

# **2017**

# **Annual Financial**

# **Report**



**The University of Massachusetts**  
*Amherst • Boston • Dartmouth • Lowell • Medical School • UMassOnline*

University Administration

As of December 2017

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December 14, 2017

To the Board of Trustees  
and President Martin T. Meehan J.D.

We are pleased to submit the annual Financial Report of the University of Massachusetts for the year ended June 30, 2017. The enclosed financial statements incorporate all financial activity of the University and its five campuses. These statements have been audited by an independent certified public accountant and are fully represented in the financial report of the Commonwealth of Massachusetts. Detailed information about each campus is provided as supplemental information.

The financial information presented in the Financial Report is designed to aid a wide variety of readers to assess the effectiveness of the University's management of its resources in meeting its primary mission of instruction, research, and public service. This report is intended to form a comprehensive and permanent record of the finances of the University of Massachusetts, and it is submitted as the public accounting of the University's financial affairs for the fiscal year ended June 30, 2017 including comparative information as of June 30, 2016.

The University's net position increased \$250 million from \$2.8 billion in fiscal year 2016 to \$3.1 billion in fiscal year 2017. This increase is primarily attributed to strong investment return, increases in tuition and auxiliary revenue from both a rate increase and enrollment increase, grant revenue due to new government and private grant activity, and statutory changes that resulted in a change in tuition retention and other non-operating revenue for the University.

Each year, the Board of Trustees reviews a five-year projection for key financial indicators that are likely to determine the success of the University over the long term. For the key indicators of operating margin, primary reserve, and debt service to operations, for FY2017, the University was on target with meeting projections. Overall, the University continues to make strategic investments that support the achievement of its long-term financial objectives of growth and stability.

Respectfully submitted,

A handwritten signature in blue ink that reads "Lisa A. Calise".

Lisa A. Calise  
Senior Vice President for Administration and  
Finance & Treasurer

**University of Massachusetts  
2017 Annual Financial Report  
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**Grant Thornton LLP**  
75 State Street, 13th Floor  
Boston, MA 02109  
T 617.723.7900  
F 617.723.3640  
[www.GrantThornton.com](http://www.GrantThornton.com)  
[linkd.in/GrantThorntonUS](https://linkd.in/GrantThorntonUS)  
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## 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 June 30, 2016, and the respective changes in financial position and, where applicable, 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*

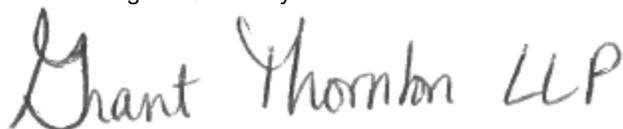
Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 7 through 16 and the Schedule of the University's Proportionate Share of the Net Pension Liability and the Schedule of the University's Contributions for the Massachusetts State Employees' Retirement System on page 53 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.

#### **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.



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)

<b>University of Massachusetts</b>				
<b>Condensed Statements of Net Position</b>				
<b>As of June 30, 2017, 2016, and 2015</b>				
<b>(in thousands of dollars)</b>				
	<b>University June 30, 2017</b>	<b>University June 30, 2016</b>	<b>FY17-16 Change</b>	<b>University June 30, 2015</b>
<b>ASSETS</b>				
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
<b>Total Assets</b>	<b>6,954,305</b>	<b>6,587,731</b>	<b>366,574</b>	<b>6,527,861</b>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>	<b>275,725</b>	<b>293,432</b>	<b>(17,707)</b>	<b>178,410</b>
<b>LIABILITIES</b>				
Current Liabilities	619,250	774,837	(155,587)	856,460
Noncurrent Liabilities	3,522,756	3,294,183	228,573	3,133,710
<b>Total Liabilities</b>	<b>4,142,006</b>	<b>4,069,020</b>	<b>72,986</b>	<b>3,990,170</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>	<b>37,671</b>	<b>12,050</b>	<b>25,621</b>	<b>48,753</b>
<b>NET POSITION</b>				
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
<b>Total Net Position</b>	<b>\$ 3,050,353</b>	<b>\$ 2,800,093</b>	<b>\$ 250,260</b>	<b>\$ 2,667,348</b>

