

Financial Statements and Report of
Independent Certified Public Accountants

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)

June 30, 2018 and 2017

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)

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REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Members of the Board

University of Massachusetts Building Authority

Report on the financial statements

We have audited the accompanying financial statements of the University of Massachusetts Building Authority (the “Authority”), a component unit of the University of Massachusetts, as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority’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 Entity’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 Authority’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 University of Massachusetts Building Authority as of June 30, 2018 and 2017, 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 (“MD&A”) as listed in the accompanying table of contents 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 MD&A information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

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

Boston, Massachusetts
December 17, 2018

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY

(A Component Unit of the University of Massachusetts)

Management's Discussion and Analysis

June 30, 2018 and 2017

This section of the annual financial statements of the University of Massachusetts Building Authority (the "Authority") presents a discussion and analysis of the Authority's financial activity for the fiscal years ended June 30, 2018 and 2017. This discussion and analysis has been prepared by management and should be read in conjunction with the Authority's financial statements and related note disclosures, which follow.

INTRODUCTION

The Authority is an independent body politic and corporate and a public instrumentality of the Commonwealth of Massachusetts (the "Commonwealth"), which was created by Chapter 773 of the Acts of 1960 of the Commonwealth, as amended (the "Enabling Act"). The Authority was created with the general purposes of providing dormitories, dining commons and other buildings and structures for use by the University of Massachusetts (the "University"), its students, staff and their dependents and other entities associated with the University as specified in the Enabling Act, as requested by authority of the Trustees of the University (the "Trustees").

The Authority is empowered to acquire, construct, remove, demolish, add to, alter, enlarge, reconstruct, remodel and do other work upon any building or structure and to provide and install furnishings, furniture, machinery, equipment, approaches, driveways, walkways, parking areas, planting, landscaping and other facilities therein. The Enabling Act authorizes the Authority to acquire property from the Commonwealth or others (but the Authority has no eminent domain power), to rent or lease as lessor or lessee any portion of a project, to operate projects, to employ experts and other persons, to enter into contracts, to borrow money to finance and refinance projects it undertakes, and to issue and sell its revenue bonds and notes which are payable solely from its revenues. The Authority's assets and projects are located on all five campuses of the University. The 11 members of the Authority are appointed by the Governor. Five of the members must be Trustees. Two of the other members must be graduates of the University. Non-trustee members serve terms of approximately six years. Trustee members serve as long as they are Trustees. Members whose terms expire continue as members until they are reappointed or replaced.

FINANCIAL HIGHLIGHTS

- The net position of the Authority continued to grow, reaching \$1.22 billion in fiscal year 2018 compared to \$1.06 billion in fiscal year 2017.
- Taking advantage of a continuing environment of historically low interest rates, the Authority issued \$37.7 million of Project Revenue Bonds, Series 2018-1, to finance a portion of the purchase of Mount Ida College assets. The new borrowing was issued with a coupon rate of 2% through June 26, 2028, and from June 27, 2028 to maturity, the rate will be equal to the Municipal Market Data 15-Year AAA GO Rate plus 25 basis points on the date of the reset, with an average life of 15.7 years. The Authority also issued \$64.5 million in commercial paper with interest rates ranging from 0.95% to 1.69% in fiscal 2018.
- Capital spending and contributed construction assets totaled \$415 million in fiscal year 2018, representing a \$38.1 million increase compared to fiscal year 2017. A majority of the capital spending in fiscal year 2018 relates to continued investments in new buildings and renovation projects, which include: buildings and land on the campus formerly owned by Mount Ida College, the Physical Science Building, research laboratory improvements, new faculty hire renovations and Fitout and Backfill Projects for the Life Sciences Laboratory at the Amherst Campus; the Utility Corridor and Roadway Relocation Project, Parking Garage, Dining Commons, and Clark Roof and Envelope Replacement at the Boston Campus; School of Marine Sciences & Technology and Classroom

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Teaching Labs & Learning Space Improvements at the Dartmouth Campus; and the Perkins Place, Fox Hall Elevator Modernization, Pasteur Hall, Coburn Hall, and Perry Hall Renovations at the Lowell Campus.

MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. The Authority's financial statements comprise two primary components: 1) the financial statements and 2) the notes to the financial statements.

The Financial Statements

The accompanying financial statements are designed to provide readers with a broad overview of the Authority's finances and are comprised of three basic statements.

The *statements of net position* present information on all of the Authority's assets, deferred outflows, and liabilities, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The *statements of revenues, expenses and changes in net position* present information that shows how the Authority's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g., the payments to vendors after year-end for services prior to year-end).

The *statements of cash flows* are reported on the direct method. The direct method of cash flow reporting portrays net cash flows from operations as major classes of operating receipts (e.g., income from contracts) and disbursements (e.g., cash paid to vendors for services), as well as capital and related financing and, noncapital financing, if any, and investing activities.

The financial statements can be found on pages 11 to 14 of this report.

The Authority's financial statements report its activities as business-type, in accordance with generally accepted accounting principles in the United States for government entities, using the economic resources measurement focus, and the full accrual basis of accounting.

The Authority is a blended component unit of the University. Therefore, the results of the Authority's operations, its net position, and its cash flows are included in the University's financial statements.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes provide information regarding the accounting policies the Authority has adopted as well as additional details of certain amounts contained in the financial statements.

The notes to the financial statements can be found on pages 15 to 40 of this report.

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Financial Analysis

As noted earlier, over time the Authority's net position may serve as a useful indicator of the Authority's financial position. In the case of the Authority, assets and deferred outflows exceeded liabilities by \$1.2 billion at the close of the most recent fiscal year.

A portion of the Authority's net position reflects its investment in capital assets (e.g. buildings, equipment and furnishings) less any related debt used to acquire those assets that is still outstanding for the most recent fiscal year. The Authority uses these capital assets to provide services to students, faculty and administration; consequently, these assets are not available for future spending. Although the Authority's investment in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. The Authority's primary sources of funds used to repay the debt are receipts related to the Authority's financial contracts with the University. These contracts generally call for the Authority to bill and collect all revenue from the projects and remit to the Trustee under the Authority's trust agreements (the "Bond Trustee") funds sufficient to cover debt service on its bonds, its costs of operations, and its financial obligations with respect to the projects.

The University of Massachusetts Building Authority's net position (in thousands) is as follows:

	June 30, 2018	June 30, 2017	June 30, 2016
Current assets	\$ 93,810	\$ 100,116	\$ 86,174
Non-current assets	<u>4,247,624</u>	<u>4,091,133</u>	<u>3,770,032</u>
Total assets	<u>4,341,434</u>	<u>4,191,249</u>	<u>3,856,206</u>
Deferred outflows of resources	<u>85,305</u>	<u>108,914</u>	<u>136,910</u>
Current liabilities	510,750	277,914	409,795
Non-current liabilities	<u>2,691,374</u>	<u>2,964,268</u>	<u>2,629,511</u>
Total liabilities	<u>3,202,124</u>	<u>3,242,182</u>	<u>3,039,306</u>
Net position			
Net investment in capital assets	1,146,035	993,142	891,768
Restricted	75,637	62,791	59,270
Unrestricted (deficit)	<u>2,941</u>	<u>2,048</u>	<u>2,772</u>
Total net position	<u>\$ 1,224,614</u>	<u>\$ 1,057,980</u>	<u>\$ 953,810</u>

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Current assets decreased by \$6.3 million in fiscal year 2018 compared to 2017 primarily due to a decrease in intergovernmental receivables of \$17.4 million offset by an increase to cash of \$9.1 million and \$2.0 million of other increases. Current assets increased by \$13.9 million in fiscal year 2017 compared to 2016 primarily due to an increase in intergovernmental receivables of \$9.7 million.

Non-current assets increased \$156.5 million in fiscal year 2018 compared to fiscal year 2017 due to additional spending on new and existing projects of \$430.4 million partially offset by depreciation of \$127.7 million and a decrease in restricted cash of \$133.4 million also due to spending on new and existing projects. Non-current assets increased \$321.1 million in fiscal year 2017 compared to fiscal year 2016 due to additional spending on new and existing projects of \$376.9 million partially offset by a decrease in restricted cash of \$47 million. In fiscal year 2017, the Authority, capitalizing on low interest rates, refunded \$78.7 million of Worcester City Campus Corporation ("WCCC") campus debt; \$67.8 million of the increase in non-current assets represents the accounts receivable from WCCC for the amounts due to the Authority related to this transaction.

Deferred outflows of resources totaled \$85.3 million, \$108.9 million, and \$136.9 million at the end of fiscal year 2018, 2017, and 2016, respectively. These amounts relate to the Authority's effective hedging relationship related to its outstanding interest rate swap agreements ("swaps"). In accordance with GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments* ("GASB No. 53"), the Authority is able to defer the related changes in fair value as a deferred outflow at year-end.

