRATION	59.037		\$ 559,784	\$ 1,095,656
Small Business Administration Total			<u>559,784</u>	<u>1,095,656</u>
Department Of Veterans Affairs				
DEPARTMENT OF VETERANS AFFAIRS	64.009		\$ -	\$ 57,052
DEPARTMENT OF VETERANS AFFAIRS	64.010		-	(61)
DEPARTMENT OF VETERANS AFFAIRS	64.015		-	25,610
DEPARTMENT OF VETERANS AFFAIRS	64.U01	VA241-14-J-1477	-	92,847
DEPARTMENT OF VETERANS AFFAIRS	64.U02	VA IPA_BROWN	-	56,308
DEPARTMENT OF VETERANS AFFAIRS	64.U03	VA257-13-C0093 / PO# 671D52005	-	26,987
DEPARTMENT OF VETERANS AFFAIRS	64.U04	NCT01249625	-	4,088
Department Of Veterans Affairs Total			<u>-</u>	<u>262,831</u>
Environmental Protection Agency				
MA DEPT OF AGRICULTURAL RESOURCES	66.714	CTAGR15	\$ -	\$ 127,410
MA DEPT OF AGRICULTURAL RESOURCES	66.714	CTAGR15	-	30,362
MA DEPT OF ENVIRONMENTAL PROTECTION	66.605	QAPP FFY 2015-2020	-	34,027
THE CADMUS GROUP, INC.	66.U01	EP-C-15-022	-	7,761
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.129		-	102,426
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.461		-	141,577
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.509		717,450	1,390,973
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.514		-	16,693
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.516		-	63,800
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.708		-	38,990
U.S. ENVIRONMENTAL PROTECTION AGENCY	66.714		-	13,818
UNIVERSITY OF CONNECTICUT	66.437	96172701	-	(4,144)
UNIVERSITY OF CONNECTICUT	66.437	LI-96290913-1	-	80,608
Environmental Protection Agency Total			<u>717,450</u>	<u>2,044,301</u>
Nuclear Regulatory Commission				
U.S. NUCLEAR REGULATORY COMMISSION	77.008		\$ -	\$ 199,967
Nuclear Regulatory Commission Total			<u>-</u>	<u>199,967</u>

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Energy				
ARGONNE NATIONAL LABS	81.U01	DE-AC02-06CH11357	\$ -	\$ 39,125
BECHTEL MARINE PROPULSION CORP	81.U02	PO# 7013868	-	1,781
BROOKHAVEN NATIONAL LABORATORY	81.U03	233969	-	43,027
FERMI NATIONAL ACCELERATOR LABORATORY	81.U04	PO 622828	-	9,485
GEORGE MASON UNIVERSITY	81.113	DE-NA0001123	-	(100)
GINER, INC.	81.049	DE-SC00113077	-	40,627
KSE, INC.	81.049	DE-SC0017219	-	724
KSE, INC.	81.049	KSE232	-	3,521
LAWRENCE BERKELEY NATL LAB U-CALIFORNIA,	81.U05	7251704	-	21,630
LITTORAL POWER SYSTEMS, INC	81.087	DE-EE0007243	-	98,014
MARINE BIOLOGICAL LABORATORY	81.049	47812	-	159,884
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	81.135	571000-4079	-	225,615
MICHIGAN TECHNOLOGICAL UNIVERSITY	81.086	DE-EE0007292	-	28,820
NATIONAL RENEWABLE ENERGY LAB	81.087	AFC-5-52004-01	-	4,914
NATIONAL RENEWABLE ENERGY LAB	81.U06	DE-AC36-080028308	-	56,784
NATIONAL RENEWABLE ENERGY LAB	81.U07	DE-AC36-08GO28308	-	534
OAK RIDGE NATIONAL LABORATORY	81.U08	4000135366	-	73,529
OAK RIDGE NATIONAL LABORATORY	81.U09	4000136881	-	103,283
PACE UNIVERSITY	81.117	DE-EE0006279	-	159,225
PACIFIC NORTHWEST NATIONAL LABORATORY	81.U10	DE-AC05-76RL01830	-	55,797
PHDS COMPANY	81.049	DE-SC0009639	-	40,527
SANDIA NATIONAL LABS	81.U11	DE-AC04-94AL85000	-	105,174
STANFORD UNIVERSITY	81.049	DE-SC0016544	-	37,850
U.S. DEPARTMENT OF ENERGY	81.049		33,869	3,220,267
U.S. DEPARTMENT OF ENERGY	81.057		-	82,416
U.S. DEPARTMENT OF ENERGY	81.087		-	7,869
U.S. DEPARTMENT OF ENERGY	81.104		-	60,670
U.S. DEPARTMENT OF ENERGY	81.112		-	167,248
U.S. DEPARTMENT OF ENERGY	81.117		-	236,342
U.S. DEPARTMENT OF ENERGY	81.121		81,314	302,949
U.S. DEPARTMENT OF ENERGY	81.135		-	18
UNITED TECHNOLOGIES RESEARCH CENTER	81.086	EERE DE-EE0005775	-	531
UNIVERSITY OF DELAWARE	81.049	37776	-	204,938
UNIVERSITY OF NEVADA	81.049	DE-SC0014275	-	21,825
UNIVERSITY OF NORTH CAROLINA	81.049	DE-SC0015376	-	4,945
Department Of Energy Total			<u>115,183</u>	<u>5,619,788</u>
Department Of Education				
ASSOCIATION ON HIGHER ED AND DISABILITY	84.116	P116D150005	\$ -	\$ 9,980
BOSTON PLAN FOR EXCELLENCE	84.336	U336S140088	-	342,332
BOSTON PLAN FOR EXCELLENCE	84.336	U336S14088	-	(222,237)
CITY OF LOWELL, PUBLIC SCHOOLS	84.215	S215E150154	-	24,578
CITY OF LOWELL, PUBLIC SCHOOLS	84.215	U215J150023	-	42,358
LANGSTON UNIVERSITY	84.129	P0011266	-	66,473
LANGSTON UNIVERSITY	84.133	Z126346	-	(9,440)
MA CHARTER PUBLIC SCHOOL ASSOCIATION	84.282	115-0299	-	90,951

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Education, continued				
MA COMMISSION FOR THE BLIND	84.126	H126A140029	\$ 45,441	\$ 45,501
MA DEPT OF ELEMENTARY & SECONDARY ED	84.366	150-009-7-1261-R	48,810	58,608
MA DEPT OF ELEMENTARY & SECONDARY ED	84.366	150-015-6-1261-Q	15,735	77,702
NATIONAL WRITING PROJECT	84.367	PR: 94-MA02-SEED2012 / SB: 114-1075	-	320
NATIONAL WRITING PROJECT	84.367	U367D150004	-	11,563
NEBRASKA DEPARTMENT OF EDUCATION	84.235	37200	-	48,544
NEBRASKA DEPARTMENT OF EDUCATION	84.235	H235N15004	-	74,656
TRANSCEN, INC.	84.133	H133B140043	-	(66,228)
U.S. DEPARTMENT OF EDUCATION	84.021		130,566	261,614
U.S. DEPARTMENT OF EDUCATION	84.129		-	192,674
U.S. DEPARTMENT OF EDUCATION	84.200		-	498,714
U.S. DEPARTMENT OF EDUCATION	84.235		2,023,479	3,502,912
U.S. DEPARTMENT OF EDUCATION	84.305		21,017	754,235
U.S. DEPARTMENT OF EDUCATION	84.325		-	805,433
U.S. DEPARTMENT OF EDUCATION	84.365		-	697,880
U.S. DEPARTMENT OF EDUCATION	84.407		183,479	2,022,748
U.S. DEPARTMENT OF EDUCATION	84.411		203,215	482,091
UNIVERSITY OF VERMONT	84.305	PR: R305A150438 / SB: 29338SUBUMASS	-	9,082
VANDERBILT UNIVERSITY	84.324	R324A160086	-	27,115
Department Of Education Total			2,671,742	9,850,159
Department Of Health And Human Services				
ADMINISTRATION ON AGING	93.110		\$ -	\$ (146,573)
ADMINISTRATIVE OFFICE OF THE TRIAL COURT	93.243	1 H79 SM061663-01	-	1,146
AGENCY FOR HEALTHCARE RESEARCH & QUALITY	93.226		769,832	2,006,652
AGILTRON, INC.	93.U01	1R43ES022884-01A1	-	(250)
ALBERT EINSTEIN COLLEGE OF MEDICINE	93.859	310743	-	142,572
ALBERT EINSTEIN COLLEGE OF MEDICINE	93.866	PR: K23 AG049466-02 / SB: 311108	-	13,430
ALTARUM INSTITUTE	93.U02	PR: HHSS2832012000011 / SB: SC-16-013	-	8,853
ALTIUS INSTITUTE FOR BIOMEDICAL SCIENCES	93.172	PR: 7U54HG007010-05 / SB:PF1292	-	46,196
ALTIUS INSTITUTE FOR BIOMEDICAL SCIENCES	93.172	U54 HG007010-05	-	35,549
AMERICAN COLLEGE OF RADIOLOGY	93.395	1 U24 CA18083-04	-	584,482
AMERICAN COLLEGE OF RADIOLOGY	93.395	PR: U24CA180803 / SB: 1612	-	829,649
AMERICAN PSYCHIATRIC ASSOCIATION	93.243	SM060562-05	-	10,334
AMERICAN THROMBOSIS & HEMOSTASIS NETWORK	93.080	PR: NU2 DD001155-01-00 / SB: ATHN2015001-1-2	128,830	225,494
AMERICAN THROMBOSIS & HEMOSTASIS NETWORK	93.184	U27 DD000862-02	-	7,043
ANTAGEN PHARMACEUTICALS, INC.	93.U03	200-2015-64147	-	106,585
ASSOC FOR PREVENTION TEACHING & RESEARCH	93.283	PR: 5U36OE000005 / SB: 15-25-IPE-03	-	(8)
ASSOC OF MATERNAL & CHILD HEALTH PROGRAM	93.424	1-U38-OT000140-03	-	10,736
ASSOC OF UNIV CENTERS ON DISABILITIES	93.283	1U38OT000140-02	-	12,947
ASSOC OF UNIV CENTERS ON DISABILITIES	93.314	CDC-RFA-DD16-1604	-	702
AUBURN UNIVERSITY	93.852	R01 NS093941	-	232,203
BANNER HEALTH	93.866	0435-02-43681	-	22,394
BAYLOR COLLEGE OF MEDICINE	93.U04	PR: HHSA-290201500002C / SB: 102038483	-	31,789