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**

<b>University of Massachusetts</b>				
<b>Condensed Statements of Net Position for Related Organizations</b>				
<b>As of June 30, 2017, 2016, and 2015</b>				
<b>(in thousands of dollars)</b>				
	<b>University Related Organizations June 30, 2017</b>	<b>University Related Organizations June 30, 2016</b>	<b>FY17-16 Change</b>	<b>University Related Organizations June 30, 2015</b>
<b>ASSETS</b>				
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
<b>Total Assets</b>	<b>556,312</b>	<b>482,662</b>	<b>73,650</b>	<b>488,311</b>
<b>LIABILITIES</b>				
Current Liabilities	28,644	29,194	(550)	31,421
Noncurrent Liabilities	2,764	3,502	(738)	3,505
<b>Total Liabilities</b>	<b>31,408</b>	<b>32,696</b>	<b>(1,288)</b>	<b>34,926</b>
<b>NET POSITION</b>				
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
<b>Total Net Position</b>	<b>\$ 524,904</b>	<b>\$ 449,966</b>	<b>\$ 74,938</b>	<b>\$ 453,385</b>

## 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
<b>Operating Revenues</b>				
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
<b>Total Operating Revenues</b>	<b>2,442,980</b>	<b>2,403,496</b>	<b>39,484</b>	<b>2,112,784</b>
<b>Operating Expenses</b>	<b>3,163,322</b>	<b>3,140,753</b>	<b>22,569</b>	<b>2,782,297</b>
<b>Operating Loss</b>	<b>(720,342)</b>	<b>(737,257)</b>	<b>16,915</b>	<b>(669,513)</b>
<b>Nonoperating Revenues/(Expenses)</b>				
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
<b>Net Nonoperating Revenues</b>	<b>805,837</b>	<b>737,485</b>	<b>68,352</b>	<b>678,918</b>
<b>Income Before Other Revenues, Expenses, Gains and Losses</b>	<b>85,495</b>	<b>228</b>	<b>85,267</b>	<b>9,405</b>
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)
<b>Total Other Revenues, Expenses, Gains and Losses</b>	<b>164,765</b>	<b>132,517</b>	<b>32,248</b>	<b>78,554</b>
<b>Total Increase in Net Position</b>	<b>250,260</b>	<b>132,745</b>	<b>117,515</b>	<b>87,959</b>
<b>Net Position</b>				
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
<b>Net Position at the End of the Year</b>	<b>\$ 3,050,353</b>	<b>\$ 2,800,093</b>	<b>\$ 250,260</b>	<b>\$ 2,667,348</b>

\*\* 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
<b>Operating Expenses</b>	\$ 14,090	\$ 17,068	\$ (2,978)	\$ 16,709
<b>Operating Loss</b>	(14,090)	(17,068)	(2,978)	(16,709)
<b>Nonoperating Revenues/(Expenses)</b>				
Other Nonoperating Income	13,631	20,351	(6,720)	18,480
<b>Net Nonoperating Revenues</b>	<b>13,631</b>	<b>20,351</b>	<b>(6,720)</b>	<b>18,480</b>
<b>Income Before Other Revenues, Expenses, Gains and Losses</b>	<b>(459)</b>	<b>3,283</b>	<b>(3,742)</b>	<b>1,771</b>
Additions to Permanent Endowments	42,173	25,864	16,309	21,618
Other Additions/Deductions	33,224	(32,566)	65,790	(15,798)
<b>Total Other Revenues, Expenses, Gains and Losses</b>	<b>75,397</b>	<b>(6,702)</b>	<b>82,099</b>	<b>5,820</b>
<b>Total Increase in Net Position</b>	<b>74,938</b>	<b>(3,419)</b>	<b>78,357</b>	<b>7,591</b>
<b>Net Position</b>				
Net Position at the Beginning of the Year	449,966	453,385	(3,419)	445,794
<b>Net Position at the End of the Year</b>	<b>\$ 524,904</b>	<b>\$ 449,966</b>	<b>\$ 74,938</b>	<b>\$ 453,385</b>