Current liabilities increased in fiscal year 2018 compared to 2017 by \$232.8 million primarily due to a increase of \$176.8 million of the current portion of bonds payable. The increase in the current portion of bonds payable is primarily due to the timing of the renewal of the liquidity facility that supports the 2008-1 and 2008-A variable rate bonds that are reported as a current liability in fiscal year 2018.

Non-current liabilities decreased in fiscal year 2018 compared to 2017 by \$272.9 million primarily due to the timing of the renewal of a liquidity facility that supports the 2008-1 and 2008-A variable rate bonds that are reported as a current liability in fiscal year 2018 but were part of non-current liabilities in fiscal year 2017. During fiscal year 2018, the Authority issued \$37.7 million of new debt. This decrease in long term debt includes principal payments of \$92.2 million, bond premium amortization of \$10.4 million and the shift of \$181.3 million to current liabilities for the 2008-1 and 2008-A variable rate bonds as noted above. During fiscal year 2017, the Authority issued \$372.3 million of new debt and \$56.0 million of new bond premiums. This increase in long term debt was offset by a \$122.1 million decrease in the bonds payable associated with the partial refunding of the 2008-2 and 2009-1 bonds, principal payments of \$85.8 million, bond premium amortization of \$8.6 million and the reclass of \$125.0 million to current liabilities for the 2011-1 variable rate bonds.

Net investment in capital assets represents capital assets, net of accumulated depreciation and reduced by outstanding balances for bonds, notes, and other debt, as well as deferred outflows of resources and deferred inflows of resources, if any, that are attributable to the acquisition, construction, or improvement of those assets or related debt.

Restricted net position represents funds primarily restricted for capital projects and debt service. Capital project restricted net assets are funds primarily provided by debt financing for the completion of University projects. The debt service restricted component of net position represents the funds primarily provided as additional collateral to the bond holders (e.g. debt service reserve funds).

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Unrestricted net position represents those funds that are not subject to restrictions, or for which restrictions have expired. In 2018, the Authority reported a \$2.9 million surplus in the unrestricted component of net position, a \$0.9 million increase from fiscal year 2017, primarily due to increased interest income. In 2017, the Authority reported a \$2.0 million surplus in the unrestricted component of net position, a \$0.7 million decrease from fiscal year 2016, primarily due to the reclassing of certain fixed assets as a capital lease.

The Authority's changes in net position (in thousands) are presented in the table below for the years ended June 30:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Operating revenues:			
Financing income and fees for services	\$ 225,376	\$ 213,101	\$ 208,557
Interest income and interest subsidies, net	23,105	19,849	16,726
Total operating revenues	<u>248,481</u>	<u>232,950</u>	<u>225,283</u>
Operating expenses:			
Facility operating costs	15,209	12,944	7,366
Interest expense	117,313	108,321	101,058
Depreciation and amortization	127,653	115,651	108,849
General and administrative expenses	3,242	5,190	3,783
Total operating expenses	<u>263,416</u>	<u>242,106</u>	<u>221,056</u>
Net operating income (loss)	<u>(14,935)</u>	<u>(9,157)</u>	<u>4,227</u>
Total non-operating income (expenses)	<u>(795)</u>	<u>-</u>	<u>(525)</u>
Total capital contributions	<u>182,364</u>	<u>113,327</u>	<u>84,976</u>
Change in net position	<u>166,634</u>	<u>104,170</u>	<u>88,678</u>
Net position at the beginning of the year	<u>1,057,980</u>	<u>953,810</u>	<u>865,132</u>
Net position at the end of the year	<u>\$ 1,224,614</u>	<u>\$ 1,057,980</u>	<u>\$ 953,810</u>

Financing income and fees for services are primarily related to contracts the Authority has with the University. The Authority has entered into various contracts with the University, acting by and through the Trustees, related to the management of certain Authority projects and the payment to the Authority of certain fees and operating costs. The Authority fixes fees, rents, rates and other charges for the use of its projects in amounts sufficient to provide for the debt service and other payments related to the Authority's obligations and for the Authority's operating expenses. These contracts generally call for the Trustees to bill and collect all revenue derived from the projects and remit to the Authority or to the trustee under the Authority's trust agreements funds sufficient to cover debt service on its bonds, its costs of operations, and its financial obligations with respect to the projects the amounts fluctuate based

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on the debt service requirements of the Authority bonds in any particular year. Revenue increased by \$12.3 million and \$4.5 million in fiscal year 2018 and 2017 compared to the respective prior fiscal years primarily as a result of increases in annual debt service. The increases are largely due to new debt service payments on the 2017 bond issues. The bonds were issued mid-year in fiscal year 2017 so revenues increase for the portion of the new debt that was paid in that year. In fiscal year 2018 the 2017 bonds were outstanding for a full year compared to the half year in 2017.

Interest income and Interest subsidy - United States Government relates to revenue associated with the interest rate subsidy provided by the United States Government related to the Authority's issuance of bonds under the Build America Bond ("BAB") program. Under the program, the Federal Government provides a direct 35% subsidy of the interest rate paid to bondholders. The interest paid to bondholders is based on the taxable, rather than the tax-exempt, debt market and the interest received by the bondholders is fully taxable to them. Revenue associated with this program remained relatively consistent in fiscal years 2018, 2017 and 2016.

During fiscal year 2013, the federal government implemented automatic budget cuts imposed through sequestration required pursuant to the Budget Control Act of 2011. As a result, the Authority's November 1st and May 1st original subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were reduced by 6.6% and 6.9% in fiscal years 2018 and 2017, respectively. This reduction accounts for the \$0.9 million decrease in Interest Subsidy Revenue in fiscal year 2018 compared to the original 35% subsidy.

Facility operating costs primarily reflect the operating costs of the UMass Club, certain operating costs of the Authority, rental expenses and expenses paid by the Authority out of reserves for maintenance of Authority-owned buildings. Facility operating costs increased in fiscal year 2018 compared to fiscal year 2017 due to an increase in Authority operating costs and utilities as well as the impairment of certain previously capitalized related to two projects discontinued on the Boston campus.

Interest expense represents interest paid to the holders of Authority issued debt. In fiscal year 2018 interest expense increased by \$9.0 million over fiscal year 2017 primarily due to a full year of interest on the bond series issued in 2017 and interest expense related to the 2018-1 and commercial paper debt issuances as well as a reduction in capitalized interest. In fiscal year 2017 interest expense increased by \$7.3 million over fiscal year 2016 primarily due to an increase of \$164 million in total bonds payable during fiscal year 2017, and an increase in associated interest expense due to the 2017-1 and 2017-2 debt issuances. (See Note 6 for more information on the fiscal year 2018 debt issue).

Depreciation and amortization increased by \$12.0 million in fiscal year 2018 compared to fiscal year 2017 and \$6.8 million in fiscal year 2017 versus 2016 as additional new capital assets were placed into service during those years.

Non-operating income (expense) was \$0.8 million in fiscal year 2018 and zero in fiscal year 2017. In fiscal year 2018, the Authority disposed of assets on the Lowell campus. There were no disposals in 2017.

Capital contributions represent certain grants and gifts provided to the Authority for capital construction at the five campuses. During fiscal year 2018, the Authority received grants totaling \$52.9 million from the Commonwealth. These grants were used as follows: \$21.4 million of Division of Capital Asset Management and Maintenance ("DCAMM") funds for the Physical Science Building and \$0.5 million for an academic classroom

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building at the Amherst Campus, and \$6 million for the substructure demolition quadrangle development (out of \$78 million committed) and \$25.0 million in support of a capital infrastructure project, both on the Boston campus.

In fiscal year 2017, the Authority received grants totaling \$62.3 million from the Commonwealth. These grants were used as follows: \$7.6 million of DCAMM funds for the Lowell and Amherst campuses, \$25 million to fund a capital infrastructure project, "Road and Transportation Improvements at UMass Boston", located on the Boston campus, and \$29.7 million to fund the School of Marine Science & Technology ("SMAST") project located at Dartmouth.

CAPITAL ASSETS OF THE AUTHORITY

The Authority's investment in capital assets as of June 30, 2018 and 2017 amounted to \$3.6 billion and \$3.3 billion, net of accumulated depreciation. This investment in capital assets included land, buildings, improvements, furnishings, equipment and construction in progress. Net capital assets increased by \$305.2 million or 9.2% in fiscal year 2018 as capital improvements and construction in progress outpaced depreciation expenses:

- Buildings and building components increased by \$171.6 million, net of accumulated depreciation, in fiscal year 2018. The increase was primarily due to placing in service newly constructed and renovations of existing buildings on the Amherst, Boston, Dartmouth, and Lowell campuses. During fiscal year 2018, equipment and furniture decreased by \$4.9 million, net of accumulated depreciation, primarily due to fewer new improvements.
- Construction in progress ("CIP") increased \$22.7 million in fiscal year 2018 as several major projects will be completed and transferred to depreciable property in FY19. Projects with significant progress, some of which were completed during fiscal year 2018 included: Physical Science Building, Isenberg School of Management Addition and Renovation, and Mount Ida Acquisition at the Amherst campus; SMAST Facility at the Dartmouth campus; and the Pullchino Tong Business Building at the Lowell campus. Significant projects that remained under construction at the end of fiscal year 2018 included; Parking Garage, Dining Hall and Utility Corridor and Roadway Relocation projects at the Boston campus; Perry Hall renovation and expansion and Pasteur Hall at the Lowell campus; and Isenberg School of Management addition and renovation at the Amherst campus.

