NEW ISSUE – BOOK-ENTRY ONLY

Moody's: Aa2
S&P: AA-
See "RATINGS" herein.

In the opinion of Hinckley, Allen & Snyder LLP, Bond Counsel, based upon an analysis of existing law, interest on the Series 2020A Bonds is included in gross income for federal income tax purposes under the Internal Revenue Code of 1986, as amended (the "Code"). Under existing law, interest on the Series 2020A Bonds and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Series 2020A Bonds are exempt from Massachusetts personal property taxes. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the Series 2020A Bonds. See "TAX MATTERS" herein.

$395,735,000
MASSACHUSETTS STATE COLLEGE BUILDING AUTHORITY
Refunding Revenue Bonds
Series 2020A
(Federally Taxable)

Dated: Date of Initial Delivery **Due: May 1, as shown on the inside cover**

The $395,735,000 Refunding Revenue Bonds, Series 2020A (Federally Taxable) (the "Series 2020A Bonds") of the Massachusetts State College Building Authority (the "Authority"), will be issued as fully registered bonds and will be registered in the name of Cede & Co., as Bondholder and nominee for The Depository Trust Company ("DTC"), New York, New York. DTC will act as securities depository for the Series 2020A Bonds. Purchases of the Series 2020A Bonds will be made in book entry form, in the denomination of $5,000 or any multiple thereof and no physical delivery of the Series 2020A Bonds will be made to purchasers. So long as Cede & Co. is the registered holder of the Series 2020A Bonds, principal and semiannual interest (payable November 1 and May 1, commencing November 1, 2020) are payable to DTC by U. S. Bank National Association, as Trustee. See Appendix C "Book-Entry Only System" herein.

The Series 2020A Bonds shall be subject to redemption prior to maturity as more fully described herein.

The Series 2020A Bonds will be special obligations of the Authority secured by a pledge of revenues, as more fully described herein. In addition, the Series 2020A Bonds will be secured by an intercept of appropriations to the State Universities, as more fully described herein. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Commonwealth Appropriation Intercept."

THE SERIES 2020A BONDS SHALL NOT BE DEEMED TO CONSTITUTE A DEBT OR LIABILITY OF THE COMMONWEALTH OF MASSACHUSETTS OR ANY POLITICAL SUBDIVISION THEREOF. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE COMMONWEALTH OF MASSACHUSETTS OR OF ANY POLITICAL SUBDIVISION OR INSTRUMENTALITY THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF OR PREMIUM OR INTEREST ON THE SERIES 2020A BONDS. THE AUTHORITY DOES NOT HAVE TAXING POWER.

The Series 2020A Bonds are offered when, as and if issued by the Authority and received by the Underwriters, subject to the approval of legality by Hinckley, Allen & Snyder LLP, Boston, Massachusetts, Bond Counsel. Certain legal matters will be passed upon for the Authority by its general counsel, Bowditch & Dewey, LLP, Boston, Massachusetts and for the Underwriters by their counsel, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts. Acacia Financial Group, Inc. is acting as municipal advisor to the Authority in connection with the issuance of the Series 2020A Bonds. It is expected that the Series 2020A Bonds in definitive form will be available for delivery through DTC in New York, New York, or its custodial agent, on or about July 1, 2020.

BofA Securities

Barclays **UBS**

Academy Securities **Fidelity Capital Markets**

June 16, 2020

$395,735,000
Massachusetts State College Building Authority
Refunding Revenue Bonds, Series 2020A
(Federally Taxable)

Dated: Date of Initial Delivery

Due: May 1, as shown below

Maturity (May 1)	Principal Amount	Interest Rate	Price	CUSIP Number*	Maturity (May 1)	Principal Amount	Interest Rate	Price	CUSIP Number*
2024	$2,875,000	1.044%	100%	575831FK3	2030	$19,305,000	1.901%	100%	575831FR8
2025	2,830,000	1.194	100	575831FL1	2031	27,460,000	1.951	100	575831FS6
2026	6,490,000	1.412	100	575831FM9	2032	30,870,000	2.031	100	575831FT4
2027	9,030,000	1.512	100	575831FN7	2033	31,595,000	2.101	100	575831FU1
2028	4,645,000	1.701	100	575831FP2	2034	27,860,000	2.201	100	575831FV9
2029	17,615,000	1.801	100	575831FQ0	2035	26,100,000	2.251	100	575831FW7

$112,555,000 2.972% Term Bonds due May l, 2040, Price: 100%, CUSIP Number*: 575831FX5
$76,505,000 3.072% Term Bonds due May l, 2049, Price: 100%, CUSIP Number*: 575831FY3

* CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed on behalf of The American Bankers Association by S&P Global Market Intelligence. The CUSIP numbers are included solely for the convenience of owners of the Series 2020A Bonds and the Authority is not responsible for the selection or the correctness of the CUSIP numbers printed herein. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors, including, but not limited to, the refunding or defeasance of such securities or the use of secondary market financial products.

No dealer, broker, salesperson or other person has been authorized by the Massachusetts State College Building Authority (the "Authority"), The Commonwealth of Massachusetts (the "Commonwealth"), the Board of Higher Education (the "BHE"), the State Universities (as defined herein) or the Underwriters to give any information or to make any representation with respect to the Series 2020A Bonds other than as contained in this Official Statement and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2020A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

Certain information contained herein has been obtained from the Authority, the BHE, The Depository Trust Company and other sources which are believed to be reliable, but is not guaranteed as to accuracy or completeness, and is not to be construed as a representation of the Authority, the Commonwealth, the BHE, the State Universities or the Underwriters. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the parties referred to above since the date hereof.

U. S. Bank National Association by acceptance of its duties as Trustee under the Trust Agreement described herein has not reviewed this Official Statement and makes no representations as to the information contained herein, including but not limited to any representations as to the use of the proceeds of the Series 2020A Bonds or related activities.

Information included in this Official Statement includes forward-looking statements about the future that are necessarily subject to various risks and uncertainties ("Forward-Looking Statements"). These Forward-Looking Statements are (i) based on the beliefs and assumptions of management of the Authority and on information currently available to such management and (ii) generally identifiable by words such as "estimates," "expects," "anticipates," "plans," "believes" and other similar expressions. Events that could cause future results to differ materially from those expressed in or implied by Forward-Looking Statements or historical experience include the impact or outcome of many factors that are described throughout this Official Statement. Although the ultimate impact of such factors is uncertain, they may cause future performance to differ materially from results or outcomes that are currently sought or expected by the Authority.