**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
	<b>720,817</b>	<b>724,984</b>	<b>676,197</b>
Less: Mandatory Waivers	-	(24,653)	(23,942)
Less: Tuition Remitted	-	(30,583)	(31,055)
<b>Net Commonwealth Support</b>	<b>\$ 720,817</b>	<b>\$ 669,748</b>	<b>\$ 621,200</b>

*\*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
<b>Total Grants and Contracts</b>	<b>\$ 560,081</b>	<b>\$ 528,352</b>	<b>\$ 510,741</b>

### **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](mailto: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
<b>ASSETS</b>				
<b>Current Assets</b>				
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
<b>Total Current Assets</b>	<b>739,847</b>	<b>3,062</b>	<b>677,927</b>	<b>2,094</b>
<b>Noncurrent Assets</b>				
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
<b>Total Noncurrent Assets</b>	<b>6,214,458</b>	<b>553,250</b>	<b>5,909,804</b>	<b>480,568</b>
<b>Total Assets</b>	<b>\$ 6,954,305</b>	<b>\$ 556,312</b>	<b>\$ 6,587,731</b>	<b>\$ 482,662</b>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>				
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	-
<b>Total Deferred Outflows of Resources</b>	<b>275,725</b>	<b>-</b>	<b>293,432</b>	<b>-</b>
<b>LIABILITIES</b>				
<b>Current Liabilities</b>				
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	-
<b>Total Current Liabilities</b>	<b>619,250</b>	<b>28,644</b>	<b>774,837</b>	<b>29,194</b>
<b>Noncurrent Liabilities</b>				
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
<b>Total Noncurrent Liabilities</b>	<b>3,522,756</b>	<b>2,764</b>	<b>3,294,183</b>	<b>3,502</b>
<b>Total Liabilities</b>	<b>\$ 4,142,006</b>	<b>\$ 31,408</b>	<b>\$ 4,069,020</b>	<b>\$ 32,696</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>				
Pensions	\$ 37,671	\$ -	\$ 12,050	\$ -
<b>Net Position:</b>				
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
<b>Total Net Position</b>	<b>\$ 3,050,353</b>	<b>\$ 524,904</b>	<b>\$ 2,800,093</b>	<b>\$ 449,966</b>

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
<b>REVENUES</b>				
<b>Operating Revenues</b>				
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	-
<b>Total Operating Revenues</b>	<b>2,442,980</b>	<b>-</b>	<b>2,403,496</b>	<b>-</b>
<b>EXPENSES</b>				
<b>Operating Expenses</b>				
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	-
<b>Total Operating Expenses</b>	<b>3,163,322</b>	<b>14,090</b>	<b>3,140,753</b>	<b>17,068</b>
<b>Operating Loss</b>	<b>(720,342)</b>	<b>(14,090)</b>	<b>(737,257)</b>	<b>(17,068)</b>
<b>NONOPERATING REVENUES/(EXPENSES)</b>				
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
<b>Net Nonoperating Revenues</b>	<b>805,837</b>	<b>13,412</b>	<b>737,485</b>	<b>20,351</b>
<b>Income Before Other Revenues, Expenses, Gains, and Losses</b>	<b>85,495</b>	<b>(678)</b>	<b>228</b>	<b>3,283</b>
<b>OTHER REVENUES, EXPENSES, GAINS, AND LOSSES</b>				
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
<b>Total Other Revenues, Expenses, Gains, and Losses</b>	<b>164,765</b>	<b>75,616</b>	<b>132,517</b>	<b>(6,702)</b>
<b>Total Increase in Net Position</b>	<b>250,260</b>	<b>74,938</b>	<b>132,745</b>	<b>(3,419)</b>
<b>NET POSITION</b>				
Net Position at Beginning of Year	2,800,093	449,966	2,667,348	453,385
<b>Net Position at End of Year</b>	<b>\$ 3,050,353</b>	<b>\$ 524,904</b>	<b>\$ 2,800,093</b>	<b>\$ 449,966</b>