DEBT OF THE AUTHORITY

The Authority carries debt in the form of bond obligations. This debt was \$3.0 billion and \$3.0 billion at June 30, 2018 and 2017, respectively. The decrease of \$68.5 million in fiscal year 2018 is primarily attributable to \$92.2 million of principal payments, and the issuance of \$37.7 million of new bonds, as further described below.

During Fiscal Year 2018, the Authority issued \$64.5 million in commercial paper to finance projects at the Lowell campus and a portion of the purchase of Mount Ida assets for the Amherst campus. The Commercial Paper matured or will mature at various dates ranging from 34 to 97 days and interest is payable at maturity. The interest rates range from 0.95% to 1.69%.

On June 27, 2018, the Authority issued \$37.7 million of Project Revenue Bonds, Series 2018-1 to finance a portion of the purchase of Mount Ida assets. The coupon rate on the Series 2018-1 bonds is 2% through June 26, 2028, and from that date to maturity, the rate will be equal to the Municipal Market Data 15-Year AAA GO Rate plus 25 basis points on the date of the reset.

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The amount of bond obligation guaranteed by the Commonwealth on bonds outstanding Series 2008-A and 2011-2 was \$113.5 million and \$115.3 million at June 30, 2018 and June 30, 2017, respectively. Refer to Note 9 of the financial statements for more information.

As of June 30, 2018, the ratings assigned to the Authority's bonds are as follows: Aa2 by Moody's Investor Services, AA by Fitch Ratings, and AA- by Standard and Poor's Investor Services.

THE UNIVERSITY OF MASSACHUSETTS CLUB

The Authority operates the University of Massachusetts Club (the "Club"). The Club is a private club open to membership for alumni, faculty, staff and friends of the University and is located on the 32nd floor of One Beacon in Boston, Massachusetts. As of August 1, 2015, the Club was managed by the not-for-profit organization University Services, Inc. More information can be found on the Club's web site, www.umassclub.com.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Authority's finances for all those with an interest in them. Questions concerning any information provided in this report or requests for additional financial information should be addressed to the Chief Financial Officer, University of Massachusetts Building Authority, One Beacon Street, 31st Floor, and Boston, Massachusetts 02108. Additional information on the Authority can be found on its web site, www.umassba.net.

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
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Statements of Net Position
As of June 30, 2018 and 2017

	2018	2017
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents (Notes 3 and 4)	\$ 26,734,660	\$ 17,612,667
Accounts receivable, net of allowance of \$343 at June 30, 2018 and \$33,092 at June 30, 2017	946,331	834,279
Intergovernmental receivables		
Massachusetts Life Sciences Center	3,106,124	21,919,437
United States Government	2,156,579	2,149,982
University of Massachusetts	46,392,456	44,998,073
WCCC loan receivable - current portion	9,205,000	8,315,000
EMKI lease receivable - current portion	3,543,372	2,636,306
Prepaid expenses and other current assets	1,725,244	1,650,624
Total current assets	93,809,766	100,116,368
NON-CURRENT ASSETS		
Restricted		
Cash and cash equivalents (Notes 3 and 4)	281,302,191	414,737,160
Investments (Notes 3 and 4)	5,318,056	5,318,056
WCCC loan receivable - non-current portion	229,798,043	241,386,207
EMKI lease receivable - non-current portion	117,113,941	120,657,313
Capital assets, net of accumulated depreciation (Note 5)	3,612,983,103	3,307,782,136
Other assets	1,108,412	1,251,715
Total non-current assets	4,247,623,745	4,091,132,587
Total assets	4,341,433,511	4,191,248,955
DEFERRED OUTFLOWS OF RESOURCES		
Loss on debt refunding	66,418,305	71,145,455
Fair value of interest rate swap agreements	18,886,262	37,768,068
Total deferred outflows of resources	85,304,567	108,913,523
Total assets and deferred outflows of resources	\$ 4,426,738,078	\$ 4,300,162,478
LIABILITIES		
CURRENT LIABILITIES		
Accounts payable	\$ 33,853,778	\$ 48,839,254
Retainage payable to contractors	12,378,032	12,270,979
Bonds payable, current portion (Note 6)	364,122,357	187,300,000
Commercial paper notes (Note 7)	64,535,000	-
Accrued bond interest payable	22,016,556	22,431,065
Unearned Interest Income - EMKI	2,812,728	2,834,952
Other liabilities	11,032,009	4,237,688
Total current liabilities	510,750,459	277,913,938
NON-CURRENT LIABILITIES		
Bonds payable, net of current portion, and unamortized bond premium (Note 6)	2,603,451,011	2,848,761,906
Derivative instruments - interest rate swap agreements (Note 6)	41,602,183	61,840,721
Unearned Interest Income, net of current - EMKI	36,055,946	39,124,048
Other liabilities	10,264,391	14,541,445
Total non-current liabilities	2,691,373,531	2,964,268,120
Total liabilities	3,202,123,990	3,242,182,058
NET POSITION		
Net investment in capital assets	1,146,035,382	993,141,974
Restricted for		
Capital projects	10,358,091	998,713
Debt service	65,279,125	61,792,118
Unrestricted	2,941,490	2,047,614
Total net position	\$ 1,224,614,087	\$ 1,057,980,419

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

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Statements of Revenues, Expenses and Changes in Net Position
For the years ended June 30, 2018 and 2017

	<u>2018</u>	<u>2017</u>
OPERATING REVENUE		
Financing income and fees for services	\$ 225,376,311	\$ 213,101,241
Interest income	10,179,212	6,950,291
Interest subsidy - United States Government	<u>12,925,292</u>	<u>12,898,243</u>
Total operating revenues	<u>248,480,815</u>	<u>232,949,775</u>
OPERATING EXPENSES		
Facility operating costs	15,208,766	12,943,714
Interest expense	117,312,924	108,321,336
Depreciation	127,652,553	115,651,498
Insurance	1,444,374	1,283,907
Professional fees	1,656,910	3,784,670
Office, administration and miscellaneous	<u>140,615</u>	<u>121,290</u>
Total operating expenses	<u>263,416,142</u>	<u>242,106,415</u>
Net operating loss	<u>(14,935,327)</u>	<u>(9,156,640)</u>
NON-OPERATING REVENUES		
Gain (loss) on disposal or sale of assets	<u>(795,104)</u>	<u>-</u>
Total non-operating income	<u>(795,104)</u>	<u>-</u>
CAPITAL CONTRIBUTIONS		
University of Massachusetts (Note 8)	126,189,961	28,024,460
Massachusetts Life Sciences Center	3,282,307	23,012,984
Commonwealth of Massachusetts	<u>52,891,831</u>	<u>62,289,288</u>
Total capital contributions	<u>182,364,099</u>	<u>113,326,732</u>
Change in net position	166,633,668	104,170,092
Net position at beginning of year	<u>1,057,980,419</u>	<u>953,810,327</u>
Net position at end of year	<u>\$ 1,224,614,087</u>	<u>\$ 1,057,980,419</u>

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

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)
Statements of Cash Flows
For the years ended June 30, 2018 and 2017

	<u>2018</u>	<u>2017</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from financing income, fees for services and other income	\$ 239,758,140	\$ 214,685,866
Cash from U.S. Government	12,918,695	12,897,914
Sales from investments	5,732,154	4,111,275
Payments to bondholders	(132,712,594)	(128,054,150)
Payments to vendors and suppliers	(13,196,414)	(14,329,009)
Payments of salaries and benefits	<u>(4,523,014)</u>	<u>(3,354,114)</u>
Net cash provided by operating activities	<u>107,976,967</u>	<u>85,957,782</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital asset expenditures	(305,342,338)	(365,699,937)
Repayment of bond principal	(92,780,938)	(86,374,542)
Repayment of commercial paper obligations	-	(25,000,000)
Bond issuance expenses paid	(129,908)	(620,430)
Proceeds from commercial paper	64,535,000	20,000,000
Proceeds from capital contribution	63,778,242	107,604,002
Proceeds from bond obligations	37,650,000	184,640,000
Proceeds from premium	<u>-</u>	<u>32,026,157</u>
Net cash used for capital and related financing activities	<u>(232,289,942)</u>	<u>(133,424,750)</u>
Net decrease in cash and cash equivalents	(124,312,976)	(47,466,968)
Cash and cash equivalents - beginning of year	<u>432,349,827</u>	<u>479,816,795</u>
Cash and cash equivalents - end of year	<u>\$ 308,036,851</u>	<u>\$ 432,349,827</u>