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
BAYSTATE MEDICAL CENTER, INC.	93.243	2U79SM059472-04	\$ -	\$ 1,542
BAYSTATE MEDICAL CENTER, INC.	93.243	U79 SM063204	-	18,625
BAYSTATE MEDICAL CENTER, INC.	93.847	PR: 1 R18 HL1055110 / SB: 705-11230-001	-	8,480
BAYSTATE MEDICAL CENTER, INC.	93.847	R18 HL08810-05	-	48,174
BECKMAN RESEARCH INSTITUTE CITY OF HOPE	93.847	PR: U01DK104162.-02 / SB: 51504.2000556.6	-	15,029
BETH ISRAEL DEACONESS MEDICAL CENTER	93.837	UM1HL108724-02	-	891
BETH ISRAEL DEACONESS MEDICAL CENTER	93.853	U01 NS074425-01	-	37,291
BETH ISRAEL DEACONESS MEDICAL CENTER	93.855	PR: 5 UM1 AII24377-02 / SB: 01028929	-	111,307
BETH ISRAEL DEACONESS MEDICAL CENTER	93.855	U19 AO095985-02	-	(840)
BETH ISRAEL DEACONESS MEDICAL CENTER	93.859	2 R01 GM104987	-	73,932
BOSTON COLLEGE	93.310	5U54GM119023-03	7,034	22,586
BOSTON COLLEGE	93.310	8U54GM119023-02	-	(35)
BOSTON COLLEGE	93.310	BU: 5101963-5	-	29,736
BOSTON COLLEGE	93.859	660-10/2R01GM060418	-	(147)
BOSTON COLLEGE	93.859	AG048962	-	109,336
BOSTON COLLEGE	93.865	R03HD080195	-	(99)
BOSTON COLLEGE	93.U05	5101962-10	-	1,871
BOSTON MEDICAL CENTER	93.847	R01 DK106531-02	-	37,236
BOSTON PUBLIC HEALTH COMMISSION	93.311	PAWOS000017	-	32,956
BOSTON PUBLIC HEALTH COMMISSION	93.738	1 U58 DP005629-01	-	867
BOSTON UNIVERSITY	93.243	1H79TI026380-02	-	10,487
BOSTON UNIVERSITY	93.307	7R24MD008819-02 Revised	-	81,559
BOSTON UNIVERSITY	93.307	R24MD008819	-	(81,559)
BOSTON UNIVERSITY	93.393	PR: 3R01CA181392-02S / SB: 4500001969	-	18,424
BOSTON UNIVERSITY	93.393	R01 CA181392-02	-	305,423
BOSTON UNIVERSITY	93.516	4500001666	-	56,941
BOSTON UNIVERSITY	93.837	1R01HL136660	-	22,212
BOSTON UNIVERSITY	93.853	R05 NS073947-02	-	65,387
BOSTON UNIVERSITY	93.U06	4500001819	-	16,468
BRANDEIS UNIVERSITY	93.433	PR: 90DPGE0001-01-01 / SB: 403315	-	10,160
BRANDEIS UNIVERSITY	93.865	PR: 7 R01 HD082105-02 / SB: 403193	-	18,033
BRANDEIS UNIVERSITY	93.865	PR: 7R01 HD074581 / SB: 4036160	-	3,557
BRIGHAM AND WOMEN'S HOSPITAL	93.121	1R34DE025908-01	-	18,206
BRIGHAM AND WOMEN'S HOSPITAL	93.286	PR: P41 EB015902 / SB:109443	-	7,060
BRIGHAM AND WOMEN'S HOSPITAL	93.837	113892	-	21,469
BRIGHAM AND WOMEN'S HOSPITAL	93.846	PR: R01AR069557 / SB: 115810	-	99,220
BRIGHAM AND WOMEN'S HOSPITAL	93.855	PR: 2P01 AI073748 / SB: 112669	-	366,258
BRIGHAM AND WOMEN'S HOSPITAL	93.866	5 U01 AG048270-02	108,384	184,732
BROWN UNIVERSITY	93.213	1 UH2 AT008145-02	-	210,334
BROWN UNIVERSITY	93.273	PR: 1 I24 DA041123-01 / SB: 00000831	-	31,879
BROWN UNIVERSITY	93.866	5 R01AG048940-03	-	375,937
CALIFORNIA INSTITUTE OF TECHNOLOGY	93.310	DP5 OD12190-06	-	127,070
CELLERANT THERAPEUTICS, INC.	93.U07	HHSO 100201000051C	-	2,921
CENTERS FOR DISEASE CONTROL & PREVENTION	93.068		-	414,282
CENTERS FOR DISEASE CONTROL & PREVENTION	93.135		-	782,571

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
CENTERS FOR DISEASE CONTROL & PREVENTION	93.262		\$ 558,519	\$ 1,819,467
CENTERS FOR DISEASE CONTROL & PREVENTION	93.318		4,670,510	7,499,644
CENTERS FOR DISEASE CONTROL & PREVENTION	93.542		-	20,523
CENTERS FOR DISEASE CONTROL & PREVENTION	93.865		-	2,721
CENTERS FOR DISEASE CONTROL & PREVENTION	93.U08	Contract No. 211-2013-M-57158	-	15,044
CENTERS FOR MEDICARE & MEDICAID SERVICES	93.638		810,876	5,071,867
CHILDREN'S FRIEND AND SERVICE	93.600	EHSCCP-Eval-001	-	29,679
CHILDREN'S HOSPITAL	93.110	6 T73MC000202402 / PO# 0001204102	-	117,878
CHILDREN'S HOSPITAL	93.266	75-0350-0-1-550	-	11,381
CHILDREN'S HOSPITAL	93.632	90DD0013-03-00	2,500	1,300
CHILDREN'S HOSPITAL	93.632	90DD0013-04-00, PO# 0000704943	7,500	304,342
CHILDREN'S HOSPITAL	93.847	2R01DK077195-06	-	78,888
CHILDREN'S HOSPITAL	93.855	PR: R01AI116577 / SB: RSTFD0000678743	-	192,814
CHILDREN'S HOSPITAL OF PHILADELPHIA	93.395	PR: NCTN / SB: U10 CA180886	-	41,940
CHILDREN'S HOSPITAL OF PHILADELPHIA	93.395	U10CA0180886	-	17,943
CINCINNATI CHILDREN'S HOSPITAL MEDCL CTR	93.865	1R01HD084430-01A1	-	34,655
CLEVELAND CLINIC FOUNDATION	93.273	U01 AA021893-05	-	462,082
COLUMBIA UNIVERSITY	93.865	PR: P01 HD080642-01 / SB: PO #G0545	-	20,410
COMMONWEALTH HLTH INS CONNECTOR AUTH	93.525	1 HBEIE130143-01-00	-	36,821
DANA FARBER CANCER INSTITUTE	93.397	5P50CA090381-13	-	(12,781)
DARTMOUTH COLLEGE	93.135	PR: U48DP005018 / SB: 1614	-	5,735
DARTMOUTH COLLEGE	93.279	5 R01 DA032533-03	-	(26,215)
DARTMOUTH COLLEGE	93.393	PR: 5 R01 CA168778-02 / SB: R186	-	2,303
DUKE UNIVERSITY	93.837	5 U01 HL107023-04	-	8,201
DUKE UNIVERSITY	93.847	5R01DK093829-04	-	38,922
DUKE UNIVERSITY	93.U09	PR: HSH272200900023C / SB: CT1300043	-	12,639
EMERSON COLLEGE	93.173	PR: 1 R01 DC012774-03 / SB: 3452-UMMS	-	39,872
EMMES CORPORATION	93.853	PR: NS026835 / SB: CT1000064	-	18,883
EMORY UNIVERSITY	93.859	1R01GM105813	-	142,805
EMORY UNIVERSITY	93.859	1R01GM105813 - 01	-	(28,986)
ENFORMIA	93.U10	113-1486	-	(374)
FAMILY SERVICE, INC.	93.086	90FM0109-01-00	-	7,407
FLORIDA DEVELOPMENT DISABILITIES COUNCIL	93.630	950EM15D	8,000	53,183
FLORIDA DEVELOPMENT DISABILITIES COUNCIL	93.630	973EM16	10,000	59,775
FLORIDA INTERNATIONAL UNIVERSITY	93.279	PR: 9 R01 DA035160-06 / SB: 800001069-02	-	43,362
FOCALCOOL LLC	93.837	R43-NS095573-01A1	-	56,361
FORDHAM UNIVERSITY	93.866	1R21AG050018-01A1	-	22,706
FTL LABS CORPORATION	93.433	90B1003301	-	18,255
GENTUITY, LLC	93.837	1 R34 NS100163-01A1	-	6,125
GEORGE WASHINGTON UNIVERSITY	93.610	PR: C1MS331343-01-00 / SB: 14-M83	-	10,363
GEORGE WASHINGTON UNIVERSITY	93.847	1R01DK100916-01A1	-	38,433
GEORGE WASHINGTON UNIVERSITY	93.847	5R01DK100916-02	-	5,619
GEORGE WASHINGTON UNIVERSITY	93.847	R01DK100916	-	104,767
GEORGE WASHINGTON UNIVERSITY	93.866	R01AG051752	-	26,008
GROUP HEALTH RESEARCH INSTITUTE	93.U11	R215-084.030-T04	-	56,901

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
HARVARD MEDICAL SCHOOL	93.837	1R01HL126896-01A1	\$ -	\$ 141,942
HARVARD MEDICAL SCHOOL	93.879	G08 LM012154	-	42,625
HARVARD MEDICAL SCHOOL	93.879	PR:-7R25LM012284-02 / SB: 153062	-	14,256
HARVARD PILGRIM HEALTH CARE, INC.	93.084	U54CK000484	-	71,979
HARVARD PILGRIM HEALTH CARE, INC.	93.103	HHSF22301001T	-	5,058
HARVARD PILGRIM HEALTH CARE, INC.	93.113	R01 ES024765-02	-	10,188
HARVARD PILGRIM HEALTH CARE, INC.	93.172	PR: R21HG008510 / SB: AH000581	-	18,314
HARVARD PILGRIM HEALTH CARE, INC.	93.226	R18HS021424	-	85,935
HARVARD PILGRIM HEALTH CARE, INC.	93.310	1UG3 OD023286-01	-	33,150
HARVARD PILGRIM HEALTH CARE, INC.	93.865	AH000453	-	20,242
HARVARD PILGRIM HEALTH CARE, INC.	93.U12	HHSF223200910006I	-	2,452
HARVARD PILGRIM HEALTH CARE, INC.	93.U13	HHSF22301007T	-	29,518
HARVARD PILGRIM HEALTH CARE, INC.	93.U14	HHSF223201400002I	-	17,663
HARVARD PILGRIM HEALTH CARE, INC.	93.U15	PR: HHSF223200910006I / SB: HHSF2201007T-0021	-	13,460
HARVARD PILGRIM HEALTH CARE, INC.	93.U16	HHSF22320140030I	-	165,247
HARVARD PILGRIM HEALTH CARE, INC.	93.U17	HHSF223201400042I	-	64,356
HARVARD SCHOOL OF PUBLIC HEALTH	93.113	PR: 2R01EA014370 / SB: 112176-5095841	-	15,683
HARVARD SCHOOL OF PUBLIC HEALTH	93.262	T42 OH008416	-	(3,067)
HARVARD SCHOOL OF PUBLIC HEALTH	93.393	5R01 CA50385-27	-	40,531
HARVARD SCHOOL OF PUBLIC HEALTH	93.853	114512-5097014	-	24,034
HARVARD SCHOOL OF PUBLIC HEALTH	93.855	PR: U19 AII07774 / SB: 109708-5064861	-	438,206
HARVARD UNIVERSITY	93.847	1DP3DK111898	-	222,707
HARVARD UNIVERSITY	93.853	PR: R01 NS082525 / SB: 138074-5085856	-	203,977
HARVARD UNIVERSITY	93.865	5P01HD082032-02	-	21,591
HARVARD UNIVERSITY	93.884	6 UH1 HP29962-01-01	-	133,236
HEALTH RESOURCES IN ACTION	93.610	CMS331039-01-00	-	(176)
HEALTH RESOURCES SERVICE ADMINISTRATION	93.107		516,822	633,396
HEALTH RESOURCES SERVICE ADMINISTRATION	93.110		234,094	1,231,404
HEALTH RESOURCES SERVICE ADMINISTRATION	93.145		1,902,283	2,409,217
HEALTH RESOURCES SERVICE ADMINISTRATION	93.178		-	802,322
HEALTH RESOURCES SERVICE ADMINISTRATION	93.247		310,257	936,506
HEALTH RESOURCES SERVICE ADMINISTRATION	93.265		-	(281)
HEALTH RESOURCES SERVICE ADMINISTRATION	93.358		-	273,155
HEALTH RESOURCES SERVICE ADMINISTRATION	93.884		-	(2,553)
HEALTH RESOURCES SERVICE ADMINISTRATION	93.918		-	484,288
HEBREW REHAB	93.866	2R01AG025037	-	17,986
HENRY FORD HEALTH SYSTEM	93.310	PR: 1OT2ODO24610-01 / SB: B11149UMASS	-	56,793
HIGHLAND VALLEY ELDER SERVICES, INC.	93.052	116-0125	-	3,683
HOLYOKE HEALTH CENTER INC	93.289	75-0120-0-1-551	-	11,499
HOSPICE OF HENDERSON COUNTY, INC.	93.U18	1C1CMS331331	-	23,363
ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI	93.242	PR: 5R01MH104341-02 / SB: 0255-0091-4809	-	59,519
ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI	93.242	PR: U01MH103392-01 / SB: 0255-7231-4609	-	284,938
ILLINOIS INSTITUTE OF TECHNOLOGY	93.837	PR: R01 HL122484-04 / SB: SA557-0614-8907	-	431,428
INDIANA UNIVERSITY	93.397	P30 CA082709-17S3 / SB: IN4687577UMASS	-	13,783