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
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
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
<b>Net Cash Used for Operating Activities</b>	<b>(488,027)</b>	<b>(570,853)</b>
<b>CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES</b>		
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
<b>Net Cash Provided by Noncapital Financing Activities</b>	<b>834,480</b>	<b>804,330</b>
<b>CASH FLOWS FROM CAPITAL AND OTHER FINANCING ACTIVITIES</b>		
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)
<b>Net Cash Used for Capital Financing Activities</b>	<b>(344,331)</b>	<b>(516,310)</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
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)
<b>Net Cash (Used for) Provided by Investing Activities</b>	<b>(52,932)</b>	<b>57,259</b>
<b>NET (DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>(50,810)</b>	<b>(225,574)</b>
<b>Cash and Cash Equivalents - Beginning of the Year</b>	<b>604,452</b>	<b>830,026</b>
<b>Cash and Cash Equivalents - End of Year</b>	<b>\$ 553,642</b>	<b>\$ 604,452</b>
<b>RECONCILIATION OF OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES</b>		
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
<b>Net Cash Used for Operating Activities</b>	<b>\$ (488,027)</b>	<b>\$ (570,853)</b>
<b>SUPPLEMENTAL DISCLOSURE OF NONCASH ACTIVITIES:</b>		
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
	<b>720,819</b>	<b>724,985</b>
Less: Mandatory Waivers	-	(24,654)
Less: Tuition Remitted	-	(30,583)
<b>Net Commonwealth Support</b>	<b>\$ 720,819</b>	<b>\$ 669,748</b>

#### 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:	<b>Investment Maturity (in Years)</b>				
<b>Debt Securities</b>	<b>Fair Value</b>	<b>Less than 1</b>	<b>1 to 5</b>	<b>6 to 10</b>	<b>More than 10</b>
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	-	-	-
<b>Sub Total Debt Securities</b>	<b>\$ 605,391</b>	<b>\$ 356,026</b>	<b>\$ 184,539</b>	<b>\$ 53,510</b>	<b>\$ 11,316</b>
<b>Other Investments</b>					
Alternative Assets	\$ 196,376				
Equity Securities - International	128,458				
Equity Securities - Domestic	95,979				
Commodities	8,330				
Real Estate	18,029				
<b>Grand Total</b>	<b>\$ 1,052,563</b>				

#### INVESTMENTS - 2016

(in thousands)

Investment Type:	<b>Investment Maturity (in Years)</b>				
<b>Debt Securities</b>	<b>Fair Value</b>	<b>Less than 1</b>	<b>1 to 5</b>	<b>6 to 10</b>	<b>More than 10</b>
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	-	-	-
<b>Sub Total Debt Securities</b>	<b>\$ 509,335</b>	<b>\$ 270,117</b>	<b>\$ 180,082</b>	<b>\$ 45,759</b>	<b>\$ 13,377</b>
<b>Other Investments</b>					
Alternative Assets	\$ 220,543				
Equity Securities - International	106,102				
Equity Securities - Domestic	76,925				
Commodities	9,108				
Real Estate	18,458				
<b>Grand Total</b>	<b>\$ 940,471</b>				