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

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)
Statements of Cash Flows - continued
For the years ended June 30, 2018 and 2017

	<u>2018</u>	<u>2017</u>
Reconciliation of operating loss to net cash provided by operating activities		
Net operating loss	\$ (14,935,327)	\$ (13,944,640)
Adjustments to reconcile net operating loss to net cash provided by operating activities		
Capitalized interest	(11,582,698)	(20,412,235)
Depreciation and amortization	118,926,646	118,401,757
Effect of non-cash transactions	(143,311)	(157,989)
Change in bad debt reserve	(32,748)	(64,264)
Changes in operating assets and liabilities		
(Increase) decrease in		
Prepaid expenses and other current assets	(74,620)	1,504,625
Accounts receivable	17,530,404	1,933,805
Other assets	143,303	455,517
Increase (decrease) in		
Accounts payable - non-construction related	(45,791)	1,129,161
Accrued bond interest payable	(414,509)	1,813,446
Accounts receivable (University billing)	<u>(1,394,383)</u>	<u>(4,701,400)</u>
Net cash provided by operating activities	<u>\$ 107,976,967</u>	<u>\$ 85,957,782</u>
Supplemental disclosure of cash flow information		
Non-cash capital and related financing activities		
Capital assets acquired and included in accounts and retainage payable and other liabilities	<u>\$ 54,393,295</u>	<u>\$ 62,430,818</u>
Capital assets transferred from Amherst campus and the Commonwealth of Massachusetts, as part of capital contribution	<u>\$ 54,792,272</u>	<u>\$ 78,238</u>
In fiscal year 2017, the Authority issued Project and Refunding revenue bonds to refund certain debt issued in 2008 and 2009, as described in the Note 6 of the financial statements.	<u>\$ -</u>	<u>\$ 219,706,157</u>

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

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)
Notes to Financial Statements
June 30, 2018 and 2017

1. OPERATIONS OF THE AUTHORITY

The University of Massachusetts Building Authority (the “Authority” or “UMBA”) is a body politic and corporate and a public instrumentality of The Commonwealth of Massachusetts (the “Commonwealth”). The Authority was created by Chapter 773 of the Acts of 1960 of the Commonwealth, as amended (the “Enabling Act”). The purposes of the Authority are to provide dormitories, dining commons and other buildings and structures for use by the University of Massachusetts (the “University”), its students, staff and their dependents and other entities associated with the University as requested by authority of the Trustees of the University (the “Trustees”).

The Enabling Act provides that the Authority shall have eleven members, five of whom shall also be trustees of the University. Members of the Authority are appointed by the Governor of the Commonwealth. Non-trustee members serve terms of approximately six years while trustee members serve until they are no longer trustees of the University. Members whose terms have expired continue to be members until reappointed or replaced.

The major functions of the Authority include the issuance of bonds to finance projects requested by the Trustees; the planning and construction or renovations related to those projects; the setting and collection of fees, rents, rates and other charges related to such projects; debt service administration; and maintenance and repair of its projects. In conjunction with its financings, the Authority has entered into contracts with the Commonwealth, acting by and through the Trustees, with respect to its projects that provide for payments for debt service and other costs of the financings as well as the operating costs of the Authority and its projects.

As stated in the Enabling Act, the Authority may sell bonds and notes, in either a public or private sale, at a price and with such terms as it may determine are in the best interest of the Authority, provided that the bonds of each issue mature no later than fifty years from their date and the sale and terms thereof have been approved by the Treasurer and Receiver-General and the Secretary of Administration and Finance of the Commonwealth or their designees.

The Authority is a component unit of the University of Massachusetts which is a component unit of the Commonwealth of Massachusetts and is exempt from federal and state income tax under the doctrine of intergovernmental tax immunity found in the U.S. Constitution. The Authority qualifies as a public charity under Section 170(b)(1)(A)(iv) of the Internal Revenue Code. Accordingly, no provision for income taxes has been recorded in the accompanying financial statements.

The Authority’s financial statements are included in the University’s financial statements as a blended component unit.

The financial statements of the Authority have been prepared in conformity with accounting principles generally accepted in the United States of America (“US GAAP”) as applied to governmental units. The Governmental Accounting Standards Board (“GASB”) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The Authority’s significant accounting policies are described in Note 3.

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
(A Component Unit of the University of Massachusetts)
Notes to Financial Statements
June 30, 2018 and 2017

Basis of Accounting

The Authority's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting.

2. WORKING CAPITAL OF THE AUTHORITY

As of June 30, 2018 and 2017, the Authority had a working capital deficiency of \$416.9 million and \$177.8 million, respectively. However, as stated in the various contracts between the Authority and the University, the University is required to provide necessary funding to the Authority to meet its obligations through June 30, 2018 and beyond.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Under the economic resources measurement focus, the Authority distinguishes operating revenues and expenses from non-operating revenues and expenses. Operating revenues and expenses result primarily from providing, operating and maintaining Authority facilities for use by the University. The principal sources of operating revenues include financing income, which represents amounts needed for debt service and related expenses received from the University, income on investments held for capital construction and debt service requirements, and fees charged to the University for services. Operating expenses for the Authority include the interest expense on bonds and commercial paper, facility operating costs, depreciation of capital assets, professional fees and other administrative costs. All revenues and expenses not categorized as operating revenues and expenses are reported as non-operating.

Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded when the liability is incurred, regardless of when the related cash flow takes place.

Use of Estimates

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Restricted Assets

Certain proceeds of the Authority's bonds, as well as certain resources set aside for their repayment, are classified as restricted assets in the accompanying Statements of Net Position because their use is limited by bond trust agreements.

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
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Notes to Financial Statements
June 30, 2018 and 2017

The following sets forth the restricted cash and cash equivalent and investment balances as of June 30:

	<u>2018</u>	<u>2017</u>
Restricted cash and cash equivalents:		
Capital projects fund	\$ 269,180,856	\$ 401,788,074
Debt service fund	<u>12,121,335</u>	<u>12,949,086</u>
Total restricted cash and cash equivalents	<u>\$ 281,302,191</u>	<u>\$ 414,737,160</u>
Restricted investments:		
Debt service fund	<u>\$ 5,318,056</u>	<u>\$ 5,318,056</u>
Total restricted investments	<u>\$ 5,318,056</u>	<u>\$ 5,318,056</u>

Capital Assets and Depreciation

Property, plant and equipment are stated at cost on the date of acquisition, or at fair market value if contributed. Construction in progress is included as a capital asset. Construction in progress is stated at cost, which includes direct construction costs and other expenditures related to construction including capitalized interest, if any. All construction costs related to projects which are not yet completed are charged to construction in progress until such time as the projects are completed and placed in operation.

Depreciation is computed using the straight-line method over the estimated useful lives of the assets from the date the property is placed in operation. Land is not depreciated. The useful lives applicable to the Authority are as follows:

Buildings	15 to 50 years
Building, leasehold and land improvements	3 to 20 years
Equipment	4 to 10 years
Furnishings	3 to 10 years

Capitalized Interest

The Authority capitalizes interest costs incurred during the construction period of qualifying property assets. The amount of capitalized interest costs consists of all interest costs of the borrowing relating to the qualifying assets less any related interest earned from the date of the borrowing until the assets are ready for their intended use. Interest capitalized during the years ended June 30, 2018 and 2017, totaled \$11.6 million and \$20.4 million, respectively, net of interest income of \$1.3 million and \$1.2 million, respectively.

Cash and Cash Equivalents

Cash and cash equivalents include cash balances maintained in checking accounts, overnight repurchase agreements and amounts held in permitted money market mutual funds with an original maturity date of three months or less.

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
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Notes to Financial Statements
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Investments

Investments in marketable securities are stated at fair value.

Investments in repurchase agreements are non-participating interest earning investment contracts and are recorded at cost. These repurchase agreements are secured by cash or investments with a fair market value between 100% and 105% of the repurchase price, depending on the type of asset used as security and the specific repurchase agreement. These repurchase agreements can be redeemed at any time for the repurchase price provided the redemption proceeds are used for a purpose permitted by the respective repurchase agreement.

Realized and unrealized gains (losses) on investments, if any, include the net changes in the fair value of investments.

Net Position

Net position is reported in three categories:

Net investment in capital assets - This category consists of capital assets, net of accumulated depreciation and reduced by outstanding balances for bonds, notes and other debt, as well as deferred outflows of resources that are attributed to the acquisition, construction or improvement of those assets.

Restricted component of net position - This category consists of assets whose use is restricted either through external restrictions imposed by creditors, grantors, contributors and the like, or through restrictions imposed by law through constitutional provisions or enabling legislation. Capital project restricted assets are funds primarily provided by debt financing for the completion of University projects. Debt service restricted assets are funds primarily provided as additional collateral to the bond holders (e.g. debt service reserve funds).

Unrestricted component of net position - This category consists of net assets which do not meet the definition of the two preceding categories, and are available to support the Authority's operations.