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
INDIANA UNIVERSITY	93.397	P30 CA082709-17S4 / SB:IN4687567UMASS	\$ -	\$ 19,297
INDIANA UNIVERSITY	93.397	PR: 5 U54 CA190151-03 / SB: PO # 1571596	-	16,603
INDIANA UNIVERSITY	93.847	PR: 2R01DK060581 / SB: IN-4681920-UMA	-	52,415
JACKSON LABORATORY	93.351	U54 OD020351	-	23,508
JOHNS HOPKINS UNIVERSITY	93.855	4 R1 AI102939-4	-	295,246
JOHNS HOPKINS UNIVERSITY	93.936	5 R01 HD080474-04	-	264,483
JOHNS HOPKINS UNIVERSITY	93.U19	2001820334	-	(71,802)
JOHNS HOPKINS UNIVERSITY	93.U20	HHSN2682011000081 / HHSN26800002	-	30,334
JOSLIN DIABETES CENTER	93.847	PR: UC4DK101108-01 / SB: PERL Study	-	11,082
KAISER FOUNDATION RESEARCH INSTITUTE	93.279	5 UG1 DA040314-02	-	9,936
KAISER FOUNDATION RESEARCH INSTITUTE	93.393	PR: 5 U24CA17524-05 / SB: RNG200623-MPCI-01	-	190,456
KAISER FOUNDATION RESEARCH INSTITUTE	93.866	U01 AG034661-04	-	40,269
KANSAS STATE UNIVERSITY	93.859	5 R01 GM107487-03	-	51,918
KLEIN BUENDEL, INC.	93.393	PR: R01CA192652 / SB: 0301-0154-000	-	164,965
LANGSTON UNIVERSITY	93.110	90AR5029-01-00	-	5,222
LANGSTON UNIVERSITY	93.433	90RT5024-01-01	-	1,223
LANGSTON UNIVERSITY	93.U21	90AR5029-01-00	-	74,657
LAWRENCE BERKELEY NATL LAB U-CALIFORNIA,	93.U22	PR: 1UM1HG009421-01 / SB:7339894	-	23,520
LUK CRISIS CENTER, INC.	93.652	90C01057	-	83,303
MA DEPARTMENT OF MENTAL HEALTH	93.U23	32103559UMASS5	4,939	92,251
MA DEPARTMENT OF PUBLIC HEALTH	93.110	PR: CYSHCN SIB / SB: INTF3050HH2500224026	-	60,509
MA DEPARTMENT OF PUBLIC HEALTH	93.136	INTF3401M03700115043	-	254,314
MA DEPARTMENT OF PUBLIC HEALTH	93.243	1H79SM062910-01	-	73,472
MA DEPARTMENT OF PUBLIC HEALTH	93.243	IU79SP020794	-	103,596
MA DEPARTMENT OF PUBLIC HEALTH	93.296	3043H78500224028	-	(3,602)
MA DEPARTMENT OF PUBLIC HEALTH	93.994	INTF3054M03300819017/124499	-	25,960
MA DEPARTMENT OF PUBLIC HEALTH	93.994	INTF7900MM3701516150	-	136,241
MA DEPT OF ELEMENTARY & SECONDARY ED	93.084	CTDOEISCT75UMASSBOSSURVEY	-	(155)
MA DEPT OF PUBLIC HEALTH, BSAS	93.243	INTF2400HH78500224216	-	15,345
MA DEVELOPMENTAL DISABILITIES COUNCIL	93.360	CT 010016G14CS62BCSNF0	-	4,950
MA EXECUTIVE OFFICE OF HLTH & HUMAN SVC	93.628	14UMMSSONECARETRANS5W	-	1,152
MA EXECUTIVE OFFICE OF HLTH & HUMAN SVC	93.628	16UMMSFALLONSURVSW	-	48,125
MA EXECUTIVE OFFICE OF HLTH & HUMAN SVC	93.644	16UMMSCONTRACEPTIVSW	-	45,647
MAHIDOL UNIVERSITY	93.989	1U01TW010091-01	-	11,633
MASSACHUSETTS GENERAL HOSPITAL	93.242	1 R01MH106577-01A1	-	87,516
MASSACHUSETTS GENERAL HOSPITAL	93.396	4UH3CA189901-3	-	187,929
MASSACHUSETTS GENERAL HOSPITAL	93.396	UH2CA189901	-	87,763
MASSACHUSETTS GENERAL HOSPITAL	93.837	226216	-	8,146
MASSACHUSETTS GENERAL HOSPITAL	93.837	PR: 1R01HL136685 / SB: 230189	-	17,419
MASSACHUSETTS GENERAL HOSPITAL	93.837	R21DK109548	-	32,277
MASSACHUSETTS GENERAL HOSPITAL	93.847	P01 DK033506-26A1	-	46,528
MASSACHUSETTS GENERAL HOSPITAL	93.853	1 U10 NS086729-04	-	1,586
MASSACHUSETTS GENERAL HOSPITAL	93.853	R21NS096402	-	48,571
MASSACHUSETTS GENERAL HOSPITAL	93.855	PR: R01 AI103055 / SB: 223544	-	60,678
MASSACHUSETTS GENERAL HOSPITAL	93.866	5K01AG0550711-01	-	99,894

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
MAYO CLINIC ROCHESTER	93.396	PR: 2R01CA136526 / PO: 64195304 / SB: UNI-203270	\$ -	\$ 8,945
MCLEAN HOSPITAL	93.242	PR: 5 R01 MH105608-02 / SB: 401122	-	30,990
MEDICAL COLLEGE OF WISCONSIN	93.855	5R01AI101898-02	-	(2,678)
MICHAEL E DEBAKEY VA MEDICAL CENTER	93.U24	1R21AG043883	-	15,752
MIRIAM HOSPITAL	93.213	PR: 4 R01 AT006948-05 / SB: 710-9907	-	8,436
MIRIAM HOSPITAL	93.213	R21AT008830	-	11,970
MIRIAM HOSPITAL	93.393	5 R01 CA156699-04	-	(1,630)
MONTANA STATE UNIVERSITY	93.286	G173-15-W5173	-	51,384
MOUNT HOLYOKE COLLEGE	93.837	GD8871	-	49,852
MOUNT SINAI MEDICAL CENTER	93.110	PR: H30 MC24048-02 / SB: 0253-6544-4609	-	32,036
NAT'L DEVELOP AND RESEARCH INSTITUTES	93.279	R01DA035 146	-	14,219
NATL INST FOR OCCUPATIONAL SAFETY&HEALTH	93.262		124,102	917,514
NEW ENGLAND RESEARCH INSTITUTE, INC.	93.837	PR: U01HL107407 / SB: CT15000	-	312
NEW YORK UNIVERSITY SCHOOL OF MEDICINE	93.393	5 R21 CA187612-02	-	69,854
NEW YORK UNIVERSITY SCHOOL OF MEDICINE	93.855	1 P01 AI100151-04	-	467,403
NIH-FOGARTY INTERNATIONAL CENTER	93.989		50,162	74,944
NIH-NATIONAL EYE INSTITUTE	93.867		-	1,332,687
NIH-NATIONAL INSTITUTE OF AGING	93.866		668,124	2,022,007
NIH-NATIONAL INSTITUTES OF HEALTH	93.113		244,016	2,704,514
NIH-NATIONAL INSTITUTES OF HEALTH	93.121		102,980	682,955
NIH-NATIONAL INSTITUTES OF HEALTH	93.142		211,984	285,124
NIH-NATIONAL INSTITUTES OF HEALTH	93.172		-	323,529
NIH-NATIONAL INSTITUTES OF HEALTH	93.173		21,888	953,038
NIH-NATIONAL INSTITUTES OF HEALTH	93.226		-	7,049
NIH-NATIONAL INSTITUTES OF HEALTH	93.233		-	477,548
NIH-NATIONAL INSTITUTES OF HEALTH	93.242		39,852	456,750
NIH-NATIONAL INSTITUTES OF HEALTH	93.273		45,234	442,125
NIH-NATIONAL INSTITUTES OF HEALTH	93.279		16,002	608,619
NIH-NATIONAL INSTITUTES OF HEALTH	93.286		302,144	1,140,631
NIH-NATIONAL INSTITUTES OF HEALTH	93.307		259,822	955,433
NIH-NATIONAL INSTITUTES OF HEALTH	93.310		738,896	3,570,470
NIH-NATIONAL INSTITUTES OF HEALTH	93.350		-	361,556
NIH-NATIONAL INSTITUTES OF HEALTH	93.351		-	116,277
NIH-NATIONAL INSTITUTES OF HEALTH	93.361		-	318,001
NIH-NATIONAL INSTITUTES OF HEALTH	93.393		318,155	502,198
NIH-NATIONAL INSTITUTES OF HEALTH	93.394		11,548	606,786
NIH-NATIONAL INSTITUTES OF HEALTH	93.395		-	352,370
NIH-NATIONAL INSTITUTES OF HEALTH	93.396		586,003	1,320,165
NIH-NATIONAL INSTITUTES OF HEALTH	93.397		29,948	776,661
NIH-NATIONAL INSTITUTES OF HEALTH	93.837		325,620	859,945
NIH-NATIONAL INSTITUTES OF HEALTH	93.846		21,947	236,612
NIH-NATIONAL INSTITUTES OF HEALTH	93.847		362,098	1,434,162
NIH-NATIONAL INSTITUTES OF HEALTH	93.853		43,274	543,585
NIH-NATIONAL INSTITUTES OF HEALTH	93.855		305,608	1,138,659
NIH-NATIONAL INSTITUTES OF HEALTH	93.859		701,029	8,028,852
NIH-NATIONAL INSTITUTES OF HEALTH	93.865		359,004	2,640,342

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
NIH-NATIONAL INSTITUTES OF HEALTH	93.866		\$ 177,420	\$ 1,131,455
NIH-NATIONAL INSTITUTES OF HEALTH	93.867		-	89,136
NIH-NATIONAL INSTITUTES OF HEALTH	93.879		-	285,536
NIH-NATIONAL INSTITUTES OF HEALTH	93.989		173,514	242,992
NIH-NATIONAL INSTITUTES OF HEALTH	93.U25	HHSN275200900451P	-	1
NIH-NATIONAL INSTITUTES OF HEALTH	93.U26	1 R01 HD083311-01A1	214,677	735,044
NIH-NATIONAL LIBRARY OF MEDICINE	93.879		63,131	1,522,349
NIH-NATL CANCER INSTITUTE	93.393		173,700	2,477,817
NIH-NATL CANCER INSTITUTE	93.394		281,745	1,251,087
NIH-NATL CANCER INSTITUTE	93.395		26,142	1,484,759
NIH-NATL CANCER INSTITUTE	93.396		78,485	2,348,216
NIH-NATL CANCER INSTITUTE	93.398		7,406	1,027,828
NIH-NATL CANCER INSTITUTE	93.U27	HHSN261201500029C	110,585	373,958
NIH-NATL CTR ADVANCING TRANSLATIONAL SCI	93.310		395,987	2,068,028
NIH-NATL CTR ADVANCING TRANSLATIONAL SCI	93.350		277,582	4,409,544
NIH-NATL CTR FOR COMPLEMENT & INT HEALTH	93.213		179,121	1,397,499
NIH-NATL HEART, LUNG & BLOOD INSTITUTE	93.837		681,833	9,091,512
NIH-NATL HEART, LUNG & BLOOD INSTITUTE	93.838		-	2,309,364
NIH-NATL HEART, LUNG & BLOOD INSTITUTE	93.839		145,641	1,640,383
NIH-NATL HUMAN GENOME RESEARCH INSTITUTE	93.172		1,087,626	4,428,879
NIH-NATL HUMAN GENOME RESEARCH INSTITUTE	93.U28	HHSN302201600025M	-	226
NIH-NATL INST OF ALLERGY & INFEC DISEASE	93.855		1,325,466	27,913,856
NIH-NATL INST OF ALLERGY & INFEC DISEASE	93.856		-	701,825
NIH-NATL INST OF ALLERGY & INFEC DISEASE	93.U29	HHSN272201600011C	43,397	169,521
NIH-NATL INST OF ALLERGY & INFEC DISEASE	93.U30	HHSN272201300031C	-	469,889
NIH-NATL INST OF ALLERGY & INFEC DISEASE	93.U31	1 R13 AII29301	-	6,000
NIH-NATL INST OF ARTHRITIS & MUSCULOSKEL	93.846		432,924	3,056,665
NIH-NATL INST OF BIOMED IMAG & BIOENGRNG	93.286		782,047	2,186,042
NIH-NATL INST OF BIOMED IMAG & BIOENGRNG	93.310		100,555	400,025
NIH-NATL INST OF CHILD HLTH & HUMAN DEVL	93.865		1,790,162	7,130,689
NIH-NATL INST OF CHILD HLTH & HUMAN DEVL	93.U32	HHSN275201500009I/HHSN27500001	-	1,236
NIH-NATL INST OF DENTAL & CRANIOFA RSCH	93.310		-	104,417
NIH-NATL INST OF DIAB & DIGEST KIDNEY DI	93.847		547,941	12,286,466
NIH-NATL INST OF ENVIR HEALTH SCIENCES	93.113		-	23,675
NIH-NATL INST OF ENVIR HEALTH SCIENCES	93.142		347,004	1,066,176
NIH-NATL INST OF ENVIR HEALTH SCIENCES	93.310		-	638,784
NIH-NATL INST OF GENERAL MEDICAL SCIENCE	93.310		73,201	521,784
NIH-NATL INST OF GENERAL MEDICAL SCIENCE	93.859		1,199,004	23,038,840
NIH-NATL INST OF NEUROLO DISORD & STROKE	93.853		940,538	11,133,938
NIH-NATL INST ON ALCO ABUSE & ALCOHOLISM	93.273		70,341	3,186,557
NIH-NATL INST ON DEAFNESS & OTH COM DIS	93.173		20,538	206,521
NIH-NATL INST ON MINORITY & HEALTH DISPA	93.307		278,246	1,215,293
NIH-NATL INSTITUTE OF MENTAL HEALTH	93.242		738,105	4,155,219
NIH-NATL INSTITUTE OF NURSING RES	93.361		-	200,904
NIH-NATL INSTITUTE ON DRUG ABUSE	93.279		68,423	4,302,653