**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)
<b>Investments by Fair Value Level</b>				
<b>Debt Securities</b>				
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	-
<b>Total Debt Securities</b>	<b>309,526</b>	<b>197,146</b>	<b>112,143</b>	<b>237</b>
<b>Equity Securities</b>				
Domestic Equities	95,979	94,729	-	1,250
International Equities	128,458	128,458	-	-
<b>Total Equity Securities</b>	<b>224,437</b>	<b>223,187</b>	<b>-</b>	<b>1,250</b>
<b>Other Securities</b>				
Commodities	8,330	8,330	-	-
REITS	18,029	18,029	-	-
<b>Total Other Securities</b>	<b>26,359</b>	<b>26,359</b>	<b>-</b>	<b>-</b>
<b>Total Investments by Fair Value Level</b>	<b>\$ 560,322</b>	<b>\$ 446,692</b>	<b>\$ 112,143</b>	<b>\$ 1,487</b>
<b>Investments Measured at the Net Asset Value ("NAV")</b>				
<b>Multi-Strategy Hedge Funds</b>				
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			
<b>Total Investments Measured at the NAV</b>	<b>196,376</b>			
<b>Total Investments Measured at Fair Value</b>	<b>\$ 756,698</b>			
Cash and Cash Equivalents	295,865			
<b>Total Investments Per Financial Statements</b>	<b>\$ 1,052,563</b>			

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)
<b>Investments by Fair Value Level</b>				
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	<b>301,244</b>	<b>169,481</b>	<b>131,605</b>	<b>158</b>
Equity Securities				
Domestic Equities	76,925	76,074	-	851
International Equities	106,102	106,102	-	-
Total Equity Securities	<b>183,027</b>	<b>182,176</b>	<b>-</b>	<b>851</b>
Other Securities				
Commodities	9,108	9,108	-	-
REITS	18,458	18,458	-	-
Total Other Securities	<b>27,566</b>	<b>27,566</b>	<b>-</b>	<b>-</b>
<b>Total Investments by Fair Value Level</b>	<b>\$ 511,837</b>	<b>\$ 379,223</b>	<b>\$ 131,605</b>	<b>\$ 1,009</b>
<b>Investments Measured at the NAV</b>				
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			
<b>Total Investments Measured at the NAV</b>	<b>220,543</b>			
<b>Total Investments Measured at Fair Value</b>	<b>\$ 732,380</b>			
Cash and Cash Equivalents	208,091			
<b>Total Investments Per Financial Statements</b>	<b>\$ 940,471</b>			

### 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):

	<b>2017</b>	<b>2016</b>
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:

	<b>Beginning Balance</b>	<b>Additions</b>	<b>Retirements</b>	<b>Ending Balance</b>
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:

	<b>Beginning Balance</b>	<b>Additions</b>	<b>Ending Balance</b>
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
<b>Total</b>	<b>\$ 8,090</b>	<b>\$ 9,242</b>	<b>\$ 17,332</b>

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

**University:**

	<b>Beginning Balance</b>	<b>Additions</b>	<b>Retirements</b>	<b>Ending Balance</b>
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	(2,494,718)	(240,957)	38,462	(2,697,213)
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:**

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

<b>Issue Borrowing</b>	<b>Original Borrowing</b>	<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Amount Outstanding</b>
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>
			<b>SUBTOTAL</b>	<b><u>3,036,062</u></b>
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>
			<b>SUBTOTAL</b>	<b><u>8,029</u></b>
MDFA:				
Clean Renewable Energy Bonds	\$ 1,625	2027	3.50%	956
			<b>TOTAL</b>	<b><u>\$ 3,091,842</u></b>

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

	<b>Beginning Balance</b>	<b>Additions</b>	<b>Retirements/ Repayment/ Amortization</b>	<b>Ending Balance</b>
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):

	<b>Derivative Instruments - Liability June 30, 2016</b>	<b>Net Change in Liability</b>	<b>Derivative Instruments - Liability June 30, 2017</b>	<b>Type of Hedge</b>	<b>Financial Statement Classification for Changes in Liability</b>
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):

	<b>Type</b>	<b>Effective Date</b>	<b>Termination Date</b>	<b>Rate Authority Pays</b>	<b>Authority Receives</b>	<b>Original Notional Value</b>
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):