Grants and Capital Contributions

Capital contributions are generally grants for capital asset acquisition, facility development and long-term planning studies, and are reported in the accompanying statements of revenues, expenses and changes in net position after non-operating revenues and expenses as capital contributions when such items are capitalized. Non-capital grants are recognized as non-operating revenue. Revenue from these grants and similar items are recognized as respective expenditures are incurred.

Insurance

The Owner-controlled Consolidated Insurance Program ("OCIP") was established to provide insurance coverage for contractors on selected Authority capital projects. This program provides workers' compensation and general liability insurance coverage for most contractors working on projects in the program. The program has a deductible component that is funded by the Authority. The deductible component is limited on both a per-occurrence basis and an aggregate basis for all OCIP-covered projects by stop-loss insurance.

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This exposure is partially secured by and paid out of an escrow trust fund set up for this purpose as a requirement of the stop-loss insurer. The total deductible exposure, plus unpaid OCIP-related insurance premiums and expenses committed to the OCIP, is addressed by the Authority with an OCIP reserve of \$2.4 million and \$5.4 million as of June 30, 2018 and June 30, 2017, respectively, which is presented as Other Liabilities in the accompanying Statements of Net Position.

Post-retirement Benefits

The Commonwealth of Massachusetts is statutorily responsible for the pension benefits for members of the State Employees' Retirement System ("SERS"), including employees of the University. The Authority's staff is employed by the Commonwealth through the University, and as such, the Authority's employees can participate in SERS, a single employer defined benefit public retirement system, covering substantially all employees of the Commonwealth and certain employees of independent authorities and agencies. The University makes contributions on behalf of the employees through a fringe benefit charge assessed by the Commonwealth. SERS does not issue stand-alone financial statements; however, SERS financial information is contained in the Commonwealth Comprehensive Annual Financial Report and can be obtained by contacting the State Comptroller, One Ashburton Place, 9th floor, Boston, MA 02108.

Revenue Recognition

The Authority's major revenue source is the financing income and fees for services that are primarily related to contracts with the University. The Authority has entered into various contracts with the University, acting by and through the Trustees, related to the management of certain authority projects and the payment to the Authority of certain fees and operating costs. The Authority fixes fees, rents, rates and other charges for the use of its projects in amounts sufficient to provide for the debt service and other payments related to the Authority's obligations and for the Authority's operating expenses. These contracts generally call for the Trustees to bill and collect all revenue derived from the projects and remit to the Authority or to the trustee under the Authority's trust agreements funds sufficient to cover debt service on its bonds, its costs of operations, and its financial obligations with respect to the projects. Revenue is recognized when earned consistent with the accrual basis of accounting and is included in financing income and fees for services line item on the Statement of Revenues, Expenses and Changes in Net Position.

The Authority records revenue associated with the interest rate subsidy provided by the United States Government related to the Authority's issuance of bonds under the Build America Bond ("BAB") program. Under the program, the Government provides a direct 35% subsidy of the interest rate paid to bondholders. During fiscal year 2013, the federal government implemented automatic budget cuts imposed through sequestration required pursuant to the Budget Control Act of 2011. As a result, in fiscal year 2018, the Authority's November 1, 2017 and May 1, 2018 original subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were reduced by 6.6%. In fiscal year 2017, the Authority's November 1, 2016 and May 1, 2017 original subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were reduced by 6.9%. This reduction was \$0.9 million in fiscal year 2018 and \$1.0 million in fiscal year 2017.

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Reclassifications

During fiscal year 2018 management identified that the lease with the Edward M Kennedy Institute should be reported as a capital lease. This immaterial error was corrected in the year ended June 30, 2017, as follows:

	<u>As Reported</u>	<u>Adjustments</u>	<u>As Adjusted</u>
CURRENT ASSETS			
EMKI Lease Receivable - Current	\$ -	\$ 2,636,306	\$ 2,636,306
NON-CURRENT ASSETS			
Capital assets, net of accumulated depreciation	3,384,583,875	(76,801,739)	3,307,782,136
EMKI Lease Receivable - Non Current	-	120,657,313	120,657,313
LIABILITIES			
CURRENT LIABILITIES			
Unearned Interest Income EMKI	-	(2,834,952)	(2,834,952)
NON-CURRENT LIABILITIES			
Unearned Interest Income	-	(39,124,048)	(39,124,048)
Other Liabilities	14,540,774	671	14,541,445
NET POSITION			
Net investment in capital assets	992,917,423	224,551	993,141,974
Unrestricted	(2,260,043)	4,307,657	2,047,614
Net position at beginning of year	954,066,119	(255,792)	953,810,327
Net position at end of year	1,053,448,211	4,532,208	1,057,980,419
OPERATING REVENUE			
Financing income and fees for services	215,493,319	(2,392,078)	213,101,241
Interest income	4,138,816	2,811,475	6,950,291
OPERATING EXPENSES			
Depreciation	120,020,101	(4,368,603)	115,651,498

In the opinion of management, these changes do not have a material impact on the previously issued 2017 and prior financial statements.

4. CASH DEPOSITS AND INVESTMENTS

Cash Deposits - Custodial Credit Risk

The 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 Authority's Enabling Act or in money market mutual funds that have been specifically permitted by state legislation.

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The Authority's cash and cash equivalents held on deposit consisted of the following as of June 30:

	<u>2018</u>	<u>2017</u>
Cash	\$ 4,606,496	\$ 5,552,854
Permitted money market accounts	<u>303,430,355</u>	<u>426,796,973</u>
Total cash and cash equivalents	<u>\$ 308,036,851</u>	<u>\$ 432,349,827</u>

Custodial credit risk is the risk that, in the event of a bank failure, the Authority 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 Authority does not have a deposit policy for custodial credit risk. As of June 30, 2018 and 2017, the bank balances of uninsured deposits totaled \$4.4 million and \$5.1 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.

Investments

As of June 30, 2018, the Authority's investments consisted of the following:

	<u>Investment Maturities (in Years)</u>		
	<u>Total</u>	<u>Less than 1</u>	<u>1 to 5</u>
Investment type			
Debt securities:			
Repurchase agreements	\$ 5,318,056	\$ -	\$ 5,318,056
Money market accounts	<u>303,430,355</u>	<u>303,430,355</u>	<u>-</u>
Total	<u>\$ 308,748,411</u>	<u>\$ 303,430,355</u>	<u>\$ 5,318,056</u>

UNIVERSITY OF MASSACHUSETTS BUILDING AUTHORITY
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Notes to Financial Statements
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As of June 30, 2017, the Authority's investments consisted of the following:

	<u>Investment Maturities (in Years)</u>		
	<u>Total</u>	<u>Less than 1</u>	<u>1 to 5</u>
Investment type			
Debt securities:			
Repurchase agreements	\$ 5,318,056	\$ -	\$ 5,318,056
Money market accounts	<u>426,796,973</u>	<u>426,796,973</u>	<u>-</u>
Total	<u>\$ 432,115,029</u>	<u>\$ 426,796,973</u>	<u>\$ 5,318,056</u>

Because money market funds are highly liquid, they are presented as investments with maturities of less than one year.

Interest Rate Risk

The Authority has a formal investment policy that establishes minimum credit quality of certain instruments, outlines investment procedures, and provides for periodic reporting. Generally, the 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 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 certificates of deposits fully secured by Treasuries or Agencies, and Treasuries and Agencies subject to repurchase agreements. Other legislation allows the 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, in accordance with the Authority investment policy, the Authority's Bond Trustee may invest some of the Authority's funds in money market accounts, permitted and collateralized by Treasuries.

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

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Investments - Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The 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 Authority's Bond Trustee as the Authority's agent. In accordance with the 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 Authority does not place a credit limit on the amount it may invest in any one issuer. As of June 30, 2018, the Authority had 98.3% of its investments in MMDT. As of June 30, 2017, the Authority had 98.8% of its investments in MMDT.

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 are as follows:

- Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Authority 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 Authority's own data.