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
NIH-OFFICE OF THE DIRECTOR	93.310		\$ -	\$ 416,890
NIH-OFFICE OF THE DIRECTOR	93.351		355,116	1,504,689
NORTHEASTERN UNIVERSITY	93.273	1R01AA021136-01A1	-	9,502
NORTHWESTERN UNIVERSITY	93.397	PR:1U54CA193419-01 / SB: 6003974 UM	-	82,318
NORTHWESTERN UNIVERSITY	93.859	4 R01 GM107209-04	-	45,009
NORTHWESTERN UNIVERSITY	93.859	60035565 UMA	-	(6,621)
OFFICE OF MINORITY HEALTH	93.137		-	62,605
OREGON SOCIAL LEARNING CENTER, INC.	93.279	R01 DA041425-01	-	99,712
PARTNERS RESEARCH MANAGEMENT	93.103	PR: 5 R01 FD0004127-04 / SB: 226881	-	3,623
PENNINGTON BIOMEDICAL RESEARCH CTR (LSU)	93.262	R210H010785-O1A1S1	-	869
PENNINGTON BIOMEDICAL RESEARCH CTR (LSU)	93.U33	HD073807-50352-S01	-	(1,184)
PENNSYLVANIA STATE UNIVERSITY	93.242	5 R01 MH098003-04	-	29,161
PENNSYLVANIA STATE UNIVERSITY	93.865	1R01HD083381-01A1	-	26,144
PLANET BIOTECHNOLOGY, INC.	93.855	PR: 1 R41 AI129106-01 / SB: R41 FH-Fc UMASSMED	-	37,857
PLYMOUTH STATE UNIVERSITY	93.243	G02HP28005-01-03	-	119,000
PRAXIS, INC.	93.121	1R42DE020979-01A1	-	153
PRAXIS, INC.	93.865	2R42HD069070-02	-	104,623
PRISM	93.U34	720201	-	68,250
PURDUE UNIVERSITY	93.395	1R01CA196947-01A1	-	18,577
PURDUE UNIVERSITY	93.855	1 R2 1 AI 121994-01	-	2,699
PURDUE UNIVERSITY	93.859	PR: R21 GM114853-01 / SB: 4102-64396	-	17,976
PURDUE UNIVERSITY	93.936	4301-80198	-	5,582
RECLAIMRX LLC	93.859	IR43GM 116211-0 IA 1	-	44,314
RESEARCH FOUNDATION OF SUNY	93.853	1 R01 NS093097-02	-	269,105
RESEARCH TRIANGLE INTERNATIONAL	93.U35	HHS2832012000061/HHSS2834204T	-	248,749
RHODE ISLAND HOSPITAL	93.361	5 R01 NR014782-03	-	21,027
RUSH UNIVERSITY MEDICAL CENTER	93.361	1 R01 NR013910-03	-	14,276
RUTGERS UNIVERSITY	93.145	PR: 6U1OHA28686 / SB: 815570	-	35,020
RUTGERS UNIVERSITY	93.847	PR: 1R01DK102934 / SB: 5471	-	46,721
SANFORD BURNHAM PREBYS MED DISCOVERY INS	93.396	PR: R01 CA207177 / SB: 60025-12917-UMASS	-	11,056
SEVEN HILLS FOUNDATION	93.243	1 SP021244-01	-	54,557
SIGMOVIR BIOSYSTEMS, INC.	93.855	2R42-A1109926-02	-	246,862
SIGNABLOK, INC.	93.273	1R34AA024355-01A1	-	5,828
SIGNABLOK, INC.	93.837	5 R44HL110417-03	-	130,561
SIMON FRASER UNIVERSITY	93.856	R01 AI097051-01	-	(1,999)
SOCIAL & SCIENTIFIC SYSTEMS, INC.	93.U37	PR: HHSN261200800001E / SB: CRB-SSS-16-004803	-	14,039
SOCIAL & SCIENTIFIC SYSTEMS, INC.	93.U38	HHSN261200800001E	-	66
SPAN, INC.	93.959	1H79T1024794-01	-	5,741
SPEECH TECHNOLOGY AND APPLIED RESEARCH	93.173	R44-DC011668	-	79,377
STANFORD UNIVERSITY	93.286	1U01EB017140-01A1	-	65,654
STANFORD UNIVERSITY	93.286	5U01EB017140 / U01EB017140	-	26,736
STANFORD UNIVERSITY	93.286	5U01EB017140-03 / U01EB017140	-	16,965
STANFORD UNIVERSITY	93.859	PR: 1R01GM112720-01 / SB: 60893476-114988	-	11,206
STATE OF RHODE ISLAND	93.624	SRI/RFP Number: 7549877	-	1,517,032
STATE OF VERMONT	93.624	PR: G1CMS 331181-01-00	-	119,514
SUBSTANCE ABUSE AND MENTAL HEALTH SERV	93.243		162,705	866,403
SWEDISH MEDICAL CENTER	93.U39	SMC: 223004 B.01	-	455,387

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
TCG, INC.	93.853	2R44NS074540-02A1	\$ -	\$ 69,855
TCG, INC.	93.853	PR: 2 R44 NS074540-02 / SB: UM-20160927-01-TCG	-	71,730
TEXAS A&M UNIVERSITY	93.855	1 P01 1A1095208-04	-	88,034
THE BROAD INSTITUTE	93.172	PR: 1R01 HG008742-01A1 / SB: 500530-550000908	-	18,626
THE BROAD INSTITUTE	93.351	PR: R24 OD018250-01A1 / SB: 5400000054	-	20,354
THE CTR FOR CONSTRUCTION RESEAR & TRAIN	93.262	U60 OH 009762	-	254,420
THE GENERAL HOSPITAL CORPORATION	93.837	4 R01 HL112661-04	-	262,958
THE J. DAVID GLADSTONE INSTITUTE	93.853	5 R01 NS079725-04	-	239,784
THE MARY IMOGENE BASSETT HOSPITAL	93.262	2 U54 OH007542-16	-	114,571
THE MARY IMOGENE BASSETT HOSPITAL	93.262	5 U54 OH007542-14	-	(15)
THE MARY IMOGENE BASSETT HOSPITAL	93.262	5 U54 OH007542-15	-	26,323
THE SCRIPPS RESEARCH INSTITUTE	93.855	PR: 4 P01 AI100263-05 / SB: PO 5-20598	-	222,827
THE SCRIPPS RESEARCH INSTITUTE	93.855	PR: 5P01AI100263 / SB: 5-20718	-	263,625
THE UNIVERSITY OF TEXAS AT TYLER	93.838	PR: 1 U01 HL133536-01 / SB: 6104360165-02	-	11,665
TRANSCEN, INC.	93.433	90RT5034-02-00	-	145,041
TRIDIUM, INC.	93.273	2 R42 AA022035-04	14,267	212,310
TRIDIUM, INC.	93.393	PR: R24 CA174048-03 / SB: SBC Project	-	169,682
TUFTS MEDICAL CENTER	93.839	PR: 5 P50 HL110789-05 / SB: 6013015-SERV	-	4,590
TUFTS MEDICAL CENTER	93.839	PR: P50 HL110789-05 / SB: 6013016-SERV	-	4,700
TUFTS MEDICAL CENTER	93.865	R01HD072778-01A1	-	7,248
TUFTS UNIV CUMMINGS SCH OF VET MED	93.865	PR: 1R21HD086361 / SB: 1012913-00001	-	39,674
TUFTS UNIVERSITY	93.855	PR: 1R01AI16969-01 / SB:101315-00001	-	25,676
TUFTS UNIVERSITY	93.859	4K12GM074869-10	-	17,376
TUFTS UNIVERSITY	93.859	5K12GM074869-09	-	9,264
TULANE UNIVERSITY	93.847	5 R01 DK099598-04	-	16,739
U OF TEXAS M.D. ANDERSON CANCER CENTER	93.286	1 R01 EB020658-01	-	162,682
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.103		-	219,730
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.242		383,420	705,896
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.433		591,163	2,420,354
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.631		86,992	567,185
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.632		22,507	588,610
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.638		-	15,215
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.866		72,934	280,789
U.S. FOOD AND DRUG ADMINISTRATION	93.103		20,000	74,674
UNIVERSITY OF ALABAMA	93.226	5 U19 HS021110-05	-	4,145
UNIVERSITY OF ALABAMA	93.846	PR: 5 R01 AR060240-05 / SB: 000401984-004	-	11,941
UNIVERSITY OF ALABAMA	93.855	PR: 5 R01 AI109001-02 / SB: 000503587-001	-	331,950
UNIVERSITY OF ALABAMA	93.865	2 R01 HD061959-10	-	32,863
UNIVERSITY OF ALABAMA	93.989	PR: 4 R01 TW009272-05 / SB: 000421737-0001	-	17,482
UNIVERSITY OF ALABAMA	93.U40	PR: HHSN268200900047C / SB: CT1100012	-	2,731
UNIVERSITY OF ALABAMA	93.U41	PR: HHSN268201300025C / SB: 000501394-02	-	91,530
UNIVERSITY OF CALIFORNIA	93.121	2R01DE016402-10	-	74,969
UNIVERSITY OF CALIFORNIA	93.855	PR: HL / SB: VEST/PREDICTS	-	5,482
UNIVERSITY OF CALIFORNIA	93.859	PR: R01GM117189 / SB: 9185sc	-	140,587
UNIVERSITY OF CALIFORNIA	93.865	55962754	-	11,468