The Underwriters of the Series 2020A Bonds have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

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See bolded language under "COVID-19" herein for subsequent events regarding the impact of COVID-19 on the Authority and State Universities.

OFFICIAL STATEMENT

$395,735,000
MASSACHUSETTS STATE COLLEGE BUILDING AUTHORITY
Refunding Revenue Bonds, Series 2020A
(Federally Taxable)

INTRODUCTION

This Official Statement (including the cover page and Appendices attached hereto) provides certain information in connection with the issuance by the Massachusetts State College Building Authority (the "Authority") of its $395,735,000 Refunding Revenue Bonds, Series 2020A (Federally Taxable) (the "Series 2020A Bonds"). The Series 2020A Bonds are being issued pursuant to Chapter 703 of the Massachusetts Acts of 1963, as amended (the "Act"), and under the Trust Agreement dated as of November 1, 1994, as amended, between the Authority and U. S. Bank National Association, as successor Trustee (the "Trustee"). The Trust Agreement dated as of November 1, 1994, as amended, restated and supplemented to the date of issuance of the Series 2020A Bonds, is herein referred to as the "Trust Agreement." Reference is also made to the Contract for Financial Assistance, Management and Services dated as of February 1, 2003, as amended and restated (the "Contract"), between the Authority and the Commonwealth of Massachusetts (the "Commonwealth"), acting by and through its Board of Higher Education ("BHE"), and acknowledged by the Comptroller of the Commonwealth. As used herein, the term "Bonds" means the Series 2020A Bonds, all outstanding bonds issued under the Trust Agreement and all additional parity bonds to be issued under the Trust Agreement in the future. For definitions of certain other capitalized terms used but not defined herein, see the "Summary of Legal Documents" in Appendix D.

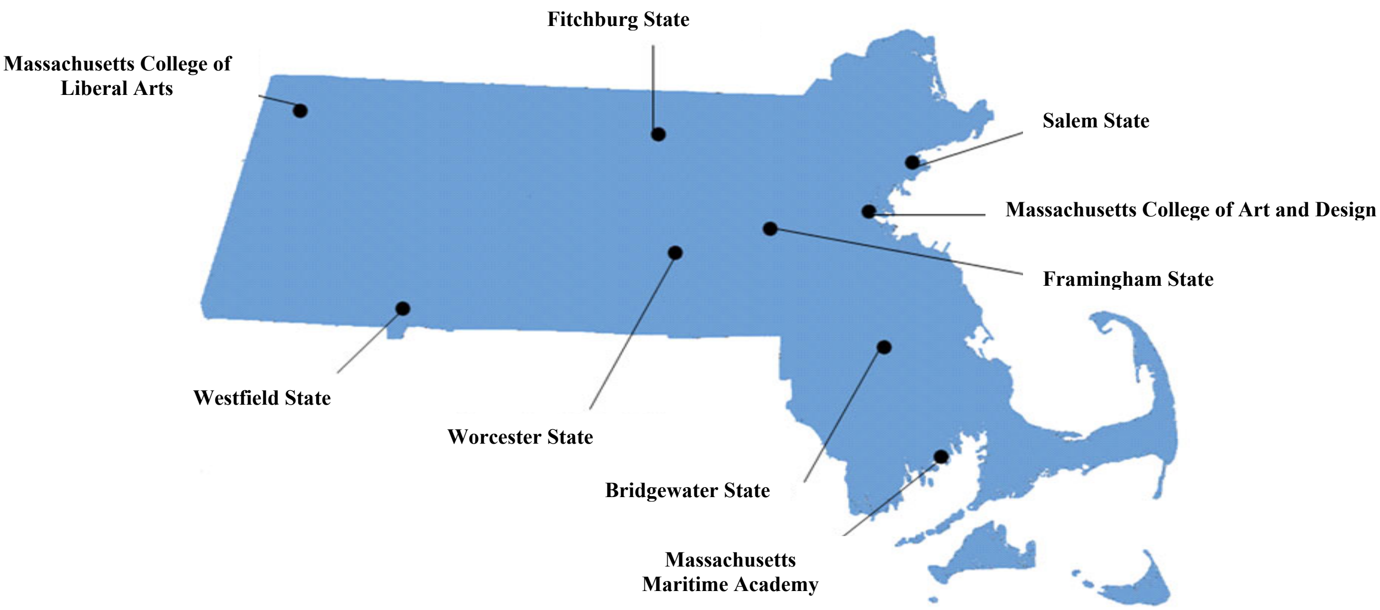
The Series 2020A Bonds will be special obligations of the Authority secured by a pledge of revenues, as more fully described herein, on a parity with all outstanding Bonds of the Authority. In addition, the Series 2020A Bonds will be secured by an intercept of Commonwealth appropriations to the State Universities, as more fully described herein. The Series 2020A Bonds shall not be deemed to constitute a debt or liability of the Commonwealth or any political subdivision thereof. Neither the faith and credit nor the taxing power of the Commonwealth or of any political subdivision or instrumentality thereof is pledged to the payment of the principal of or premium or interest on the Series 2020A Bonds. The Authority does not have taxing power. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS" herein.

The Series 2020A Bonds are being issued to refund certain Bonds (or portions thereof) of the Authority, as set forth in "Sources and Uses of Funds – Plan of Refunding" and in Appendix G – Table of Refunded Bonds. See "Sources and Uses of Funds – Plan of Refunding" herein.

The Authority

The Authority was created by the Act in 1963 to finance, design and construct residential, dining, parking, athletic, cultural, healthcare, and other revenue-producing facilities for the Massachusetts state colleges, which include the public institutions of higher education in the state university segment and the community college segment. The state university segment includes: Bridgewater, Fitchburg, Framingham, Salem, Westfield and Worcester State Universities, Massachusetts College of Liberal Arts, Massachusetts College of Art and Design, and Massachusetts Maritime Academy. The community college segment includes: Berkshire, Bristol, Bunker Hill, Cape Cod, Greenfield, Holyoke, Massachusetts Bay, Massasoit, Middlesex, Mount Wachusett, North Shore, Northern Essex, Quinsigamond, Roxbury, and Springfield Technical Community Colleges. The Series 2020A Bonds, the Trust Agreement and the Contract relate only to the state university segment. Authority financings for the community college segment are undertaken under an entirely separate credit structure.