<b>Fiscal Year</b> <b>Ending June 30,</b>	<b>Interest Rate</b>			
	<b>Principal</b>	<b>Interest</b>	<b>Swaps, Net</b>	<b>Total</b>
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

deceased, and accordingly, the liability for the bonds payable and the assets held to repay the debt have not been 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>
<b>University:</b>				
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
<b>University Related Organization:</b>				
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):

	<b>Beginning Balance</b>	<b>Additions/ Adjustments</b>	<b>Reductions/ Adjustments</b>	<b>Ending Balance</b>
<b>University:</b>				
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
<b>University Related Organization:</b>				
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:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-term Expected Real Rate of Return</b>
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:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-term Expected Real Rate of Return</b>
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):

<b>Fiscal Year Ended</b>	<b>1% Decrease to 6.5%</b>	<b>Current Discount Rate 7.5%</b>	<b>1% Increase to 8.5%</b>
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):

	<b>2017</b>	<b>2016</b>
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)
<b>Pension Expense</b>	<b>\$ 36,040</b>	<b>\$ 34,466</b>

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):

	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
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	-
	<b>\$ 37,671</b>	<b>\$ 158,185</b>

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):

	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>
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):

<b>Year Ending June 30:</b>	
2018	\$ 21,201
2019	21,201
2020	32,788
2021	18,758
2022	951
Thereafter	-
	<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 Years<sup>1</sup>

**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%

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

**University of Massachusetts  
2017 Annual Financial Report  
Supplemental Financial Information  
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**Grant Thornton LLP**  
75 State Street, 13th Floor  
Boston, MA 02109  
T 617.723.7900  
F 617.723.3640  
[www.GrantThornton.com](http://www.GrantThornton.com)  
[linkd.in/GrantThorntonUS](https://linkd.in/GrantThorntonUS)  
[twitter.com/GrantThorntonUS](https://twitter.com/GrantThorntonUS)

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Trustees  
**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"), 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, and our report thereon dated December 14, 2017 expressed unmodified opinions on these financial statements. Our audits were performed for the purpose of forming opinions on the financial statements that collectively comprise the University's basic financial statements.

The accompanying Combining Statements of Net Position for University Related Organizations and of Revenues, Expenses, and Changes in Net Position as of and for the years ended June 30, 2017 and 2016 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 supplementary information has been subjected to the auditing procedures applied in the audits 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.

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

Boston, Massachusetts  
December 14, 2017

Combining Statements of Net Position for University Related Organizations as of June 30, 2017 and 2016  
(in thousands of dollars)