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
UNIVERSITY OF CALIFORNIA BERKELEY	93.859	2R01GM094402-06	\$ -	\$ 49,315
UNIVERSITY OF CALIFORNIA IRVINE	93.226	2015-3303	-	14,285
UNIVERSITY OF CALIFORNIA IRVINE	93.310	UH3AII 13337	-	50,235
UNIVERSITY OF CALIFORNIA REGENTS	93.243	U79 SM080001-01	-	137,934
UNIVERSITY OF CALIFORNIA REGENTS	93.279	5 U24 DA041123-02	-	40,193
UNIVERSITY OF CALIFORNIA REGENTS	93.855	5 R21 AI101566-02	-	34,503
UNIVERSITY OF CALIFORNIA REGENTS	93.989	PR: 2 U19 TW007401-10 / SB: 61686358	-	28,275
UNIVERSITY OF CALIFORNIA SAN FRANCISCO	93.121	2E01DE19638-06A1	-	131,922
UNIVERSITY OF CALIFORNIA SAN FRANCISCO	93.213	PR: 1 R34 AT08948-01A1 / SB: 9560sc	-	138,849
UNIVERSITY OF CALIFORNIA SAN FRANCISCO	93.242	9168SC	-	7,424
UNIVERSITY OF CALIFORNIA SAN FRANCISCO	93.855	PR: 1UM1 AI126611 / SB: 9617sc	-	229,438
UNIVERSITY OF CALIFORNIA SAN FRANCISCO	93.865	1 R21 HD082330-01A1	-	7,198
UNIVERSITY OF CINCINNATI	93.U42	200-2015-M-63859	-	2,600
UNIVERSITY OF COLORADO AT DENVER	93.846	PR: 5 UH2 AR067681-03 / SB: FY17.090.002_AMD3	-	154,747
UNIVERSITY OF COLORADO AT DENVER	93.846	PR: UH2AR067681-01 / SB: FY15.090.004	-	26,533
UNIVERSITY OF CONNECTICUT	93.624	1 G1CMS331404	-	9,817
UNIVERSITY OF CONNECTICUT	93.866	PR: P01 AG021600-09 / SB: USHS6-62703698	-	411,649
UNIVERSITY OF FLORIDA	93.286	5 R01 EB014869-04	-	23,693
UNIVERSITY OF FLORIDA	93.360	PR: 2 R01 EB014869-05 / SB: UFDSP00011615	-	88,780
UNIVERSITY OF FLORIDA	93.846	1 R01AR069660-02	-	139,184
UNIVERSITY OF LOUISVILLE	93.847	120597	-	(95)
UNIVERSITY OF MARYLAND	93.067	PR: 3U2GGH000099-05 / PO: SR00004247	-	77,617
UNIVERSITY OF MARYLAND	93.243	16-16034G	-	10,346
UNIVERSITY OF MARYLAND	93.853	PR: 5 R21 NS086902-02 / SB: 1500188/12976	-	5,213
UNIVERSITY OF MEDICINE & DENTISTRY OF NJ	93.433	PR: H133A120152 /SB:8094	-	71,145
UNIVERSITY OF MEMPHIS	93.286	5-40312	-	275,352
UNIVERSITY OF MICHIGAN	93.859	PR: R01GM116960 / SB: 30038554238	-	138,144
UNIVERSITY OF MICHIGAN	93.866	5P01AG029409-08	-	31,850
UNIVERSITY OF MINNESOTA	93.226	P005171401	-	6,541
UNIVERSITY OF MINNESOTA	93.262	7 U01 OH010730-03	-	70,617
UNIVERSITY OF MINNESOTA	93.361	N002994701	-	9,316
UNIVERSITY OF MINNESOTA	93.433	90RT5019-01-00	-	49,569
UNIVERSITY OF MINNESOTA	93.859	PR: P01 GM091743 / SB:H001786602	-	(690)
UNIVERSITY OF MINNESOTA	93.U43	90RT5019-02-00	-	32,968
UNIVERSITY OF MISSISSIPPI	93.U44	PR: HHSN268201300046C/SB: 66102700414-04UMASS	-	33,699
UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	93.855	PR: 7R01AI095740 / SB: 66103650115-UM	-	10,275
UNIVERSITY OF MISSISSIPPI MEDICAL CENTER	93.U45	HHSN268201300047C	-	25,175
UNIVERSITY OF NEBRASKA	93.279	24-0524-0054-004	-	35,085
UNIVERSITY OF NEW HAMPSHIRE	93.865	5 R01 HD064576	-	(153)
UNIVERSITY OF NEW MEXICO	93.273	PR: 1 R34 AA023304-02 / SB: 028326-871G	-	12,640
UNIVERSITY OF NORTH CAROLINA	93.242	PR: 1R01MH110427 / SB: 516171	-	5,837
UNIVERSITY OF NORTH CAROLINA	93.310	PR: 1UG3OD023348 / SB: 5106194	-	114,582
UNIVERSITY OF NORTH CAROLINA	93.847	PR: 5 R01 DK103546-03 / SB: 510150	-	65,333
UNIVERSITY OF NORTH CAROLINA	93.855	5 R01 AI121558-02	-	132,711
UNIVERSITY OF NORTH CAROLINA	93.855	5 R21 AI115752-02	-	14,530

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
UNIVERSITY OF NORTH CAROLINA	93.855	PR: 5 U19 AI109965-02 / SB: 5103507	\$ -	\$ 55,304
UNIVERSITY OF PENNSYLVANIA	93.393	5 R01 CA202699-02	-	229,451
UNIVERSITY OF PENNSYLVANIA	93.393	5R01CA196131-02	-	12,248
UNIVERSITY OF PENNSYLVANIA	93.838	5 P30 DK047757-22	-	83,750
UNIVERSITY OF PENNSYLVANIA	93.839	2-R56-HL-090774-05A1	-	(1,233)
UNIVERSITY OF PENNSYLVANIA	93.855	PR: 1R01 AI120821-02 / SB: 566489	-	41,191
UNIVERSITY OF PITTSBURGH	93.846	2 R01 AR060744-07	-	23,274
UNIVERSITY OF PITTSBURGH	93.847	PR: 1 R01 DK095748-01A1/SB: 0028057(123009-1)	-	24,532
UNIVERSITY OF PITTSBURGH	93.855	5 UH2 AI22295-02	-	232,251
UNIVERSITY OF PITTSBURGH	93.866	PR: 5 U01 AG12533-22 / SB: 0040521(124995-5)	-	212,998
UNIVERSITY OF RHODE ISLAND	93.855	2 P01 AI034533-23	-	1,697
UNIVERSITY OF RHODE ISLAND	93.855	4 P01 AI34533-24	-	101,404
UNIVERSITY OF ROCHESTER	93.121	1R01DE025447-01	-	29,323
UNIVERSITY OF ROCHESTER	93.280	4R33AI116180-03	-	4,206
UNIVERSITY OF ROCHESTER	93.837	PR: 5R01 HL127891 / SB: 416917-G	-	150,217
UNIVERSITY OF ROCHESTER	93.837	PR: U01 HL096607-05 / SB: 415588-G	-	11,344
UNIVERSITY OF ROCHESTER	93.U46	PR: HHSN272201400005C / SB: 416428	-	56,568
UNIVERSITY OF SOUTH CAROLINA	93.283	PR: 5U01 DD001007-05 / SB: 17-3249	-	24,295
UNIVERSITY OF SOUTH CAROLINA	93.393	PR: R01CA151304-03 / SB: 14-2701	-	(1,281)
UNIVERSITY OF SOUTH FLORIDA	93.853	PR: 1R01NS095563 / SB: 6125-1076-00B	-	51,221
UNIVERSITY OF TENNESSEE	93.865	R01HD083431	-	116,990
UNIVERSITY OF TEXAS AT SAN ANTONIO	93.855	PR: 1R21AI114762-01 / SB: 10000753	-	47,191
UNIVERSITY OF TORONTO	93.242	PR: R01 MH099167-01	-	40,322
UNIVERSITY OF UTAH	93.837	PR: U54 HL12311 / SB:10023730-01	45,639	502,517
UNIVERSITY OF VERMONT	93.103	30689SUB52094	-	3,732
UNIVERSITY OF VERMONT	93.393	7 P01 CA082834-05	-	131,073
UNIVERSITY OF WASHINGTON	93.855	PR: 5 R01 AI112640-03 / SB: UWSC8525	-	59,644
UNIVERSITY OF WISCONSIN	93.847	U54DK104310	-	217,000
UNIVERSITY OF WISCONSIN	93.855	PR: R01 AI12135 / SUB: 617K536	-	31,335
UNIVERSITY OF WISCONSIN	93.865	153405508	-	(14)
VETERANS MEDICAL RESEARCH FOUNDATION	93.855	1R01AI129706-01A1	-	37,120
VIRGINIA POLYTECHNIC INST AND STATE UNIV	93.279	5R01 DA036017-05	-	577
WAKE FOREST UNIVERSITY	93.393	PR: R01 CA199137 / SB: WFUHS114040	-	109,086
WASHINGTON STATE UNIVERSITY	93.846	PR: R01 AR062279-01A1	-	17,328
WASHINGTON UNIVERSITY	93.855	PR: 2 R01AI081803-06A1	-	83,269
WASHINGTON UNIVERSITY	93.855	PR: R01 AI072195 / SB: WU-14-364-MOD-2	-	117,319
WASHINGTON UNIVERSITY	93.855	PR: R01AI125045-01 / SB: WU-16-307	-	310,609
WASHINGTON UNIVERSITY	93.859	WU-HT-12-16	-	(211)
WEILL CORNELL MEDICAL COLLEGE	93.103	1 U01 FD005478-02	-	46,866
WEILL CORNELL MEDICAL COLLEGE	93.866	5K24AG022399-10	-	14,024
WESTAT, INC.	93.U47	6182-506	-	(420)
WISTAR INSTITUTE	93.855	5 U19 AI109646-03	-	616,481
WOMEN'S & INFANTS HOSPITAL OF R.I.	93.865	R01 HD074751	-	25,688
WOODS HOLE OCEANOGRAPHIC INSTITUTION	93.113	5P01ES021923-02	-	1,928
WORCESTER POLYTECHNIC INSTITUTE	93.226	PR: 1 R21 HS024003-01 / SB: 15-21084-00	-	40,132

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services, continued				
WORCESTER POLYTECHNIC INSTITUTE	93.394	PR: 1-R01-CA166379-01A1 / SB:14-210730-02	\$ -	\$ 109,953
WRIGHT STATE UNIVERSITY	93.279	5R01DA039454-03	-	13,099
YALE UNIVERSITY	93.266	4U18HS016978-09	26,667	68,484
YALE UNIVERSITY	93.266	5U18HS016978-10	20,298	234,388
YALE UNIVERSITY	93.837	5 R01 HL115295-04	-	53,023
YALE UNIVERSITY	93.866	C15A12281(A10334)	-	9,634
Department Of Health And Human Services Total			30,574,015	238,491,915
Corporation For National And Community Service				
CORP FOR NATIONAL AND COMMUNITY SERVICE	94.007		\$ -	\$ (18,800)
Corporation For National And Community Service Total			-	(18,800)
Social Security Administration				
MATHEMATICA POLICY RESEARCH	96.007	PR: DRC12000001-01-00 / SB 40112S03049	\$ -	\$ 5,192
U.S. SOCIAL SECURITY ADMINISTRATION	96.008		-	264,694
Social Security Administration Total			-	269,886
Department Of Homeland Security				
MA EMERGENCY MANAGEMENT AGENCY	97.039	FEMA-DR-4110-MA	\$ -	\$ 212,475
MA EMERGENCY MANAGEMENT AGENCY	97.039	HMGF 1994-10	64,936	72,003
MA EMERGENCY MANAGEMENT AGENCY	97.047	ISA-CDAPDMC1104UMS12A	-	3,287
U.S. DEPARTMENT OF HOMELAND SECURITY	97.061		-	(1,062)
UNIVERSITY OF SOUTHERN CALIFORNIA	97.061	2010-ST-061-RE0001-06	-	987
Department Of Homeland Security Total			64,936	287,690
Agency For International Development				
EDUCATION DEVELOPMENT CENTER, INC.	98.U01	GS-10F-0406P	\$ -	\$ 427,181
FHI 360	98.U02	AID-306-A-1 3-00009-00	242,494	4,704,444
INTERFAITH MEDIATION CENTRE	98.001	AID-620-A-12-00003	-	127,153
INTERFAITH MEDIATION CENTRE	98.001	AID-620-A-12-0003	-	(42,082)
NATIONAL ACADEMY OF SCIENCES	98.012	ESP-A-00-05-0000 1-00	-	39,818
TETRA TECH, INC.	98.U03	SAR Task Force-India	-	982
TETRA TECH, INC.	98.U04	1072-1601	-	49,431
Agency For International Development Total			242,494	5,306,927
Research and Development Cluster Total			46,432,383	379,241,484
Student Financial Assistance Cluster				
Department Of Education				
U.S. DEPARTMENT OF EDUCATION	84.007	SEOG	\$ -	\$ 3,120,362
U.S. DEPARTMENT OF EDUCATION	84.033	Federal Work Study	-	5,053,616
U.S. DEPARTMENT OF EDUCATION	84.063	Pell Grants	-	70,995,563
U.S. DEPARTMENT OF EDUCATION	84.379	TEACH Grants	-	228,251
U.S. DEPARTMENT OF EDUCATION	84.268	William D. Ford Federal Direct Loans	-	184,016,295
U.S. DEPARTMENT OF EDUCATION	84.268	William D. Ford Federal Direct Parent Loans for Undergraduates	-	151,619,905
U.S. DEPARTMENT OF EDUCATION	84.038	Perkins Loan	-	-
		Loans Outstanding at Begin of Fiscal Year	-	39,685,134
		Dispersed During the Fiscal Year	-	8,078,989
		Administrative Cost Allowance	-	441,345
Department Of Education Total			-	463,239,460