The Authority's residence halls portfolio currently has capacity for approximately 16,900 students in 55 residential complexes. These facilities house approximately 41% of the undergraduate student population and comprise approximately 4.4 million square feet of space on the nine State University campuses. There are no residence halls on the Community College campuses. See "THE AUTHORITY" and "COVID-19" herein.



Purpose and Content of Official Statement

This Official Statement describes the terms and use of proceeds of, and security for, the Series 2020A Bonds. This introduction is subject in all respects to the additional information contained in this Official Statement, including Appendices A through G. All descriptions of documents contained herein are only summaries and are qualified in their entirety by reference to each such document.

Appendix E attached hereto contains the proposed form of legal opinion of Bond Counsel with respect to the Series 2020A Bonds. Appendix F attached hereto contains the proposed form of the Authority's and BHE's continuing disclosure undertaking to be entered into upon the issuance of the Series 2020A Bonds and referenced in the form of the Series 2020A Bonds to facilitate compliance by the underwriters of the Series 2020A Bonds with the requirements of paragraph (b)(5) of Rule 15c2-12 of the Securities and Exchange Commission. Appendix G attached hereto contains a listing of the Bonds or portions thereof to be refunded with the proceeds of the Series 2020A Bonds.

THE SERIES 2020A BONDS

General

The Series 2020A Bonds will be issued as fully registered bonds in the aggregate principal amounts as set forth on the inside cover page hereof, will be dated the date of delivery and will bear interest from that date to their respective maturities as set forth on the inside cover page hereof, subject to redemption as described below. Ownership interests in the Series 2020A Bonds will be available in denominations of $5,000 and integral multiples thereof. Interest on the Series 2020A Bonds will be payable on each May 1 and November 1, commencing November 1, 2020.

So long as Cede & Co. is the registered owner of the Series 2020A Bonds, all payments of principal and interest on the Series 2020A Bonds are payable by wire transfer by the Trustee to Cede & Co. as nominee for The Depository Trust Company ("DTC"), New York, New York, which will, in turn, remit such amounts to the DTC Participants for subsequent disposition to Beneficial Owners. The record date for principal and interest payments will be the fifteenth day of the month next preceding the debt service payment date. See Appendix C "Book-Entry Only System" herein.

Redemption Provisions

<u>Optional Redemption for the Series 2020A Bonds</u>. The Series 2020A Bonds maturing on May 1, 2040 and May 1, 2049 are subject to redemption, at the option of the Authority, in whole or in part at any time, on any date on

or after May 1, 2030, on a pro rata basis at a Redemption Price equal to 100% of the principal amount of such Series 2020A Bonds or portions thereof to be redeemed, plus accrued interest to the redemption date.

The Series 2020A Bonds maturing on or before May 1, 2035 will be subject to redemption on any date and the Series 2020A Bonds maturing on May 1, 2040 and May 1, 2049 will be subject to redemption on any date before May 1, 2030, at the option of the Authority, in whole or in part (on a pro rata basis with respect to the Series 2020A Bonds to be redeemed as described below) at any time, at a Redemption Price equal to the greater of:

(i) 100% of the principal amount of the Series 2020A Bonds to be redeemed; or

(ii) the sum of the present values of the remaining scheduled payments of principal and interest on the Series 2020A Bonds to be redeemed (exclusive of interest accrued to the date fixed for redemption) discounted to the date of redemption on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 25 basis points, plus accrued and unpaid interest on the Series 2020A Bonds being redeemed to the date fixed for redemption.

"Treasury Rate" means, with respect to any redemption date for a particular Series 2020A Bond, the yield to maturity as of such redemption date of United States Treasury securities with a constant maturity (as compiled and published in the Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two Business Days, but not more than 45 calendar days, prior to the redemption date (excluding inflation indexed securities) (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption date to the maturity date of the Series 2020A Bond to be redeemed; provided, however, that if the period from the redemption date to such maturity date is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used.

Mandatory Sinking Fund Redemption of the Series 2020A Bonds. The Series 2020A Bonds maturing May 1, 2040 and May 1, 2049 shall be subject to mandatory sinking fund redemption and shall be redeemed prior to their stated maturity, from Sinking Fund Installments, payable on the dates and in the amounts set forth below, at a Redemption Price of 100% of the principal amount of such Series 2020A Bonds called for redemption, plus accrued interest to the redemption date as follows:

Series 2020A Bonds Maturing May 1, 2040

Date (May 1)	Amount
2036	$26,865,000
2037	25,545,000
2038	26,105,000
2039	19,640,000
2040*	14,400,000

* Maturity

Series 2020A Bonds Maturing May 1, 2049

Date (May 1)	Amount
2041	$15,095,000
2042	11,695,000
2043	8,195,000
2044	12,195,000
2045	6,220,000
2046	6,410,000
2047	6,610,000
2048	6,815,000
2049*	3,270,000

* Maturity

The Authority is entitled to reduce its mandatory sinking fund redemption obligation in any year with respect to the Series 2020A Bonds by the principal amount of any Series 2020A Bonds previously purchased or optionally redeemed by the Authority.

Pro Rata Redemption of the Series 2020A Bonds. If the Series 2020A Bonds are registered in book-entry-only form and so long as DTC or a successor securities depository is the sole registered owner of the Series 2020A Bonds, partial redemptions with respect to the Series 2020A Bonds will be treated by DTC as a "pro rata pass-through distribution of principal" in accordance with DTC procedures. It is the Authority's intent that redemption allocations made by DTC, the DTC Participants or such other intermediaries that may exist between the Authority and the beneficial owners be made on a pro rata pass-through distribution of principal basis. However, the Authority can provide no assurance that DTC, the DTC Participants or any other intermediaries will allocate redemptions among beneficial owners on such a proportional basis. If the DTC operational arrangements do not allow for the redemption of Series 2020A Bonds on a pro rata pass-through distribution of principal basis, then the Series 2020A Bonds will be selected for redemption, in accordance with DTC procedures, by lot.

If the Series 2020A Bonds are not registered in book-entry-only form, any redemption of less than all of the Series 2020A Bonds of any maturity will be allocated among the registered owners of such Series 2020A Bonds as nearly as practicable in proportion to the principal amounts of the Series 2020A Bonds of such maturity owned by each registered owner, subject to the authorized denominations applicable to the Series 2020A Bonds.

Notice of Redemption. The Trustee is required to give notice of redemption of any Series 2020A Bonds, specifying, among other things, the date of redemption, the portions of the principal amounts thereof to be redeemed and the redemption price, by mailing, postage prepaid, not more than 45 days nor less than 30 days prior to the redemption date, copies thereof to the registered holder of any Series 2020A Bonds, or portions thereof, to be redeemed.