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The following tables present the investments carried at fair value, as of June 30, by the valuation hierarchy defined above:

	Fair Value Measurements as of June 30, 2018			
	Level 1	Level 2	Level 3	Total
Investment type:				
Debt securities:				
Repurchase agreements	\$ -	\$ 5,318,056	\$ -	\$ 5,318,056
Money market accounts	<u>303,430,355</u>	<u>-</u>	<u>-</u>	<u>303,430,355</u>
Total	<u>\$ 303,430,355</u>	<u>\$ 5,318,056</u>	<u>\$ -</u>	<u>\$ 308,748,411</u>

	Fair Value Measurements as of June 30, 2017			
	Level 1	Level 2	Level 3	Total
Investment type:				
Debt securities:				
Repurchase agreements	\$ -	\$ 5,318,056	\$ -	\$ 5,318,056
Money market accounts	<u>426,796,973</u>	<u>-</u>	<u>-</u>	<u>426,796,973</u>
Total	<u>\$ 426,796,973</u>	<u>\$ 5,318,056</u>	<u>\$ -</u>	<u>\$ 432,115,029</u>

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5. CAPITAL ASSETS

A summary of changes in capital assets follows:

	Balance June 30, 2016	Additions/ (Transfers)	Balance June 30, 2017	Additions/ (Transfers)	Balance June 30, 2018
Land	\$ 37,104,492	\$ 21,949,865	\$ 59,054,357	\$ 57,503,161	\$ 116,557,518
Buildings	2,505,413,122	366,912,657	2,872,325,779	257,776,437	3,130,102,215
Building and land improvements	595,440,159	20,320,150	615,599,260	90,378,466	705,977,726
Equipment and furnishings	51,568,052	29,610,704	81,178,756	2,035,729	83,214,486
Construction in progress	541,714,311	(61,924,723)	479,789,588	22,693,947	502,483,536
Subtotal	<u>3,731,240,136</u>	<u>376,868,653</u>	<u>4,107,947,741</u>	<u>430,387,740</u>	<u>4,538,335,480</u>
Less: accumulated depreciation					
Buildings	(469,466,370)	(82,980,694)	(549,281,914)	(86,179,453)	(635,461,367)
Building and land improvements	(188,993,702)	(30,243,766)	(219,227,175)	(32,085,343)	(251,312,518)
Equipment and furnishings	(26,221,908)	(6,789,069)	(31,656,516)	(6,921,977)	(38,578,493)
Subtotal	<u>(684,681,981)</u>	<u>(120,013,529)</u>	<u>(800,165,605)</u>	<u>(125,186,773)</u>	<u>(925,352,378)</u>
Total capital assets, net	<u>\$ 3,046,558,156</u>	<u>\$ 256,855,124</u>	<u>\$ 3,307,782,136</u>	<u>\$ 305,200,967</u>	<u>\$ 3,612,983,103</u>

During the years ended June 30, 2018 and 2017, the Authority charged \$2.8 million and \$2.4 million, respectively to facility costs related to certain capital projects that were discontinued at the Boston campus.

The Authority has outstanding purchase commitments with contractors for the construction of certain facilities as of June 30, 2018 and 2017 of \$116.6 million and \$283.7 million respectively.

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6. BONDS PAYABLE

The following is a summary of bond transactions for the years ended June 30, 2018 and 2017:

	<u>Bonds Payable</u>	<u>Unamortized Original Issue Premiums</u>	<u>Total</u>
Beginning balance - July 1, 2016	\$ 2,706,705,000	\$ 122,146,350	\$ 2,828,851,350
Issuances	372,320,000	55,987,318	428,307,318
Refundings	(122,075,000)	(2,126,023)	(124,201,023)
Payments/amortization	<u>(85,775,000)</u>	<u>(11,120,740)</u>	<u>(96,895,740)</u>
Ending balance - June 30, 2017	<u>2,871,175,000</u>	<u>\$ 164,886,905</u>	3,036,061,905
Less: Due within one year			<u>(187,300,000)</u>
Non-current balance			<u>\$ 2,848,761,905</u>
Beginning balance - July 1, 2017	\$ 2,871,175,000	\$ 164,886,905	\$ 3,036,061,905
Issuances	37,650,000	-	37,650,000
Payments/amortization	<u>(92,245,000)</u>	<u>(13,893,537)</u>	<u>(106,138,537)</u>
Ending balance - June 30, 2018	<u>\$ 2,816,580,000</u>	<u>\$ 150,993,368</u>	2,967,573,368
Less: Due within one year			<u>(364,122,357)</u>
Non-current balance			<u>\$ 2,603,451,011</u>

Aggregate annual maturities of principal and interest on long-term debt as of June 30, 2018 are as follows:

	<u>Principal</u>	<u>Interest*</u>	<u>Total</u>
Year Ending June 30,			
2019	\$ 98,105,000	\$ 117,072,561	\$ 215,177,561
2020	101,790,000	113,264,234	215,054,234
2021	105,610,000	109,342,482	214,952,482
2022	98,055,000	105,427,528	203,482,528
2023	102,250,000	101,619,096	203,869,096
2024-2028	522,205,000	449,494,887	971,699,887
2029-2033	475,320,000	346,970,541	822,290,541
2034-2038	527,285,000	245,392,049	772,677,049
2039-2043	541,515,000	113,966,498	655,481,498
2044-2048	<u>244,445,000</u>	<u>19,763,523</u>	<u>264,208,523</u>
	<u>\$ 2,816,580,000</u>	<u>\$ 1,722,313,399</u>	<u>\$ 4,538,893,399</u>

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* These interest payments are presented net of the interest rate subsidy provided by the United States Government related to the Authority's issuance of bonds under the Build America Bond ("BAB") program. Under the BAB program, the Government provides a direct subsidy of the interest rate paid to bondholders up to 35%. The Authority's November 1, 2017, and May 1, 2018 subsidy payments related to the Senior Series 2009-2 Project Revenue Build America Bonds and the Senior Series 2010-2 Project Revenue Build America Bonds were 32.69% and 32.59%, respectively. For Fiscal Year 2019 through Fiscal Year 2041, the estimated subsidy reflected in the table above is 32.83%

The Authority classifies variable rate bonds subject to remarketing as current, unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements that extend beyond the following fiscal year. For fiscal 2018, the 2008-1 and 2008-A variable rate bonds, with a combined outstanding principal balance of \$181,265,000, are classified as a current debt obligation due to the supporting liquidity facility expiring in April 2019. In the event that variable rate bonds are put back to the Authority by the debt holder, management believes that the Authority's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. As a result, these variable rate bonds are listed in the table above at their original maturities. The 2011-2 window bonds with a principal outstanding balance of \$95,055,000 have no supporting liquidity facility and therefore are classified as a current debt obligation.

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The following is a summary of bonds outstanding for the years ended June 30, 2018 and 2017 (bond amounts in thousands):

Bond Description	Outstanding June 30,		Interest Rate	Maturity Year	Amount Issued	Insured	Commonwealth Guaranteed (Note 9)	Callable	Call Date Beginning
	2018	2017							
Project Revenue Bonds, Senior Series 2008-1	\$ 163,115	\$ 171,430	Variable	2038	\$ 232,545	No	No	At Par	Anytime
Project Revenue Bonds, Senior Series 2008-2	-	3,065	4.00% to 5.00%	2038	120,560	FSA (Partial)	No	At Par	May-18
Project Revenue Bonds, Senior Series 2008-A	18,150	19,145	Variable	2038	26,580	No	Yes	At Par	Anytime
Project Revenue Bonds, Senior Series 2009-1	15,285	28,400	3.00% to 5.00%	2039	247,810	No	No	At Par	May-19
Project Revenue Bonds, Senior Series 2009-2 (Federally Taxable - Build America Bonds - Direct Pay to Issuer)	271,855	271,855	6.423% to 6.573%	2039	271,855	No	No	At Par	May-18
Project Revenue Bonds, Senior Series 2009-3 (Federally Taxable)	25,100	25,685	5.823% to 6.173%	2039	28,570	No	No	*	Anytime
Project Revenue Bonds, Senior Series 2010-1	45,485	59,230	5.000%	2020	118,985	No	No	No	-
Project Revenue Bonds, Senior Series 2010-2 (Federally Taxable - Build America Bonds - Direct Pay to Issuer)	430,320	430,320	3.80% to 5.45%	2040	430,320	No	No	*	Anytime

* These series of bonds are callable at the Make-Whole Redemption Price which equals the greater of the outstanding principal balance or the present value of the scheduled future principal and interest payments, which payments are discounted at the Treasury Rate plus 25 basis points (2009 Series Bonds) or 30 basis points (2010 Series Bonds).

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<u>Bond Description</u>	<u>Outstanding June 30,</u>		<u>Interest Rate</u>	<u>Maturity Year</u>	<u>Amount Issued</u>	<u>Insured</u>	<u>Commonwealth Guaranteed (Note 9)</u>	<u>Callable</u>	<u>Call Date Beginning</u>
	<u>2018</u>	<u>2017</u>							
Project Revenue Bonds, Senior Series 2010-3 (Federally Taxable)	\$ 2,675	\$ 2,730	5.75%	2040	\$ 3,005	No	No	*	Anytime
Refunding Revenue Bonds, Senior Series 2011-1	124,990	126,540	Variable	2034	135,040	No	No	At Par	Anytime
Refunding Revenue Bonds, Senior Series 2011-2	95,055	96,115	Variable	2034	101,700	No	Yes	At Par	Anytime
Project Revenue Bonds, Senior Series 2013-1	193,745	198,655	2.00% to 5.00%	2043	212,585	No	No	At Par	Nov-22
Project Revenue Bonds, Senior Series 2013-2 (Federally Taxable)	62,825	65,090	0.43% to 2.686%	2043	71,970	No	No	At Par	Nov-23
Project and Refunding Revenue Bonds, Senior Series 2013-3	24,640	24,640	4.0% to 5.0%	2043	24,640	No	No	At Par	May-23
Project Revenue Bonds, Senior Series 2014-1	292,490	293,015	3% to 5.0%	2044	293,890	No	No	At Par	Nov-24
Project Revenue Bonds, Senior Series 2014-2	5,750	8,555	.44% to 2.1%	2019	14,085	No	No	*	Anytime
Refunding Revenue Bonds, Senior Series 2014-4	92,095	122,125	.20% to 3.381%	2025	157,855	No	No	*	Anytime

* These series of bonds are callable at the Make-Whole Redemption Price which equals the greater of the outstanding principal balance or the present value of the scheduled future principal and interest payments, which payments are discounted at the Treasury Rate plus 25 basis points (2009 Series Bonds) or 30 basis points (2010 Series Bonds).