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services				
Department Of Health And Human Services	93.264	Nurse Faculty Loan Program		
		Loans Outstanding at Begin of Fiscal Year	\$ -	\$ 3,535,847
		Dispersed During the Fiscal Year	-	840,895
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.342	Health Professions Student Loans		
		Primary Care Loans Outstanding at Begin of Fiscal Year	-	1,012,663
		Primary Care Loans Dispersed During the Fiscal Year	-	172,500
		Loans for Disadvantaged Students Outstanding at Begin of FY	-	164,012
		Loans for Disadvantaged Students Dispersed During FY	-	150,000
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.364	Nursing Student Loan Program		
		Nursing Studen Loans Outstanding at Begin of Fiscal Year	-	28,380
		Nursing Studen Loans Dispersed During the Fiscal Year	-	10,600
Department Of Health And Human Services Total			<u>-</u>	<u>5,914,897</u>
Student Financial Assistance Cluster Total			<u>-</u>	<u>469,154,357</u>
Other Clustered Federal Assistance				
Department Of Agriculture				
SNAP Cluster				
MA DEPT OF TRANSITIONAL ASSISTANCE	10.551	CTISAWEL44003064UMS13A	\$ 21,536	\$ 3,540,532
Department Of Agriculture Total			<u>21,536</u>	<u>3,540,532</u>
Department Of Commerce				
Economic Development Cluster				
ECONOMIC DEVELOPMENT ADMINISTRATION	11.307		\$ -	\$ 124,390
Department Of Commerce Total			<u>-</u>	<u>124,390</u>
Department Of Housing And Urban Development				
CDBG - Entitlement Grant Cluster				
CITY OF SPRINGFIELD	14.218	20170069	\$ -	\$ 8,384
Department Of Housing And Urban Development Total			<u>-</u>	<u>8,384</u>
Department Of Labor				
Employment Service Cluster				
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.207	ES-27496-15-55-A-25	\$ -	\$ 71,022
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.207	ES-29418-16-55-A-25	-	247,372
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.801	DV-26628-15-55-5-25	-	17,812
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.207	3250 DEIIC100	-	(43,645)
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.207	325015DEWWL00000000000000	-	74,832
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.207	EOL3250	-	98,220
Employment Service Cluster Total			<u>-</u>	<u>465,613</u>
WIA/WIOA Cluster				
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.258	AA-26785-15-55-A-25	\$ -	\$ 94,135
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.258	AA-28322-16-55-A-25	-	345,942
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.278	AA-26785-15-55-A-25	-	86,283
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.278	AA-28322-16-55-A-25	-	375,159
GREATER NB WORKFORCE INVESTMENT AREA	17.258	DOL 17CCNBEDWIOA	-	1,235
GREATER NB WORKFORCE INVESTMENT AREA	17.278	17 NBEDWIA	-	57,293
GREATER NB WORKFORCE INVESTMENT AREA	17.278	DOL 17CCNBEDWIOA	-	22,696
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.278	CT EOL 3250 17WWLDISABILITY0000	-	21,397
WIA/WIOA Cluster Total			<u>-</u>	<u>1,004,140</u>
Department Of Labor Total			<u>-</u>	<u>1,469,753</u>

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Transportation				
Highway Planning and Construction Cluster				
MA DEPARTMENT OF TRANSPORTATION	20.205	72580	\$ -	\$ 193,680
MA DEPARTMENT OF TRANSPORTATION	20.205	77077	-	101,743
MA DEPARTMENT OF TRANSPORTATION	20.205	83190	-	11,000
MA DEPARTMENT OF TRANSPORTATION	20.205	HIS-002S(591)X	-	3,641
MA DEPARTMENT OF TRANSPORTATION	20.205	INTF00X002012A0073160	-	129,858
MA DEPARTMENT OF TRANSPORTATION	20.205	INTF00X002014A0082301	-	(39,496)
MA DEPARTMENT OF TRANSPORTATION	20.205	INTF00X20150086036 or 85828	-	(79,665)
MA DEPARTMENT OF TRANSPORTATION	20.205	ISA INTF00X002012A00	-	9,118
MA DEPARTMENT OF TRANSPORTATION	20.205	ISA INTF00X02015A83600	-	77,480
Highway Planning and Construction Cluster Total			-	407,359
Highway Safety Cluster				
MA EXEC OFC OF PUBLIC SAFETY & SECURITY	20.616	ISACT2016UMASSCRDATA	\$ -	\$ 31,168
MA EXEC OFC OF PUBLIC SAFETY & SECURITY	20.616	ISACTEPSUMSCRASHFY15	-	59,346
Highway Safety Cluster Total			-	90,514
Transit Services Programs Cluster				
MA DEPARTMENT OF TRANSPORTATION	20.513	INTF00X02016P0092758	\$ -	\$ 96,466
MA DEPARTMENT OF TRANSPORTATION	20.521	MA-57-X031	-	(148)
Transit Services Programs Cluster Total			-	96,318
Department Of Transportation Total			-	594,191
Department Of Education				
Special Education Cluster (IDEA)				
MA DEPT OF ELEMENTARY & SECONDARY ED	84.027	17CT6500UMASSAIRCTR	\$ -	\$ 51,171
MA DEPT OF ELEMENTARY & SECONDARY ED	84.027	DOE 14CT8300UMASSAIRCTR	-	(545)
MA DEPT OF ELEMENTARY & SECONDARY ED	84.027	FH027130143	-	(586)
Special Education Cluster (IDEA) Total			-	50,040
TRIO Cluster				
U.S. DEPARTMENT OF EDUCATION	84.042		\$ -	\$ 840,775
U.S. DEPARTMENT OF EDUCATION	84.044		-	416,964
U.S. DEPARTMENT OF EDUCATION	84.047		105,928	1,919,985
U.S. DEPARTMENT OF EDUCATION	84.217		-	230,127
TRIO Cluster Total			105,928	3,407,851
Department Of Education Total			105,928	3,457,891
Other Federal Assistance				
Department Of Agriculture				
KANSAS STATE UNIVERSITY	10.500	2013-48696-21184	\$ -	\$ 14,310
KANSAS STATE UNIVERSITY	10.500	S16062	-	9,121
MA DEPT OF ELEMENTARY & SECONDARY ED	10.560	CT-DOE-15CT7500UMASSMAKECOUNT	-	135,039
NATL INSTITUTE OF FOOD AND AGRICULTURE	10.500		23,600	2,369,069
U.S. DEPARTMENT OF AGRICULTURE	10.001		-	35,592
U.S. DEPARTMENT OF AGRICULTURE	10.435		-	14,528
U.S. DEPARTMENT OF AGRICULTURE	10.500		47,200	1,528,752
Department Of Agriculture Total			70,800	4,106,411
Department Of Defense				
NATIONAL SECURITY AGENCY	12.900		\$ -	\$ 70,222
Department Of Defense Total			-	70,222

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Justice				
ADMINISTRATIVE OFFICE OF THE TRIAL COURT	16.812	2015-RW-BX-0006	\$ -	\$ 3,770
MA DEPARTMENT OF MENTAL HEALTH	16.812	2015-RW-BX-0006	-	30,858
MA DEPARTMENT OF MENTAL HEALTH	16.812	WI-RAPS-16	-	(309)
MA DEPARTMENT OF PUBLIC HEALTH	16.589	INTF3222M020115023	-	(455)
MA OFFICE FOR VICTIM ASSISTANCE	16.575	MOVA-VOCA/FY2016	-	1,882
MA OFFICE FOR VICTIM ASSISTANCE	16.575	MOVA-VOCA/FY2017	-	192,031
MA OFFICE FOR VICTIM ASSISTANCE	16.575	VOCA2017EVWC00000000	-	63,422
U.S. DEPARTMENT OF JUSTICE	16.525		19,772	73,247
U.S. DEPARTMENT OF JUSTICE	16.726		237,709	441,933
Department Of Justice Total			<u>257,481</u>	<u>806,379</u>
Department Of Labor				
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.225	Contract IOSCC10 16 RESEA	\$ -	\$ 116,895
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.225	UI-27117-15-55-A-25	-	5,839
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.225	UI-29847-17-55-A-25	-	14,998
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.225	UI-30223-17-60-A-25	-	83,181
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.245	PR: TA-28056-16 / SB: Contract #10SCC10	-	75,999
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.277	10SCC10	-	42,319
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.277	EM-27356-15-60-A-25	-	7,998
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.277	EM-29564-16-60-A-25	-	408,709
BROCKTON AREA WORKFORCE INVESTMT BOARD	17.277	Master Agreement #JD-004	-	14,163
ECONOMIC DEVEL & INDUST CORP	17.268	16-0174-0-1-504	-	28,689
ECONOMIC SYSTEMS, INC.	17.720	1028012	-	896
ECONOMIC SYSTEMS, INC.	17.720	EFSLMP-15_121504	-	(3,656)
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.283	CT EOL 3250 17ICIDEIVII000000000	-	16,032
MA EXEC OFFICE OF LABOR & WORKFORCE DEV	17.283	CT EOL 325017WWLDEIVII000000000	-	69,364
MASSASOIT COMMUNITY COLLEGE	17.282	Navigator - TAACCCT IV	-	1,337
Department Of Labor Total			<u>-</u>	<u>882,763</u>
Department Of State				
ASSOC OF UNIV CENTERS ON DISABILITIES	19.415	S-ECAGD-16-CA-1111	\$ -	\$ 54,638
FULBRIGHT COMMISSION ARGENTINA	19.402	19-0201-0-1-154 Fulbright-Hays Act of 1961	-	38,993
FULBRIGHT COMMISSION ARGENTINA	19.U03	19-0201-0-1-154 Fulbright-Hays Act of 1961	-	64,044
FULBRIGHT COMMISSION ARGENTINA	19.U04	ARG 2015	-	(5,450)
INSTITUTE OF INTERNATIONAL EDUCATION	19.021	SIZ-100-15-GR019	-	56,772
MERIDIAN INTERNATIONAL CENTER	19.021	PR: SIZ-100-13-GR039 / SB: 021-0012-0345	-	(1,126)
MERIDIAN INTERNATIONAL CENTER	19.021	PR: SIZ-100-15-CA023 / SB: IYELP2016	-	139,233
U.S. DEPARTMENT OF STATE	19.009		-	606,909
U.S. DEPARTMENT OF STATE	19.040		-	70,696
U.S. DEPARTMENT OF STATE	19.401		-	264,592
U.S. DEPARTMENT OF STATE	19.501		-	697,764
WORLD LEARNING, INC.	19.021	S02 SIZ-100-16-CA-008	-	3,361
Department Of State Total			<u>-</u>	<u>1,990,426</u>
Department Of Transportation				
COMMONWEALTH CORPORATION	20.U07	4200 Mod 3	\$ -	\$ 11,164
Department Of Transportation Total			<u>-</u>	<u>11,164</u>
National Endowment For The Arts				
NEW ENGLAND FOUNDATION FOR THE ARTS	45.025	15-29720	\$ -	\$ (853)
National Endowment For The Arts Total			<u>-</u>	<u>(853)</u>