Notice having been given as specified above, the Series 2020A Bonds so called for redemption shall be due and payable on the redemption date, interest from and after such date shall cease to accrue thereon and such Series 2020A Bonds shall cease to be entitled to any security under the Trust Agreement except as to payment from funds set apart therefor of the redemption price and interest accrued to the date of redemption. The mailing of notice of redemption shall not be a condition precedent to redemption, and failure to mail any such notice to any particular registered holder or any defect therein shall not affect the validity of the proceedings for the redemption of any other Series 2020A Bonds.

SOURCES AND USES OF FUNDS

The proceeds from the sale of the Series 2020A Bonds are expected to be applied as follows (rounded to the nearest dollar):

Sources of Funds	Total
Par Amount	$395,735,000.00
Total	$395,735,000.00

Uses of Funds	
Deposit to Refunding Escrow Fund	$393,488,907.62
Underwriters' discount and costs of issuance	2,246,092.38
Total	$395,735,000.00

Plan of Refunding

The proceeds of the Series 2020A Bonds, together with certain earnings thereon, will be used to refund the Bonds or portions thereof listed in Appendix G (the "Refunded Bonds") and to pay costs of issuance of the Series 2020A Bonds. A portion of the proceeds of the Series 2020A Bonds will be used to refund certain of the Refunded Bonds on their redemption dates in order to achieve debt service savings. The Authority will also use a portion of the proceeds of the Series 2020A Bonds to refund certain of the Refunded Bonds that are due and payable on May 1, 2021 and May 1, 2022 in order to provide fiscal relief for the State Universities in fiscal years 2021 and 2022 to assist them in dealing with the impacts of the COVID-19 pandemic and the related public health mitigation efforts. See "COVID-19" herein. The proceeds of the Series 2020A Bonds that will be used to refund the Refunded Bonds will be deposited in accounts of the refunding escrow fund held by U. S. Bank National Association, Boston, Massachusetts, as refunding trustee, and will be invested in Defeasance Obligations. According to the report described in "VERIFICATION OF MATHEMATICAL CALCULATIONS," such investments will mature at such times and earn interest in such amounts that will produce sufficient moneys, together with any initial cash deposits, to provide for the payment of principal of and redemption premium, if any, and interest on the Refunded Bonds. The refunding is contingent upon the delivery of the Series 2020A Bonds.

SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS

General

The following summary of the security for the Series 2020A Bonds is qualified in its entirety, and reference is hereby made to Appendix D hereto and to the Trust Agreement and the Contract which set forth in further detail the provisions relating to the security for the Series 2020A Bonds.

The Series 2020A Bonds will be issued pursuant to the Act and under the Trust Agreement. The Series 2020A Bonds are special obligations of the Authority payable solely from the Revenues and Pledged Funds provided under the provisions of the Act, the Trust Agreement and the Contract, subject only to the provisions of the Trust Agreement regarding the application of Revenues and Pledged Funds.

Pursuant to the Trust Agreement, the Authority has covenanted to fix, revise and adjust fees, rents, rates and other charges for the use of its projects in accordance with the Trust Agreement to assure the timely payment of debt service on the Bonds and to meet all other requirements with respect to such Bonds. See "Rate Covenant," below. The Trust Agreement assigns to the Trustee all rights of the Authority under the Contract to receive Revenues payable to the Authority thereunder and pledges the Revenues to the Trustee for the benefit of the Owners of the Bonds.

Bonds

In March, 2003, the Authority amended and restated the Trust Agreement and defeased all of the bonds previously issued under the Trust Agreement except for certain senior-lien Commonwealth-guaranteed bonds that are no longer outstanding. The Series 2020A Bonds will be the twenty-fifth series of Bonds issued by the Authority since March, 2003 that are secured by a parity lien on the Revenues of the Authority. Such Bonds, together with bonds to be issued in the future on parity with the Bonds under the Trust Agreement, are referred to herein as "Bonds."

After the issuance of the Series 2020A Bonds, there will be approximately $1.20 billion of Bonds outstanding.

All Bonds are special obligations of the Authority payable solely from the Revenues and Pledged Funds provided under the provisions of the Act, the Trust Agreement and the Contract, subject only to the provisions of the Trust Agreement regarding the application of Revenues and Pledged Funds.

The Series 2020A Bonds, the Trust Agreement and the Contract relate only to the state university segment. Authority financings for the community college segment are undertaken under an entirely separate credit structure.

Pledge of Revenues

Under the Trust Agreement, the Authority has pledged as security for the Bonds (i) all Revenues, (ii) all moneys and securities on deposit in all funds and accounts created under the Trust Agreement (except moneys or securities in the Operating Fund and the Rebate Fund), (iii) all Pledged Funds and (iv) all rights of the Authority under the Contract to receive all Revenues and Pledged Funds payable to the Authority and pledged under the Trust Agreement.

The term "Revenues" is defined in the Trust Agreement to include the following: (i) all moneys received by the Authority in payment of fees, rents, rates and other charges for the use and occupancy of, and for the services and facilities provided by any Project, including, without limitation, the moneys which the BHE is required to remit to the Authority under the Contract and all other income derived by the Authority from the operation, ownership or control of the Projects and (ii) any other amounts designated as Revenues under the Contract. The term "Revenues" does not include Pledged Funds.

Flow of Funds

The Trust Agreement provides that the Authority shall promptly deposit all Revenues, except earnings on investment of the funds and accounts held under the Trust Agreement, into the Revenue Fund to be applied as follows on the last business day of each February and on each October 10 (or the next preceding business day, if October 10 is not a business day):

> *First*, to the Debt Service Fund, an amount which, when added to other amounts on deposit in such Fund and available for such purpose, including amounts in any capitalized interest account that may have been established by the applicable Supplemental Trust Agreement, will equal the interest to become due and payable on Outstanding Bonds on the next interest payment date and any Principal Installment to become due and payable on Outstanding Bonds on or before the next date (within the next twelve months) on which such Principal Installment is payable (and if the amount on deposit in the Debt Service Fund shall be less than such required amount, the Trustee shall notify the Authority and the BHE in writing of the amount of the deficiency and request payment of such amount pursuant to the Contract);
>
> *Second*, to the Debt Service Reserve Fund, an amount which, together with the amounts on deposit therein, will equal the Debt Service Reserve Fund Requirement;
>
> *Third*, to the Authority for deposit in the Operating Fund, the amount directed to be deposited therein by an Authorized Officer of the Authority for the purposes of paying Operating Expenses;
>
> *Fourth*, to the Authority for deposit in the System Projects Capital Improvement Reserve Account or one or more Campus Project Capital Improvement Reserve Accounts in the Capital Improvement Reserve Fund, the amount, if any, directed in writing to be deposited therein by an Authorized Officer of the Authority; and
>
> *Fifth*, to the Authority for deposit in the Multipurpose Reserve Fund, the amount, if any, directed in writing to be deposited therein by an Authorized Officer of the Authority.