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<u>Bond Description</u>	<u>Outstanding June 30,</u>		<u>Interest Rate</u>	<u>Maturity Year</u>	<u>Amount Issued</u>	<u>Insured</u>	<u>Commonwealth Guaranteed (Note 9)</u>	<u>Callable</u>	<u>Call Date Beginning</u>
	<u>2018</u>	<u>2017</u>							
Refunding Revenue Bonds, Senior Series 2014-3	\$ 58,160	\$ 61,640	2.00% to 5.00%	2029	\$ 67,635	No	No	At Par	Nov-24
Project Revenue Bonds, Senior Series 2015-1	298,795	298,795	4.00% to 5.00%	2036	298,795	No	No	At Par	Nov-25
Refunding Revenue Bonds Senior Series 2015-2	189,000	191,825	3.00% to 5.00%	2036	191,825	No	No	At Par	Nov-25
Refunding Revenue Bonds Senior Series 2017-1	165,130	165,130	3.25% to 3.77%	2047	165,130	No	No	At Par	Nov-27
Refunding Revenue Bonds Senior Series 2017-2	19,510	19,510	1.58% to 3.37%	2027	19,510	No	No	No	-
Refunding Revenue Bonds Senior Series 2017-3	184,760	187,680	3.00% to 5.00%	2038	187,680	No	No	At Par	Nov-27
Project Revenue Bonds, Senior Series 2018-1	37,650	-	2.00% to 2.93%	2043	75,000	No	No	At Par	Jun-18
Total	<u>\$ 2,816,580</u>	<u>\$ 2,871,175</u>							

* = These series of bonds are callable at the Make-Whole Redemption Price which equals the greater of the outstanding principal balance or the present value of the scheduled future principal and interest payments, which payments are discounted at the Treasury Rate plus 25 basis points (2009 Series Bonds) or 30 basis points (2010 Series Bonds).

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Variable Rate Bonds

On April 15, 2016, the Authority entered into a standby purchase agreement with Barclays Bank PLC (“Barclays”) for the 2008-1 bonds 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 2018 and 2017, the Authority incurred fees in connection with the Barclays agreement in the amount of \$584,025 and \$672,942, respectively. The agreement expires on April 22, 2019 and may be extended if a mutual interest exists between the Authority and Barclays.

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 \$73,575 and \$83,533 for the years ended June 30, 2018 and June 30, 2017, respectively.

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 percent. 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 \$143,253,392 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 \$139,063,145 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. On June 29, 2018, the agreement was extended with Wells until July 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 \$434,357 and \$435,176 for the years ended June 30, 2018 and 2017, 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

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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

There was no refunding of bonds in fiscal year 2018.

In fiscal year 2017, the Authority issued \$187,680,000 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 Authority’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 \$5,765,590. 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 \$30,157,463 and resulted in an economic gain (the present value of the savings) of \$21,403,862.

Bond Premium and Issuance Expenses

In fiscal year 2017, the Authority received premiums at issuance totaling \$55,987,318. The Authority amortizes the premiums received as a reduction of interest expense over the life of the respective bond issue. No premiums were received for the 2018-1 bonds.

In connection with the Authority’s bond issues, the Authority incurred certain issuance costs associated with the bond offerings. In fiscal year 2018 issuance costs were \$129,908 and in fiscal year 2017, these costs amounted \$2,334,834 and were expensed in accordance with the provisions of GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*.

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 No. 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

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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, 2018 and 2017 were as follows:

	Derivative Instruments - Liability June 30, 2017	Net Change in Liability	Derivative Instruments - Liability June 30, 2018	Type of Hedge	Financial Statement Classification for Changes in Liability
Series 2008-1 Swap	\$ (25,266,776)	\$ 8,690,332	\$ (16,576,444)	Cash Flow	Non-current liability
Series 2008-A Swap	(2,883,584)	953,242	(1,930,342)	Cash Flow	Non-current liability
Series 2006-1 Swap	<u>(33,690,361)</u>	<u>10,594,964</u>	<u>(23,095,397)</u>	Cash Flow	Non-current liability
Total	<u>\$ (61,840,721)</u>	<u>\$ 20,238,538</u>	<u>\$ (41,602,183)</u>		

The terms of the Authority's financial derivative instruments that were outstanding at June 30, 2018 are summarized in the table below:

	Type	Effective Date	Termination Date	Rate Authority Pays	Authority Receives	Original Notional Value
Series 2008-1 Swap	Synthetic Fixed	May 1, 2008	May 1, 2038	3.388 %	70% of 1-Month LIBOR	\$ 232,545,000
Series 2008-A Swap	Synthetic Fixed	Nov 13, 2008	May 1, 2038	3.378 %	70% of 1-Month LIBOR	26,580,000
Series 2006-1 Swap	Synthetic Fixed	Apr. 20, 2006	Nov. 1, 2034	3.482 %	60% of 3-Month LIBOR + .18%	243,830,000

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.

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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.

As of June 30, 2018 and 2017, the Authority's swaps had a negative fair value of \$41,602,183 and \$61,840,721, respectively, and as such are presented as noncurrent liabilities.

Credit risk - As of June 30, 2018 and 2017, 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, 2018 are as follows:

	Credit Ratings		
	Moody's	S&P	Fitch
UBS AG	Aa3	A+	AA-
Deutsche Bank AG	A3	BBB+	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.

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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 \$10,000,000. 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, 2018; 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 \$22,200,000. 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, 2018, 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:

Fiscal Year Ending June 30,	Consolidated Summary			
	Variable Rate Debt		Interest Rate Swap	
	Principal	Interest	Net	Total
2019	\$ 12,215,000	\$ 6,073,031	\$ 7,645,043	\$ 25,933,074
2020	12,720,000	5,884,928	7,409,365	26,014,293
2021	28,390,000	5,575,589	7,020,180	40,985,769
2022	29,545,000	5,139,865	6,470,971	41,155,835
2023	33,915,000	4,662,733	5,869,404	44,447,136
2024 - 2028	155,640,000	16,102,142	20,258,607	192,000,749
2029 - 2033	112,390,000	5,579,047	7,010,901	124,979,948
2034 - 2038	16,495,000	373,150	468,681	17,336,831
2039 - 2043	-	-	-	-
Total	<u>\$ 401,310,000</u>	<u>\$ 49,390,483</u>	<u>\$ 62,153,153</u>	<u>\$ 512,853,635</u>

As actual rates vary, variable-rate bond interest payments and net swap payments will vary.

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7. COMMERCIAL PAPER

The maximum aggregate principal amount of commercial paper which may be outstanding at one time is \$200,000,000. The \$125,000,000 Commercial Paper Notes, Series 2013-A, were secured by an irrevocable letter of credit (“LOC”) provided by State Street Bank and Trust Company (“State Street”) which expired on August 12, 2016. The letter of credit was replaced with a standby liquidity facility agreement that expires on August 12, 2019. The remaining \$75,000,000 Commercial Paper Notes, Series 2013-B are secured by a standby liquidity facility agreement provided by U.S. Bank National Association, which was extended in fiscal year 2016 and now expires on August 12, 2019.

The following is a summary of commercial paper issues for the years ended June 30, 2018 and 2017:

	Balance			Balance
	June 30, 2017	Issues	Repayments	June 30, 2018
Commercial paper series 2013-A tax exempt	\$ -	\$64,535,000	\$ -	\$ 64,535,000
Commercial paper series 2013-B	-	-	-	-
	<u>\$ -</u>	<u>\$64,535,000</u>	<u>\$ -</u>	<u>\$ 64,535,000</u>
	Balance			Balance
	June 30, 2016	Issues	Repayments	June 30, 2017
Commercial paper series 2013-A tax exempt	\$ 5,000,000	\$ -	\$ (5,000,000)	\$ -
Commercial paper series 2013-B tax exempt	-	20,000,000	(20,000,000)	-
Commercial paper series 2013-A taxable	-	-	-	-
	<u>\$ 5,000,000</u>	<u>\$ 20,000,000</u>	<u>\$ (25,000,000)</u>	<u>\$ -</u>

The Authority incurred fees of \$472,914 and \$494,991 for fiscal years 2018 and 2017, respectively, associated with the State Street LOC. Fees in connection with the U.S. Bank National Association Standby Liquidity Facility Agreement amounted to \$260,794 and \$260,793, respectively, for fiscal year 2018 and fiscal year 2017.