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
National Endowment For The Humanities				
MASS HUMANITIES	45.164	039-15	\$ -	\$ 4,676
NATIONAL ENDOWMENT FOR THE HUMANITIES	45.163		16,131	101,044
National Endowment For The Humanities Total			<u>16,131</u>	<u>105,720</u>
Small Business Administration				
SMALL BUSINESS ADMINISTRATION	59.037		\$ 239,223	\$ 840,613
Small Business Administration Total			<u>239,223</u>	<u>840,613</u>
Department Of Veterans Affairs				
VETERAN AFFAIRS BOSTON HEALTHCARE SYS	64.U05	Ctrct # GA-10F-0211M/Obligation#523D43002(43033)	\$ -	\$ 2,169
Department Of Veterans Affairs Total			<u>-</u>	<u>2,169</u>
Department Of Education				
BOSTON PLAN FOR EXCELLENCE	84.336	U336S14088	\$ -	\$ 300,946
BOSTON PLAN FOR EXCELLENCE	84.336	U405A100117	-	886
MA DEPT OF ELEMENTARY & SECONDARY ED	84.002	359-017-7-1255-R	-	8,864
MA DEPT OF ELEMENTARY & SECONDARY ED	84.002	CTDOE-1678UMASSAMHERSTMAPT	-	417,183
MA DEPT OF ELEMENTARY & SECONDARY ED	84.366	CTDOE 1247UMASSDONAHUE0293	-	144,989
MAINE DEPARTMENT OF LABOR	84.421	PO# CT12A 2017022100000002436	-	73,409
NATIONAL WRITING PROJECT	84.367	#2A/92-MA01-SEED2012 NWP 2014-2016	-	5,435
NATIONAL WRITING PROJECT	84.367	03-MA04-SEED 2012	-	4,023
NATIONAL WRITING PROJECT	84.367	U367D150004	-	14,295
SALUS UNIVERSITY	84.325	H325H140002	-	47,045
SALUS UNIVERSITY	84.325	H325H140002-14A	-	1,035
SPECIAL OLYMPICS, INC.	84.128	Project Unify	-	452,618
U.S. DEPARTMENT OF EDUCATION	84.031		-	270,897
U.S. DEPARTMENT OF EDUCATION	84.129		-	266,874
U.S. DEPARTMENT OF EDUCATION	84.133		-	(18,998)
U.S. DEPARTMENT OF EDUCATION	84.200		-	76,987
U.S. DEPARTMENT OF EDUCATION	84.264		1,330,697	3,036,358
U.S. DEPARTMENT OF EDUCATION	84.299		-	275,797
U.S. DEPARTMENT OF EDUCATION	84.324		87,333	440,762
U.S. DEPARTMENT OF EDUCATION	84.325		-	597,364
U.S. DEPARTMENT OF EDUCATION	84.327		44,820	467,339
U.S. DEPARTMENT OF EDUCATION	84.365		-	347,496
U.S. DEPARTMENT OF EDUCATION	84.382		-	165,896
U.S. DEPARTMENT OF EDUCATION	84.407		-	(45,992)
UNIVERSITY OF MINNESOTA	84.133	H133B130006	-	(32,777)
UNIVERSITY OF WASHINGTON	84.326	H264A080003	-	298
Department Of Education Total			<u>1,462,850</u>	<u>7,319,029</u>
Department Of Health And Human Services				
ADMINISTRATIVE OFFICE OF THE TRIAL COURT	93.243	1 H79 SM061663-01	\$ -	\$ 70,034
ADMINISTRATIVE OFFICE OF THE TRIAL COURT	93.243	1-TI026677-01	-	21,483
CHILDREN'S HOSPITAL	93.110	2T73MC00020-19-00	-	(10,937)
CHILDREN'S HOSPITAL	93.110	6 T73MC00020-23-00	-	(205)
CHILDREN'S HOSPITAL	93.632	90DD0808-01-00	-	7,012
FLORIDA DEVELOPMENT DISABILITIES COUNCIL	93.630	983EM16E	-	91,789
HEALTH RESOURCES SERVICE ADMINISTRATION	93.178		23,802	279,561

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA #	Pass-Through Entity Identifying Number	Passed Through to Subrecipients	Total Federal Expenditures
Department Of Health And Human Services				
MA DEPARTMENT OF MENTAL HEALTH	93.104	821014080220000	\$ 95,470	\$ 238,774
MA DEPARTMENT OF MENTAL HEALTH	93.243	1 H79 SM061663-01	-	72,115
MA DEPARTMENT OF MENTAL HEALTH	93.243	PR: 1 H79 SM061663-01 / SB: SCDMH822015081490000	-	(931)
MA DEPARTMENT OF MENTAL HEALTH	93.243	SCDMH821014081480000	-	18
MA DEPARTMENT OF MENTAL HEALTH	93.829	16UMMS CBHCPAYMENTSW	-	16,691
MA DEPARTMENT OF PUBLIC HEALTH	93.243	INTF2330MM3W16007103	-	382,112
MA DEPARTMENT OF PUBLIC HEALTH	93.243	INTF233MM3W16007103 34512-9086	-	4,239
MA DEPARTMENT OF PUBLIC HEALTH	93.283	INTF4126H23SPRF46004	-	8,735
MA DEPARTMENT OF PUBLIC HEALTH	93.735	INTF2915HH2500224009	-	22,663
MA DEPARTMENT OF PUBLIC HEALTH	93.757	4120HH250024053	-	31,947
MA DEPARTMENT OF PUBLIC HEALTH	93.918	INTF4943MM3200120038	-	638,794
MA DEPARTMENT OF PUBLIC HEALTH	93.994	INTF3054M03300819017	-	438
MA DEPARTMENT OF PUBLIC HEALTH	93.U48	INTF5291HH4300522026	-	8,871
MA DEPT OF DEVELOPMENTAL SERVICES	93.631	17UMSICIGRANTEMPLY1	-	35,607
MA DEPT OF PUBLIC HEALTH, BSAS	93.243	INTF2400H78500224216	-	(780)
MA DEPT OF PUBLIC HEALTH, BSAS	93.243	PR: 1 H79 TI025347 / SB: INTF2400H78500224220	-	66,055
MA DEPT OF PUBLIC HEALTH, BSAS	93.243	PR: 1 H79TI025347 / SB: INTF2400H78500224220	-	10,898
MA DEVELOPMENTAL DISABILITIES COUNCIL	93.630	CTADD010017GCS62BCSNF0	-	8,500
MA EXECUTIVE OFFICE OF HLTH & HUMAN SVC	93.609	15UMMSMOANALYTICSSW	-	55
MASSACHUSETTS DEPARTMENT OF REVENUE	93.597	CTDOR2017JMBHH4	-	101,670
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.048		-	248,891
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.297		145,062	481,535
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.433		-	237,806
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.464		89,539	195,659
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.600		1,564,068	6,424,650
U.S. DEPT OF HEALTH AND HUMAN SERVICES	93.U49	HHSP233201500006C	-	2,838,652
WASHINGTON STATE DEPT OF SOC & HLTH SVCS	93.243	1465-24434	-	(2,660)
WASHINGTON STATE DEPT OF SOC & HLTH SVCS	93.243	1565-30187	-	21,811
WASHINGTON STATE DEPT OF SOC & HLTH SVCS	93.243	5H79TI025342-02	-	12,181
WASHINGTON STATE DEPT OF SOC & HLTH SVCS	93.243	SM061705	-	17,143
Department Of Health And Human Services Total			<u>1,917,941</u>	<u>12,580,876</u>
Department Of Homeland Security				
MA EXEC OFC OF PUBLIC SAFETY & SECURITY	97.067	PR: CTUASI14EXERCISUM15A / SB: UASI EPS	\$ -	\$ 1,927
Department Of Homeland Security Total			<u>-</u>	<u>1,927</u>
Agency For International Development				
U.S. AGENCY INTERNATIONAL DEVELOPMENT	98.001		\$ -	\$ 67,346
Agency For International Development Total			<u>-</u>	<u>67,346</u>
Total Expenditures of Federal Awards			<u>\$ 50,524,273</u>	<u>\$ 886,375,174</u>

See accompanying notes to Schedule of Expenditures of Federal Awards

UNIVERSITY OF MASSACHUSETTS
Notes to the Schedule of Expenditures of Federal Awards
For the year ended June 30, 2017

1. BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the “Schedule”) presents the direct and indirect expenditures of federal financial assistance programs administered by the University of Massachusetts (the “University”) an entity defined in the financial statements except that the federal financial assistance programs, if any, of the University of Massachusetts Amherst Foundation, the Worcester City Campus Corporation, the University of Massachusetts Foundation, Inc. and the University of Massachusetts Dartmouth Foundation, Inc., are not included. Accordingly, the accompanying Schedule presents the federal award expenditures administered by the University, as defined above, for the year ended June 30, 2017.

The Schedule is prepared on the accrual basis of accounting. The information in this schedule is presented in accordance with the requirements of *Title 2 U.S. Code of Federal Regulations (CFR) Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)*. Therefore, some amounts presented in this Schedule may differ from amounts presented in, or used in the preparation of, the basic financial statements. Negative amounts that appear on the Schedule represent adjustments made after the closeout process has been completed. CFDA and pass-through numbers are presented when available. Federal Loan Programs are represented on the Schedule in accordance with Uniform Guidance Part 200.502, *Basis for determining Federal awards expended*, to include the previous balance of amounts outstanding and current loans dispersed for which the University is the lender.

2. MATCHING COSTS

Matching costs, i.e., the nonfederal share of program costs, are not included in the accompanying Schedule.

3. RELATIONSHIP TO FEDERAL FINANCIAL REPORTS

The regulations and guidelines governing preparation of federal financial reports do not always match the accounting principles used by the University to present amounts in the accompanying Schedule. Accordingly, the amounts reported in the federal financial reports do not necessarily agree with the amounts reported in the accompanying Schedule which is prepared on the accrual basis, as explained in note 1.

4. DIRECT AND INDIRECT FEDERAL AWARD EXPENDITURES

Federal award expenditures consist of direct and indirect costs which are commonly referred to as facilities and administrative (F&A) costs. Direct costs are those that can be readily identified with an individual federally sponsored project. The salary of a principal investigator of a sponsored research project and the materials consumed by the project are examples of direct costs.

Unlike direct costs, indirect costs cannot be readily identified with an individual federally sponsored project. Indirect costs are the costs of services and resources that benefit both sponsored and non-sponsored project and activities. Indirect costs consist of expenses incurred for administration, library, plant maintenance, and building and equipment depreciation.

UNIVERSITY OF MASSACHUSETTS
Notes to the Schedule of Expenditures of Federal Awards
For the year ended June 30, 2017

The University and federal agencies use an indirect cost rate to charge indirect costs to individual federally sponsored projects. The rate is a result of a number of complex cost allocation procedures that the University uses to allocate its indirect costs to both sponsored and non-sponsored activities. Rates are negotiated with and approved by the University's cognizant audit agency, the U.S. Department of Health and Human Services. The University does not use a de minimis rate as defined by Uniform Guidance Part 200.414, Indirect (F&A) Costs.

5. FEDERAL LOAN PROGRAMS

The following schedule presents new loans processed by the University for eligible students under federal student loan programs and federally guaranteed loan programs for the year ended June 30, 2017:

	<u>CFDA Number</u>	<u>Amount Disbursed</u>	
William D. Ford Federal Direct Loan Programs			
Ford Loans	84.268	\$ 184,016,295	
Parent Loans for Undergraduate Students	84.268	<u>151,619,905</u>	
Total William D. Ford Federal Direct Loan Program		<u>335,636,200</u>	
	<u>CFDA Number</u>	<u>Amount Disbursed</u>	<u>Amount Outstanding</u>
Other Loan Programs			
Perkins Loan	84.038	8,078,989	\$ 40,905,367
Primary Care Loans	93.342	172,500	1,073,397
Loans for Disadvantaged Students	93.342	150,000	279,820
Nurse Faculty Loan Program	93.264	840,895	4,115,891
Nurse Faculty Loan Program - ARRA	93.264	-	64,863
Nursing Student Loans	93.364	<u>10,600</u>	<u>23,054</u>
Total Other Loan Programs		<u>9,252,984</u>	<u>\$ 46,462,391</u>
Total Federal Loan Programs		<u>\$ 344,889,184</u>	

The Perkins Loans, Primary Care Loans, Loans for Disadvantaged Students, Nurse Faculty Loan Program and the Nursing Student Loans are administered directly by the University and balances and transactions are included in the University's financial statements. Loans outstanding at the beginning of the year and loans made during the year under these programs are included in the federal expenditures presented in this schedule.