Any balance remaining in the Revenue Fund following the above payments shall be retained in the Revenue Fund to be available for payments therefrom.

Rate Covenant

Pursuant to the Trust Agreement, the Authority covenants to fix, revise, adjust and collect fees, rents, rates and other charges for the use of the Projects of the Authority at least sufficient, with other available funds, to pay or provide for, as the same become due or are payable, (i) all Operating Expenses of the Projects, (ii) all payments of the Principal Installments and Redemption Price of and interest on Outstanding Bonds allocable to the Projects, (iii) all amounts payable to the Debt Service Reserve Fund and allocable to the Projects and (iv) all other amounts that the Authority may by law or contract be obligated to pay from Revenues allocable to the Projects. When fixing fees, rents, rates and other charges for the State Universities pursuant to the Trust Agreement, the Authority is required, insofar as consistent with the rate covenant, to maintain reasonable uniformity of charges for like rooms or other accommodations, facilities and services at the State Universities whether or not contained in or provided by a Project of the Authority. To the extent the Act requires the approval of the BHE for the fixing, revision or adjustment of fees, rents, rates or other charges by the Authority, the Authority also covenants to use its best efforts to obtain such approval.

Under the Act and the Contract, in the event that the BHE does not approve the Authority's proposed schedule of fees, rents, rates and charges by March 31 of a particular year and if the BHE has not proposed an alternative schedule of fees, rents, rates and charges by March 1 in such year that will produce sufficient revenues to pay debt service and other costs described above, the Authority may proceed to fix fees, rents, rates and other charges without BHE approval if necessary to provide sufficient revenues to pay debt service and such other required costs described above. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Annual Budget and the Fixing of Rents and Fees*" and "THE BOARD OF HIGHER EDUCATION."

Debt Service Reserve Fund

The Trust Agreement establishes a Debt Service Reserve Fund as security for all Bonds and requires it to be funded in an amount equal to the Debt Service Reserve Fund Requirement. Until the issuance of the Authority's Refunding Revenue Bonds, Series 2019C (Federally Taxable) (the "Series 2019C Bonds") on November 19, 2019, the term "Debt Service Reserve Fund Requirement" meant, as of any date of calculation, an amount equal to the least of (i) 10% of the aggregate original net proceeds from the sale of all Bonds Outstanding, (ii) 125% of average annual Debt Service on all Bonds Outstanding and (iii) the maximum amount of Debt Service due in any future Fiscal Year on all Bonds Outstanding. Upon the issuance of the Series 2019C Bonds, the consent of a majority of the Owners of the Bonds was obtained to amend the Trust Agreement to eliminate the Debt Service Reserve Fund Requirement by reducing the amount of the Requirement to zero (the "Amendment") and the Amendment took effect. Although the Authority currently has amounts on deposit in the Debt Service Reserve Fund, it is no longer obligated under the Trust Agreement to continue to retain such amounts in the Fund or to make any additional deposits to the Fund. The Authority may determine at any time and from time to time to transfer moneys from the Debt Service Reserve Fund as permitted under the Trust Agreement.

See "SUMMARY OF LEGAL DOCUMENTS – Summary of the Trust Agreement; *Debt Service Reserve Fund*" in Appendix D.

Other Reserves

The Trust Agreement also establishes a Capital Improvement Reserve Fund and a Multipurpose Reserve Fund. Moneys on deposit in the Capital Improvement Reserve Fund and the Multipurpose Reserve Fund are available to pay debt service on Bonds. The Contract requires each State University to maintain an operating reserve within the trust fund for the Projects on its campus to provide for extraordinary and unexpected operating, maintenance and repair costs for its Projects (with the exception of non-residential Projects for which the requirement may be waived). See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Trust Funds and Reserves of State Universities*." See also "SUMMARY OF LEGAL DOCUMENTS – Summary of the Trust Agreement; *Capital Improvement Reserve Fund*" and "SUMMARY OF LEGAL DOCUMENTS – Summary of Contract for Financial Assistance, Management and Services; *Operating Reserves*" and "SUMMARY OF LEGAL DOCUMENTS –

Summary of Contract for Financial Assistance, Management and Services; *Capital Improvement Reserve Accounts*" in Appendix D.

Capital Improvement Reserve Fund. The Trust Agreement establishes the Capital Improvement Reserve Fund, including the following accounts within such fund: the "System Projects Capital Improvement Reserve Account" and separate "Campus Project Capital Improvement Reserve Accounts" for each State University at which a Campus Project is located. The Capital Improvement Reserve Fund is funded from amounts required by the Contract to be deposited by the State Universities at the times specified by the Authority's annual operating budget, which is required by the Contract to be submitted to the BHE by February 1 of each year (the "Annual Budget"). The Authority may apply amounts in the System Projects Capital Improvement Reserve Account to Project Costs of any System Project and may apply amounts in a Campus Project Capital Improvement Reserve Account to Project Costs of any Campus Project located at the State University to which said account relates. The Authority may, in its discretion, transfer amounts in the Capital Improvement Reserve Fund to the Trustee for deposit in the Revenue Fund or the Multipurpose Reserve Fund. Under the Trust Agreement, the Authority has covenanted to cause its architects and engineers to make regular inspections of the Authority's Projects and periodically to assess the state of repair of the Projects. If the Authority's architects and engineers find that any of the Projects has not been maintained in good repair, the Authority has further covenanted that it will, to the extent consistent with sound business judgment, restore such Project to good repair as expeditiously as practicable and will make adequate provision therefor in its capital improvements budget.

System Projects Capital Improvement Reserve Account. "System Projects" are projects financed with Bonds issued before 1998. Amounts held in the System Projects Capital Improvement Reserve Account are maintained to make Capital Improvements to System Projects. Under the Contract, the System Projects Capital Improvements Reserve Account requirement for each fiscal year is an amount equal to 7.5% of the total Revenues collected with respect to System Projects during such fiscal year or such greater amount as may be specified by the Authority's Annual Budget as being required by the Trust Agreement to be so deposited.