Supplemental Schedule I

	Total	Eliminations and Adjustments	The University of Massachusetts Foundation, Inc.	University of Massachusetts Dartmouth Foundation, Inc.	Total	Eliminations and Adjustments	The University of Massachusetts Foundation, Inc.	University of Massachusetts Dartmouth Foundation, Inc.
	June 30, 2017	June 30, 2017	June 30, 2017	June 30, 2017	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016
<b>ASSETS</b>								
<b>Current Assets</b>								
Cash and Cash Equivalents								
Accounts, Grants and Loans Receivable, net	\$ 1,424	\$ -	\$ 116	\$ 1,308	\$ 1,475	\$ -	\$ 98	\$ 1,377
Pledges Receivable, net	1,515	(11,480)	12,211	784	371	(7,296)	6,635	1,032
Due From Related Organizations	123	123	-	-	193	193	-	-
Other Assets	-	-	-	-	55	-	55	-
<b>Total Current Assets</b>	<b>3,062</b>	<b>(11,357)</b>	<b>12,327</b>	<b>2,092</b>	<b>2,094</b>	<b>(7,103)</b>	<b>6,788</b>	<b>2,409</b>
<b>Noncurrent Assets</b>								
Pledges Receivable, net	\$ 737	\$ (12,190)	\$ 12,287	\$ 640	\$ 1,690	\$ (19,392)	\$ 19,904	\$ 1,178
Investments	532,605	(685,728)	1,160,597	57,736	468,260	(641,171)	1,056,774	52,657
Other Assets	2,487	-	-	2,487	2,528	-	-	2,528
Investment In Plant, net	17,421	-	17,421	-	8,090	-	8,090	-
<b>Total Noncurrent Assets</b>	<b>553,250</b>	<b>(697,918)</b>	<b>1,190,305</b>	<b>60,863</b>	<b>480,568</b>	<b>(660,563)</b>	<b>1,084,768</b>	<b>56,363</b>
<b>Total Assets</b>	<b>\$ 556,312</b>	<b>\$ (709,275)</b>	<b>\$ 1,202,632</b>	<b>\$ 62,955</b>	<b>\$ 482,662</b>	<b>\$ (667,666)</b>	<b>\$ 1,091,556</b>	<b>\$ 58,772</b>
<b>LIABILITIES</b>								
<b>Current Liabilities</b>								
Accounts Payable	\$ 53	\$ (21)	\$ 52	\$ 22	\$ 64	\$ -	\$ 63	\$ 1
Due To Related Organizations	21	(7,668)	-	7,689	69	(6,575)	-	6,644
Assets Held on Behalf of the University	-	(632,665)	632,665	-	-	(593,116)	593,116	-
Assets Held on Behalf of Others	27,408	-	27,408	-	27,837	-	27,837	-
Unearned Revenues and Credits	1,162	-	1,162	-	1,224	-	1,224	-
<b>Total Current Liabilities</b>	<b>28,644</b>	<b>(640,354)</b>	<b>661,287</b>	<b>7,711</b>	<b>29,194</b>	<b>(599,691)</b>	<b>622,240</b>	<b>6,645</b>
<b>Noncurrent Liabilities</b>								
Other Liabilities	\$ 2,764	\$ -	\$ 2,764	\$ -	\$ 3,502	\$ -	\$ 3,502	\$ -
<b>Total Noncurrent Liabilities</b>	<b>2,764</b>	<b>-</b>	<b>2,764</b>	<b>-</b>	<b>3,502</b>	<b>-</b>	<b>3,502</b>	<b>-</b>
<b>Total Liabilities</b>	<b>\$ 31,408</b>	<b>\$ (640,354)</b>	<b>\$ 664,051</b>	<b>\$ 7,711</b>	<b>\$ 32,696</b>	<b>\$ (599,691)</b>	<b>\$ 625,742</b>	<b>\$ 6,645</b>
<b>Net Position:</b>								
Invested in Capital Assets Net of Related Debt Restricted	\$ 17,421	\$ 17,421	\$ -	\$ -	\$ 8,090	\$ 8,090	\$ -	\$ -
Nonexpendable	385,856	(58,728)	\$407,979	\$36,605	374,566	(37,235)	\$374,566	\$37,235
Expendable	98,145	(10,193)	92,219	16,119	46,275	(30,740)	64,380	12,635
Unrestricted	23,482	(17,421)	38,383	2,520	21,035	(8,090)	26,868	2,257
<b>Total Net Position</b>	<b>\$ 524,904</b>	<b>\$ (68,921)</b>	<b>\$ 538,581</b>	<b>\$ 55,244</b>	<b>\$ 449,966</b>	<b>\$ (67,975)</b>	<b>\$ 465,814</b>	<b>\$ 52,127</b>

Combining Statements of Revenues, Expenses, and Changes in Net Position for University Related Organizations  
For The Years Ended June 30, 2017 and 2016  
(in thousands of dollars)