PART II

REPORTS ON INTERNAL CONTROL AND COMPLIANCE

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS REQUIRED BY *GOVERNMENT AUDITING STANDARDS*

Board of Trustees of the
University of Massachusetts

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 financial statements of the business-type activities and the aggregate discretely presented component units of the University of Massachusetts (the “University”) as of and for the year ended June 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the University’s basic financial statements, and have issued our report thereon dated December 14, 2017.

The financial statements of Worcester City Campus Corporation, the University of Massachusetts Foundation, and the University of Massachusetts Dartmouth Foundation, Inc., were not audited in accordance with *Government Auditing Standards* and, accordingly, this report does not include reporting on internal control over financial reporting and on compliance and other matters associated with these entities.

Internal control over financial reporting

In planning and performing our audit of the financial statements, we considered the University’s internal control over financial reporting (“internal control”) to design audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of 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 University’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 the University's internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and other matters

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters, described in the accompanying schedule of findings and questioned costs as item 2017-002, that is required to be reported under *Government Auditing Standards*.

University's response to findings

The University's response to our findings, which is described in the accompanying schedule of findings and questioned costs, was not subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we express no opinion on the University's response.

Intended purpose

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

A handwritten signature in cursive script that reads "Grant Thornton LLP".

Boston, Massachusetts
December 14, 2017

**REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS
ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM
AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED
BY THE UNIFORM GUIDANCE**

Board of Trustees of the
University of Massachusetts

Report on compliance for each major federal program

We have audited the compliance of the University of Massachusetts (the “University”) with the types of compliance requirements described in the U.S. Office of Management and Budget’s *OMB Compliance Supplement* that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2017. 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.

Our audit of, and opinion on, the University’s compliance for each major federal program does not include the compliance requirements governing student loan repayments under the Student Financial Assistance cluster because the University engaged Heartland ECSI to perform these compliance activities. This third-party servicer has obtained a compliance examination from another practitioner for the year ended June 30, 2017 in accordance with the U.S. Department of Education’s Audit Guide, *Audits of Federal Student Financial Assistance Programs at Participating Institutions and Institution Servicers*.

Management’s responsibility

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

Auditor’s 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, 2017.

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 compliance requirements that could have a direct and material effect on each major federal program to design audit 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.

As described in our Report on Compliance for Each Major Federal Program above, this Report on Internal Control Over Compliance does not include the results of the other auditors' testing of internal control over compliance that is reported on separately by those auditors.

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 a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we identified a deficiency in internal control over compliance, described in the accompanying schedule of findings and questioned costs as item 2017-002, which we consider to be a significant deficiency in the University's internal control over compliance.

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

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

A handwritten signature in dark ink that reads "Grant Thornton LLP". The signature is written in a cursive, flowing style.

Boston, Massachusetts
December 14, 2017

PART III

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

SECTION I - SUMMARY OF AUDITOR'S RESULTS

Financial statements:

Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP: Unmodified

Internal control over financial reporting:

- Material weakness (es) identified? __ yes X no
- Significant deficiency (ies) identified? __ yes X none reported
- Noncompliance material to the financial statements noted? __ yes X no

Federal awards:

Internal control over the major programs:

- Material weakness (es) identified? __ yes X no
- Significant deficiency (ies) identified that are not considered to be material weakness (es)? X yes __ none reported

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

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)? X yes __ no

Identification of major federal programs:

Program or Cluster Title	Federal CFDA Number
Research and Development Cluster	Multiple
Student Financial Assistance Cluster	Multiple
TRIO Cluster	Multiple
Head Start	93.600 & 93.U49
Rehabilitation Services	84.264

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

Auditee qualified as low-risk auditee? X yes __ no

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

SECTION II - FINANCIAL STATEMENT FINDINGS

None noted.

SECTION III - FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

Reference 2017-001: Timeliness of recognition of certain activities

Boston Campus

Cluster: Research and Development

Grantor: National Institutes of Health

Award Name: A Family-Based Weight Loss Intervention for Youth with Intellectual Disability

Award year: 2/6/13 – 4/30/17

Award Number: R01HD072573

CFDA Number: 93.865

Criteria:

CFR 200.302 Financial management requires that the entity must account for grant activity in such a way that allows for accurate, current, and complete disclosure of the financial results of each Federal award or program in accordance with requirements for monitoring and reporting program performance. In addition, *CFR 200.303 Internal controls* requires an entity to establish and maintain effective control over the Federal award the provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. These controls should allow the entity to evaluate and monitor the Federal entity's compliance, and take prompt action when instances of noncompliance are identified.

Condition and Context:

When performing testing of the sub-recipient activity with the Research and Development cluster, one transaction in a sample of 40 selected for testing represented an expense that was charged to a federal award in fiscal year 2017 for services performed in November 2014. The grant started on February 6, 2013. The expense was incurred within the period of performance for the grant, but was not accurately and currently disclosed as part of federal program in a timely manner.

Questioned Costs:

None

Cause:

Certain invoices for subrecipient expenditures are remitted directly by the subrecipient institution to the Principal Investigator's ("PI's") department for approval before being routed to Accounts Payable for payment

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

Effect:

The delay in entering the expense does not allow controls around allowability and approval to occur in a timely manner, and does not allow the entity to capture accurate, current, and complete reporting of financial results.

Recurring Finding:

No.

Recommendation:

We recommend that controls around monitoring subrecipient invoices be enhanced to ensure that all subrecipient expenditures are captured timely in the University's system.

Views of Responsible Officials and Corrective Action Plan:

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

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

Reference 2017-002: Timeliness of earmarking controls

Boston Campus

Cluster: TRIO Cluster

Grantor: Department of Education

Award Name: Talent Search/ Upward Bound Veterans

Award year: 09/01/2016-08/31/2021/ 09/1/2012-08/31/2017

Award Numbers: P044A160542 & P047V120035

CFDA Numbers: 84.044/ 84.047

Criteria:

CFR 200.328 Monitoring and reporting program performance requires that the entity must monitor its activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. In addition, *CFR 200.303 Internal controls* requires an entity to establish and maintain effective control over the Federal award that provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. These controls should allow the entity to evaluate and monitor the Federal entity's compliance, and take prompt action when instances of noncompliance are identified.

Condition and Context:

In testing a population of five awards for earmarking requirements, all TRIO cluster programs were determined to have met the compliance requirement for the cluster by the end of the period (in this case, June 30, 2017). However, for two programs, Talent Search ("TS") and Veterans Upward Bound ("VUB"), it was determined that timely controls were not in place to provide management reasonable assurance that the Federal awards are being disbursed in compliance with Federal requirements. For both TS and VUB there is a requirement that two-thirds (66%) of those served be low-income individuals who are potential first generation college students. Data gathered to be used in management's review and evaluation of the proportion of applicants that met this criteria throughout the period did not happen in a manner that allowed management to ensure compliance as the program occurred, but rather was gathered and finalized in such a way to be able to detect compliance at the end of the period.

Questioned Costs:

None

Cause:

For TS, in the past the University would use information gathered through the Boston Public Schools ("BPS") Free Lunch Program to document which participants were low-income individuals. This data allowed management to verify whether a student fell into the population that met the earmarking requirement in a timely fashion, as the data was available at the outset of the program. During the past year, the BPS instituted a new process that shifted responsibility for collecting the data from the schools to their central office and the information was not available to the program and therefore the control that management previously applied as a preventative control at the beginning of the period was not able to operate in a timely manner, which caused a delay in the operation of the control around this compliance requirement.

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

For VUB, Project Managers do require completed applications prior to enrollment and service provision, but data entry errors in the Annual Performance Report misclassified some students. When the errors were corrected, earmarking targets were achieved.

Effect:

Without completing the verification process at the outset and throughout the program period, the entity is unable to ensure that it is meeting the earmarking requirement for the TS and VUB programs.

Recurring Finding:

No.

Recommendation:

The University should establish a control using the data available to ensure that management can monitor the University's compliance with the earmarking compliance requirements, and that allows management to take prompt action when instances of noncompliance are identified.

Views of Responsible Officials and Corrective Action Plan:

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

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

Reference 2017-003: Late reporting

Amherst Campus

Cluster: Research and Development

Grantor: National Park Service, Department of Energy, & Natural Resources Conservation Services

Award Name: Creating a Collections Mobile app for the Springfield Armory National Historic Site

Award year: 9/11/2015 – 6/30/2017, 5/17/2011 – 8/14/2016, & 8/17/2011 – 8/16/2016

Award Numbers: P15AC01114, DE-SC0006641, & 68-1320-11-05

CFDA Number: 15.945, 81.049, & 10.025

Criteria:

CFR 200.327 Financial Reporting

Unless otherwise approved by OMB, the Federal awarding agency may solicit only the standard, OMB-approved government wide data elements for collection of financial information (at time of publication the Federal Financial Report or such future collections as may be approved by OMB and listed on the OMB Web site). This information must be collected with the frequency required by the terms and conditions of the Federal award, but no less frequently than annually nor more frequently than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes, and preferably in coordination with performance reporting.

Condition and Context:

The University has established policies and procedures to accurately and timely report financial information under federal regulation. In a sample of 25, 3 of the selected reports were not submitted within the required time period as defined in the grant agreements. The quarterly SF425 Report was submitted 3 days late, and the two Final SF425 Reports were submitted 16 days late and 1 day late.

Cause:

The reports were submitted late due to inconsistencies in the way different Research Accountants were tracking the report due dates. As a result of the inconsistencies, when a Research Accountant was on leave or left the University, the Research Accountant covering for them missed the due date as they were used to a different tracking method.

Effect:

The inconsistencies in tracking the report due dates results in the opportunity for due dates to be missed, leading to the late submission of reports.

Repeat Finding:

No

Recommendation:

The University should implement a consistent method for tracking the due dates, and should implement a review process to ensure all reports submitted are reviewed for timely submission.

UNIVERSITY OF MASSACHUSETTS
Schedule of Findings and Questioned Costs
For the year ended June 30, 2017

Views of Responsible Officials and Corrective Action Plan:

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

SECTION IV - SUMMARY SCHEDULE OF PRIOR YEAR AUDIT FINDINGS

None noted

MANAGEMENT'S CORRECTIVE ACTION PLAN



CORRECTIVE ACTION PLAN

Reference 2017-001: Timeliness of Recognition of Certain Activities

Corrective Action Plan

Boston will implement a new process that will install enhanced controls for the monitoring of subrecipient invoices. Starting with all new subrecipient agreements, Office of Research and Sponsored Programs (“ORSP”) will instruct subrecipient institutions to deliver invoices to a new ORSP email box (orsp-postaward@umb.edu). After invoices are received, ORSP staff will review each invoice to ensure it has proper institutional certification text and signature (per UG 2CFR 200.415), a subaward number, and current/cumulative costs are listed. Proper invoices will be routed to the department Grants Managers and the PI using an electronic routing and signature software (i.e., Adobe E-Sign). ORSP will track invoices and ensure appropriate billing and timely submission for payment of subrecipient invoices per OMB Uniform Guidance 200.305.

Contact Person – Boston Campus

Matthew Meyer, Associate Vice Provost for Research and Director of ORSP (617) 287-5372

Reference 2017-002: Timeliness of Earmarking Controls

Corrective Action Plan

The TS program staff has reached an agreement with the BPS that will enable them to again certify low income students, and are already confirming this as students are enrolled in the program. Additionally, the Project Director for TS will report earmarking levels to the Principal Investigator and Associate Vice Provost for Research and Director of ORSP every quarter to provide additional oversight.

For VUB, additional oversight to ensure accurate information is entered into the APR is now being performed by the PI. The VUB award terminated on 9/30/17 and therefore no future earmarking reports will be necessary after the next filing.

Contact Person – Boston Campus

Matthew Meyer, Associate Vice Provost for Research and Director of ORSP (617) 287-5372

Reference 2017-003: Reporting “Late Reporting”

Corrective Action Plan

The University has updated our internal operating procedures for the consistent treatment of milestone due dates and have included an additional monitoring resource to ensure timely submission.

Contact Person – Amherst Campus

Norman Gousy, Interim Controller (413) 545-3364