Campus Project Capital Improvement Reserve Accounts. "Campus Projects" are projects financed and those to be financed in the future with Bonds issued after 1998. Amounts held in each Campus Project Capital Improvement Reserve Account are maintained to make Capital Improvements to Campus Projects. Separate Campus Project Capital Improvement Reserve Accounts are held by the Trustee for each State University at which a Campus Project is located. Under the Contract, commencing with the second full fiscal year after completion of a Campus Project (with the exception of non-residential Projects for which the requirement has been waived), each applicable State University is required to pay to the Trustee for deposit in the applicable Campus Project Capital Improvement Reserve Account the greater of the amount specified in the Authority's Annual Budget as being required by the Trust Agreement to be so deposited or an amount not less than the following percentages of Revenues collected with respect to each such Campus Project during the prior fiscal year: (i) in the second fiscal year after completion of the Campus Project, and in each of the next seven fiscal years, 2.5%, (ii) in each of the next five fiscal years, 5%, and (iii) in each year thereafter, 7.5%. The Authority expects this provision of the Contract to be amended in connection with the issuance of the Series 2020A Bonds to calculate the required deposit to the Campus Project Capital Improvement Reserve Account as provided in the preceding sentence, except the calculation will be based on the Revenues collected with respect to each Campus Project during the same fiscal year instead of the calculation being based on the Revenues collected during the prior fiscal year.

Multipurpose Reserve Fund. The Multipurpose Reserve Fund is funded from the Revenue Fund at the discretion of the Authority to the extent provided in any Supplemental Trust Agreement or as directed in a certificate of an Authorized Officer of the Authority. Amounts not subject to the lien of the Trust Agreement may be deposited by the Authority in the Multipurpose Reserve Fund at any time. In recent years, the Multipurpose Reserve Fund has been funded at $1,400,000 per year from assessments on System Projects. The Authority may apply amounts in the Multipurpose Reserve Fund to any lawful purpose.

Campus Project Operating Reserves. The Contract requires each State University with a Campus Project (with the exception of non-residential Projects for which the requirement may be waived) to maintain within its trust fund for the Projects a minimum balance as an operating reserve. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Trust Funds and Reserves of State Universities*." Pursuant to the Authority's Annual Budget, and at such time or times in each fiscal year as may be specified in the Annual Budget, commencing with the second full Fiscal Year after completion of a Campus Project, the applicable State University is required to add to the balance in such trust fund held as an operating reserve the amount, if any, necessary to cause such reserve amount to equal the following percentages of the operating expenses for the Campus Project for the fiscal year prior to the year in which the deposit is to be made: (i) in the second full fiscal year after completion of the Campus Project, 1%, (ii) in the third year, 2%, (iii) in the fourth year, 3%, (iv) in the fifth year, 4%, and (v) in the sixth year and thereafter, 5%.

Moneys held in the operating reserve may be expended by a State University for the payment of extraordinary and unexpected operating, maintenance and repair costs or to meet budgetary shortfalls with respect to the applicable Campus Project resulting from an unexpected decline in use of the Campus Project, damage to or destruction of a portion of the Campus Project or any other unexpected occurrence with respect to the Campus Project. Moneys withdrawn from the operating reserve must be replenished by the State University by the end of the next fiscal year after such withdrawal, in addition to the annual deposits described above.

The Contract

The Authority and the BHE have entered into the Contract in order to provide Revenues and Pledged Funds for the payment of debt service on the Bonds. The BHE, acting in the name of the Commonwealth, is authorized by the Act to enter into the Contract and to offer the services of the various State Universities. The Trust Agreement assigns to the Trustee all rights of the Authority under the Contract to receive Revenues payable to the Authority thereunder.

Annual Budget and the Fixing of Rents and Fees. The Contract requires the Authority to submit its Annual Budget to the BHE by February 1 of each year detailing, among other things, projected costs of operating, maintaining and repairing the Projects, the Authority's projected debt service costs, the Authority's projected operating and administrative costs, any projected required deposits to reserves, any projected payments to the Commonwealth pursuant to the Act and any additional reserves the Authority may propose to create or augment consistent with the Trust Agreement. The Contract also requires the Authority to include in its Annual Budget a fixing of fees, rents, rates and other charges for the use of the Projects by the State Universities. The fees, rents, rates and other charges for the use of the Projects are required to be sufficient, in the aggregate, together with other available moneys, to cover all of the costs (including debt service) and transfers to reserves as aforesaid allocable to the Projects. When fixing rents and fees in the case of a Campus Project that is not a Campus Residence Hall Project, such fees, rents, rates and other charges are required by the Contract to be fixed so as to be sufficient, in the aggregate, to cover all of the debt service and operating costs and transfers to reserves described above, provided that, in the case of operating and maintenance costs, the fees, rents, rates and other charges need only be sufficient to cover costs that are borne directly by the Authority. Under the Act and the Contract, the fixing or revision of fees, rents, rates and other charges by the Authority requires the prior approval of the BHE. However, if the BHE does not approve the Authority's proposed schedule of fees, rents, rates and charges by March 31 in a particular year and if the BHE has not proposed an alternative schedule of fees, rents, rates and charges by March 1 in such year that will produce sufficient revenues to pay debt service and other required costs described above, the Authority may proceed to fix fees, rents, rates and other charges without BHE approval if necessary to provide sufficient revenues to pay debt service and other required costs as described above. Under the Contract, the State Universities remain responsible for collecting rents and for the day-to-day operation of the Authority's projects, though the Authority reserves the power to contract with third parties for the operation of particular Projects.

Pledged Funds. As additional security for all Bonds, the BHE under the Contract pledges a portion of each State University's non-appropriated funds or other revenues legally available to the State University, including without limitation tuition, fees and other charges (the "Trust Funds") in an amount equal to 25% of the average annual aggregate debt service costs allocable to such State University's Projects. The aggregate amount of Trust Funds of a particular State University that are pledged are referred to herein as the "Pledged Trust Funds" of the State University. As of June 1, 2020, the aggregate amount of Pledged Trust Funds pledged by the various State Universities ranged from $575,995 to $4,633,300.

The BHE under the Contract also pledges the entirety of the annual appropriations made by the Legislature on behalf of each State University ("Pledged Appropriations") to secure Bonds. The pledge of appropriations and the payment mechanisms associated with it are sometimes referred to as an "appropriation intercept." See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Commonwealth Appropriation Intercept." Pledged Trust Funds and Pledged Appropriations are collectively referred to herein as "Pledged Funds."