Supplemental Schedule II

	Total	Eliminations and Adjustments	The University of Massachusetts Foundation, Inc.	University of Massachusetts Dartmouth Foundation, Inc.	Total	Eliminations and Adjustments	The University of Massachusetts Foundation, Inc.	University of Massachusetts Dartmouth Foundation, Inc.
	June 30, 2017	June 30, 2017	June 30, 2017	June 30, 2017	June 30, 2016	June 30, 2016	June 30, 2016	June 30, 2016
<b>EXPENSES</b>								
<b>Operating Expenses</b>								
Educational and General								
Public Service	\$ 11,278	\$ (5,202)	\$ 13,749	\$ 2,731	\$ 16,502	\$ (971)	\$ 13,927	\$ 3,546
Depreciation	314	-	314	-	202	-	202	-
Scholarships and Fellowships	2,498	-	1,504	994	364	(1,497)	811	1,050
<b>Total Operating Expenses</b>	<b>14,090</b>	<b>(5,202)</b>	<b>15,567</b>	<b>3,725</b>	<b>17,068</b>	<b>(2,468)</b>	<b>14,940</b>	<b>4,596</b>
<b>Operating Income/(Loss)</b>	<b>(14,090)</b>	<b>5,202</b>	<b>(15,567)</b>	<b>(3,725)</b>	<b>(17,068)</b>	<b>2,468</b>	<b>(14,940)</b>	<b>(4,596)</b>
<b>NON-OPERATING REVENUES/(EXPENSES)</b>								
Gifts	\$ 3,620	\$ 611	\$ -	\$ 3,009	\$ 7,396	\$ 1,074	\$ -	\$ 6,322
Investment Income	(219)	(219)	-	-	182	(79)	126	135
Endowment Income Distributed for Operations	-	-	-	-	1,386	40,568	(39,182)	-
Other Non-Operating Revenue	10,011	(3,204)	13,215	-	11,387	-	11,387	-
<b>Net Non-operating Revenues</b>	<b>13,412</b>	<b>(2,812)</b>	<b>13,215</b>	<b>3,009</b>	<b>20,351</b>	<b>41,563</b>	<b>(27,669)</b>	<b>6,457</b>
<b>Income/(Loss) Before Other Revenues, Expenses, Gains, and Losses</b>	<b>(678)</b>	<b>2,390</b>	<b>(2,352)</b>	<b>(716)</b>	<b>3,283</b>	<b>44,031</b>	<b>(42,609)</b>	<b>1,861</b>
<b>OTHER REVENUES, EXPENSES, GAINS, AND LOSSES</b>								
Additions to Permanent Endowments	\$ 42,173	\$ 2,162	\$ 40,011	\$ -	\$ 25,864	\$ (3,094)	\$ 28,958	\$ -
Less: Amounts Earned/Received on Behalf of the University	-	38,633	(38,633)	-	-	(36,498)	36,498	-
Less: Amounts Earned/Received on Behalf of Others	-	489	(489)	-	-	(1,831)	1,831	-
Endowment Return Net of Amounts Used in Operations	30,441	(78,833)	104,599	4,675	(36,524)	(34,671)	-	(1,853)
Distribution to University	-	32,299	(32,299)	-	-	28,637	(28,637)	-
Other Additions/Deductions	3,002	1,914	1,930	(842)	3,958	3,170	1,382	(594)
<b>Total Other Revenues, Expenses, Gains, and Losses</b>	<b>75,616</b>	<b>(3,336)</b>	<b>75,119</b>	<b>3,833</b>	<b>(6,702)</b>	<b>(44,287)</b>	<b>40,032</b>	<b>(2,447)</b>
<b>Total Increase/(Decrease) in Net Assets</b>	<b>74,938</b>	<b>(946)</b>	<b>72,767</b>	<b>3,117</b>	<b>(3,419)</b>	<b>(256)</b>	<b>(2,577)</b>	<b>(586)</b>
<b>NET POSITION</b>								
Net Position at Beginning of Year	449,966	(67,975)	465,814	52,127	453,385	(67,719)	468,391	52,713
<b>Net Position at End of Year</b>	<b>\$ 524,904</b>	<b>\$ (68,921)</b>	<b>\$ 538,581</b>	<b>\$ 55,244</b>	<b>\$ 449,966</b>	<b>\$ (67,975)</b>	<b>\$ 465,814</b>	<b>\$ 52,127</b>