8. GRANTS FROM THE UNIVERSITY OF MASSACHUSETTS AND THE COMMONWEALTH OF MASSACHUSETTS

During fiscal year 2018, the Authority received grants totaling \$52.9 million from the Commonwealth. These grants were used as follows: \$27.9 million of Division of Capital Asset Management and Maintenance (“DCAMM”) funds for the Lowell and Amherst campuses, \$25 million to fund a capital infrastructure project, “Road and Transportation Improvements” at UMass Boston.

The Authority also recorded in fiscal years 2018 and 2017, \$96.7 million and \$0.5 million, respectively, of construction costs incurred by the Commonwealth Capital Asset Management Division in connection with an on-going construction projects at the Lowell and Amherst campuses.

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As per the Authority's policy, these grants are shown in the Statements of Revenues, Expenses and Changes in Net Position as a capital contribution.

9. GUARANTY OF THE COMMONWEALTH OF MASSACHUSETTS

Section 10 of the Enabling Act authorizes the Commonwealth, acting by and through the Trustees, to enter into contracts with the Authority for state financial assistance in the form of a guaranty by the Commonwealth of the payment of the principal and interest as they become due and payable up to a maximum of \$200,000,000 principal amount of outstanding bonds and notes of the Authority. The full faith and credit of the Commonwealth are pledged for the payment of the guaranty. As is generally the case with other full faith and credit obligations of the Commonwealth, funds with which to honor such guaranty would be provided by appropriation. The amount of bond obligation guaranteed by the Commonwealth was \$113.2 million and \$115.3 million at June 30, 2018 and June 30, 2017, respectively.

10. PUBLIC PRIVATE PARTNERSHIP

On November 8, 2016, the Authority entered into an agreement whereby the Authority sub-leased property on the University of Massachusetts Boston campus to Provident Commonwealth Educational Resources, Inc. (PCER), a Massachusetts not-for-profit corporation. The land is ground-leased to the Authority by the Commonwealth. PCER has engaged a contractor to construct a 1,082-bed student housing facility on the site (the "Project"). The Authority sub-leased the property to PCER for a term of 40 years (2056), with the property reverting to the Authority when the lease terminates. Commencing approximately one year following the completion of the project in August 2018, the annual rental amount payable to the Authority under the ground lease will be \$1.025 million. Unpaid annual rent shall accrue and shall be paid in the future to the extent sufficient monies are available. The first ground lease payment is anticipated to be recognized a year following completion of the project, which would be fiscal 2020, and therefore no revenue associated with this projected has been reported in the fiscal 2017 or fiscal year 2018 financial statements.

The Project was financed with \$130.08 million of revenue bonds issued on October 26, 2016 (Series 2016 Bonds) by the Massachusetts Development Finance Agency ("MassDevelopment") pursuant to a Loan and Trust Agreement between MassDevelopment and PCER. The Authority, University nor UMass Boston have pledged revenues to secure the payment of the Series 2016 bonds or have any obligation with respect to payment of the Series 2016 bonds.

Pursuant to the Dining Facility Sublease dated November 8, 2016 between PCER, as sub-lessor and the Authority, as sub-lessee, PCER leased the dining facility, located within the Project, to the Authority and the Authority shall operate or cause to be operated the dining facility. The University funded the construction costs of the dining facility through debt issued by the Authority. This lease only relates to the operations and maintenance of the dining facility.

Management evaluated the relevant applicability of relevant GASB guidance (including GASB Statement No. 39, *Determining Whether Certain Organizations Are Component Units*, Statement No. 60, *Accounting for Financial Reporting for Service Concession Arrangements*, and Statement No. 61, *The Financial Reporting Entity: Omnibus*) against the underlying agreements and indentures and has concluded that the associated debt should not be recognized on the financial statements of the Authority.

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Note 14, Subsequent Events provides information about a similar transaction on the Dartmouth campus that closed on November 14, 2018.

11. COMMITMENTS AND CONTINGENCIES

The Authority has executed long-term leases with the Commonwealth, acting by and through the Trustees, covering the land on which facilities owned by the Authority are located on the University's campuses. These leases call for nominal annual payments to the Commonwealth. Certain of these leases renew automatically for subsequent five or ten year periods unless the Authority notifies the University that it does not wish to renew. Other leases require the Authority to notify the University of its desire to renew. As of June 30, 2018, all leases with the Commonwealth were in good standing and any leases requiring action by the Authority during the year to facilitate their renewals were properly renewed.

As provided in the Enabling Act, each of the above-referenced leases also terminates when the Authority no longer has any bonds outstanding, at which time all Authority property becomes the property of the Commonwealth.

On April 1, 2014, the Authority entered into a lease, as lessee, with Massachusetts Mutual Life Insurance Company, as lessor, for space at Tower Square, 1500 Main Street, Springfield, Massachusetts to be used by the University primarily as classroom space for its Springfield Satellite campus. The lease began August 1, 2014 and ends July 31, 2019.

On July 17, 2014, the Authority entered into a lease, as lessee, with One Beacon Street Limited Partnership, as lessor, for space at One Beacon Street, Boston, Massachusetts to be used primarily as office space by the Authority, the UMASS Club and the University. The lease began on July 15, 2015 and ends December 31, 2030. The lease commencement date was November 1, 2015 and included an initial four month period of no rental payments.

For the years ended June 30, 2018 and 2017, lease operating costs were \$3,893,658 and \$2,893,349, respectively, which are included in facility operating costs in the accompanying Statements of Revenues, Expenses and Changes in Net Position.

Future payments (excluding Lessor's costs and taxes and including the base rent escalation of \$2 per square foot for every other year) under the lease agreements are as follows:

Year Ending June 30,

2019	\$ 2,122,226
2020	2,139,004
2021	2,180,561
2022	2,222,117
2023	2,263,673
2024 and thereafter	<u>18,118,697</u>
	<u>\$ 29,046,277</u>

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The Authority is a defendant in a lawsuit and is subject to various contractual matters; however, Authority 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 Authority.

12. THE UNIVERSITY OF MASSACHUSETTS CLUB

The University of Massachusetts Club (the “Club”) is managed by the not for profit organization University Services, Inc. The Authority did not provide operating support in fiscal 2018 or in fiscal 2017.

13. RELATED PARTY TRANSACTIONS

The following table details the amounts due to the various campuses of the University at June 30, which were recorded as part of accounts payable and other liabilities in the statements of net position:

	2018	2017
Campus		
Amherst Campus	\$ 162,320	\$ 1,039,013
Boston Campus	1,728	1,212,128
Dartmouth Campus	4,138,835	4,455,047
Lowell Campus	303,933	3,541,051
Total	\$ 4,606,817	\$ 10,247,239

In July 2014, March 2015 and January 2017, the Authority issued debt to refund certain portions of outstanding debt of Worcester City Campus Corporation (“WCCC”). Notes payables from WCCC are presented within bonds payable balances with offsetting loan receivable from WCCC. The current and non-current balance of the outstanding WCCC loan receivable amounted to \$9.2 million and \$229.8 million as of June 30, 2018 and \$8.3 million and \$241.4 million as of June 30, 2017.

14. SUBSEQUENT EVENT

Subsequent to year-end, the Authority issued \$38.4 million of Series 2013-A commercial paper to be used for funding of approved capital projects at the Lowell, Amherst and Dartmouth campuses. The commercial paper is expected to be repaid with proceeds from the Authority’s next long-term bond financing.

On November 14, 2018, the Authority entered into an agreement whereby the Authority sub-leased property on the University of Massachusetts Dartmouth campus to Provident Commonwealth Educational Resources II Inc., a Massachusetts not-for-profit corporation. The land is leased to the Authority by the Commonwealth. Provident Commonwealth Educational Resources II Inc. will engage a contractor to construct a 1,210-bed student housing facility on the site. The Authority will sub-lease the property to Provident Commonwealth Educational Resources II Inc. for a term of approximately 45 years. Commencing with the first lease year of the lease following the completion of the project (estimated completion is August 2020), the annual rental amount payable to the Authority under the ground lease will be \$0.625 million.

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Pursuant to the Dining Facility Sublease dated November 14, 2018 between Provident Commonwealth Educational Resources II Inc., as sub-lessor and the Building Authority, as sub-lessee, the Provident Commonwealth Educational Resources II Inc. shall lease the dining facility, located within the residential hall, to the Campus and shall operate the Dining Facility or cause it to be operated.

For purposes of determining the effects of subsequent events on these financial statements, management has evaluated events subsequent to June 30, 2018 and through December 17, 2018, the date on which the financial statements were available to be issued and, determined that there were no matters requiring recognition or disclosure to the accompanying financial statements.