The Contract requires the BHE to make payments from Pledged Funds if and to the extent Revenues related to a particular State University and other moneys received by the Authority or otherwise available pursuant to the Trust Agreement in connection with the Projects of such State University are insufficient to pay debt service on the Bonds allocable to such Projects and the Authority's expenses in connection with such Bonds or such Projects. Upon receipt from the Authority or the Trustee of notice of any such insufficiency relating to a particular State University, the BHE is required, as promptly as practicable, to pay to the Trustee, or to cause the applicable State University to pay to the Trustee, from the Pledged Funds of such State University the amount of such insufficiency. Pledged Funds may also be used to replenish the Debt Service Reserve Fund in the event of a withdrawal precipitated by such a deficiency. The Pledged Trust Funds of one State University may not be used to make payments on behalf of any other State University. However, if the Pledged Trust Funds of the applicable State University have been exhausted and the Pledged Appropriations of such State University are insufficient to cover the insufficiency, the BHE is required to pay to the Trustee, or cause the Trustee to be paid, the amount of the remaining insufficiency from the Pledged Appropriations of all of the State Universities, ratably, according to the percentage of outstanding Bonds then allocable to each particular State University. In order to comply with the provisions of the Contract or to effectuate the pledge of Pledged Funds, the BHE is required to take all actions necessary or desirable to effectuate transfers from funds made available for expenditure on behalf of an applicable State University pursuant to an appropriation or other spending authorization in the Commonwealth's annual operating budget, including supplemental and deficiency budgets.

Under the Contract, the BHE and/or any State University is permitted to grant a lien on Pledged Funds on a parity with the pledge made to the holders of the Bonds if the BHE or the applicable State University, as the case may be, certifies in writing to the Authority that the total revenues available for expenditure by the applicable State University during each of the three most recently completed fiscal years (including the Pledged Funds, but excluding any Revenues, in respect of such State University) were not less than 200% of the maximum annual debt service requirements on all outstanding debt obligations allocable to such State University, all other outstanding debt obligations issued by the Authority to finance or refinance Projects for such State University and any debt obligation being issued in connection with the creation of such parity pledge.

The Contract requires the Authority to keep an accurate account of the sufficiency of available funds to pay debt service on its outstanding indebtedness, including without limitation Pledged Funds and to provide the BHE and the Comptroller with reports as to the sufficiency of available funds to pay debt service no later than September 30, in the case of payments due November 1, and no later than January 31, in the case of payments due May 1. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Commonwealth Appropriation Intercept." If such report is not received by the Comptroller during the month of September or January, as the case may be, the Contract requires the Comptroller to prevent any amounts from being expended from the appropriations account of any State University until such time as the Comptroller has determined whether there is an insufficiency of available funds to pay debt service. If such report indicates that there is an insufficiency of funds available to pay debt service, or if, in the absence of a report, the Comptroller ascertains that there is such as insufficiency, the Comptroller shall, within five days, but not later than the last business day in February (in the case of a May 1 debt service payment) or October 10 (in the case of a November 1 debt service payment), transfer amounts, without further allotment, from the appropriation account of one or more State Universities, as appropriate, to cure such insufficiency in accordance with the provisions of this section.

See Appendix D – "SUMMARY OF LEGAL DOCUMENTS – Summary of Contract for Financial Assistance, Management and Services; *Payments from Pledged Funds*."

Trust Funds and Reserves of State Universities. The Contract requires each State University to hold all revenues derived from Projects separate and apart from all other moneys and to deposit all revenues derived from Projects into a trust fund held by such State University. State Universities that have Campus Projects also are required, pursuant to the Contract, to maintain a minimum balance as an operating reserve within such trust fund for the Projects (with the exception of non-residential Projects for which the requirement may be waived). See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Other Reserves; *Campus Project Operating Reserves.*" Such trust funds are held by the State Universities in trust for the Authority and are distinct from the Pledged Trust Funds described above which consist of the State Universities' own assets and which are pledged as additional security for the Bonds. Such trust funds are accounted for in the financial statements of the individual State Universities and not in the financial statements of the Authority.

The Contract also requires each State University to make a deposit into the Capital Improvement Reserve Fund held under the Trust Agreement in the amount and at the times specified in the Authority's Annual Budget. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Other Reserves; *Capital Improvement Reserve Fund*" above.

Commonwealth Appropriation Intercept

As additional security for all Bonds, the Act and the Contract provide for an intercept of legislative appropriations to the State Universities, if the Authority lacks sufficient funds to pay debt service. See "SECURITY FOR AND SOURCE OF PAYMENT FOR THE BONDS – The Contract; *Pledged Funds*."

The Authority is required to keep an accurate account of the sufficiency of available funds to pay debt service on its outstanding indebtedness, including without limitation Pledged Funds, and to provide the BHE and the Comptroller with reports as to the sufficiency of available funds to pay debt service no later than September 30, in the case of payments due November 1, and no later than January 31, in the case of payments due May 1. If such report is not received by the Comptroller by September 30 or January 31, as the case may be, the Act requires the Comptroller to prevent any amounts from being expended from the appropriation account of any State University until such time as the Comptroller has determined whether there is an insufficiency of available funds to pay debt service. If such report indicates or, in the absence of such report, if the Comptroller determines that such an insufficiency exists, the Comptroller must transfer amounts, without further allotment, from such State University's appropriations account to cure such insufficiency within five days, but in any event no later than the applicable deposit date (October 10 in the case of a November 1 debt service payment and the last business day of February in the case of a May 1 debt service payment). If the Pledged Trust Funds of the applicable State University have been exhausted and the Pledged Appropriations of such State University are insufficient to cover the insufficiency, the BHE is required to pay to the Trustee, or cause the Trustee to be paid, the amount of the remaining insufficiency from the Pledged Appropriations of all of the State Universities, ratably, according to the percentage of outstanding Bonds then allocable to each particular State University.

In addition, the Trustee is required to give notice directly to the BHE and the Comptroller if there is an insufficiency of funds on any such deposit date. See Appendix D – "SUMMARY OF LEGAL DOCUMENTS – Summary of the Trust Agreement; *Pledged Funds*."

<u>Total Budgeted Appropriations for the System of Public Higher Education.</u> The following table sets forth appropriation information for the system of public higher education for fiscal years 2010-2020 as enacted in the original budgets for the related fiscal years. The Commonwealth makes budgetary adjustments over the course of each fiscal year which have resulted in increases and decreases to the original budgeted amounts. The Commonwealth is not obligated to continue to appropriate such money on an annual basis, and the Legislature may fail to make or may reduce appropriations in the future. Commonwealth appropriations for State Universities are disbursed evenly throughout the year to cover payroll costs.

Total Budgeted Appropriations for the System of Public Higher Education
(Fiscal 2010 – 2020)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bridgewater	$33,012,270	$36,796,245	$33,860,038	$33,860,038	$40,591,669	$40,591,669	$42,461,139	$43,592,400	$44,027,968	$45,569,315	$48,394,114
Fitchburg	23,218,183	25,882,973	23,467,647	23,467,647	27,430,823	27,430,823	28,474,577	29,109,894	29,400,755	30,430,027	32,009,925
Framingham	20,748,941	23,130,332	21,266,256	21,466,256	24,964,332	25,164,332	26,466,879	27,637,347	27,913,495	29,890,701	31,341,005
Mass. College of Art	12,692,230	14,150,408	13,405,202	13,405,202	16,353,460	16,353,460	17,201,537	17,899,354	18,078,201	18,711,090	19,665,615
Mass. College of Liberal Arts	11,999,050	13,376,973	12,559,859	12,559,859	14,779,296	14,779,296	15,523,258	16,233,085	16,319,534	16,888,607	17,745,143
Mass. Maritime Academy	11,753,330	13,102,278	12,330,691	12,330,691	14,734,703	14,734,703	15,541,878	16,344,745	16,344,745	16,929,177	18,335,358
Salem	33,249,600	37,065,712	34,614,021	34,614,021	41,482,180	41,482,180	43,129,420	44,004,594	44,444,281	46,000,203	48,463,307
Westfield	19,388,572	21,587,980	20,139,642	20,139,642	24,829,786	24,829,786	26,034,463	26,875,492	27,094,027	28,117,028	29,515,559
Worcester	19,760,543	22,028,495	19,941,794	19,941,794	24,128,143	24,128,143	25,276,495	26,368,898	26,632,372	27,564,727	28,923,383
Total State Universities	185,822,719	207,121,396	191,585,150	191,785,150	229,294,392	229,494,392	240,109,646	248,065,809	250,255,378	260,100,875	274,393,409
Community Colleges	204,012,305	227,424,464	208,154,311	208,154,311	225,670,016	249,348,859	260,880,694	271,266,283	276,593,627	284,643,883	295,291,787
University of Massachusetts	411,898,263	464,575,067	422,761,193	418,107,753	478,891,873	519,005,373	537,807,373	509,492,447	515,460,371	522,557,080	561,534,794
Total	$801,733,287	$899,120,927	$822,500,654	$818,047,214	$933,856,281	$997,848,624	$1,038,797,713	$1,028,824,539	$1,042,309,376	$1,067,301,838	$1,131,219,990

Source: Commonwealth of Massachusetts enacted budget, as summarized for the current fiscal year at http://www.mass.gov/bb/gaa.

THE AUTHORITY

General

The Authority was created in 1963 as a body politic and corporate and a public instrumentality placed in the Commonwealth's Department of Education, but not subject to the supervision or regulation of that Department or of any other department, commission, board, bureau or agency of the Commonwealth except as specifically provided in the Act.

The Authority was established for the general purpose of aiding and contributing to the performance of the educational and other purposes of the Massachusetts state colleges by providing dormitories, dining commons and other buildings, structures and facilities designed primarily for housing, feeding, medical care, parking, athletics and cultural and extracurricular and other student life activities and services primarily (i) for the use of the colleges, their students, staff and their dependents, (ii) for lease to or use by an organization or association of students or others, the activities of which are a part of the activities at one or more state colleges and subject to regulation by the BHE, or (iii) for lease to or use by any other entity the activities of which are approved by the BHE as furthering the purposes of one or more of the state colleges. Under the Act, the term "state colleges" includes the public institutions of higher education in the state university segment and the community college segment. The state university segment includes: Bridgewater, Fitchburg, Framingham, Salem, Westfield and Worcester State Universities, Massachusetts College of Liberal Arts, Massachusetts College of Art and Design, and Massachusetts Maritime Academy. The community college segment includes: Berkshire, Bristol, Bunker Hill, Cape Cod, Greenfield, Holyoke, Massachusetts Bay, Massasoit, Middlesex, Mount Wachusett, North Shore, Northern Essex, Quinsigamond, Roxbury, and Springfield Technical Community Colleges. The Series 2020A Bonds, the Trust Agreement and the Contract relate only to the state university segment. Authority financings for the community college segment are undertaken under an entirely separate credit structure.

Under the Act, the Authority must obtain a written request made by authority of the BHE and written approval from the Commonwealth's Secretary of Administration and Finance and Commissioner of Higher Education before initiating a project. The Act also requires the Authority to obtain the written approval of the BHE prior to refunding any of its outstanding bonds or notes.

The Authority is empowered, among other things, to acquire, construct, remove, demolish, add to, alter and do other work upon any building or structure and to provide and install furnishings, furniture, equipment and other facilities therein. The Act authorizes the Authority, among other things, 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 therefor payable solely from its revenues.

Pursuant to Section 156 of Chapter 131 of the Acts of 2010 ("Section 156"), the Authority is also authorized to provide supplemental financing for certain state university and community college projects under the Act that were authorized for funding by the Commonwealth pursuant to Chapter 258 of the Act of 2008.

The Act does not limit the amount of debt of the Authority that may be issued or outstanding. The Act requires approval by the Treasurer and Receiver-General of the Commonwealth and the Secretary of Administration and Finance of the Commonwealth of the sale and terms of bonds or notes sold by the Authority.

Members, Officers and Staff

The Authority consists of nine members appointed by the Governor of the Commonwealth, three of whom are to be appointive members of the BHE. Pursuant to the Act, each member continues in office for a term expiring on June thirtieth in the sixth calendar year after the calendar year in which the term of office of such member began, except that a person appointed to fill a vacancy in any such membership shall serve only for the unexpired term. Members serve until a successor is appointed and qualified. The members of the Authority are sometimes referred to as the Authority's board. The Authority annually elects a chairman and vice-chairman from its members and also elects a secretary-treasurer and may elect an assistant secretary-treasurer, neither of whom need be a member. There are currently two vacancies. The present members of the Authority are listed below.

David A. Ellis, Chair (member since 2008). Dr. Ellis is the Senior Vice President and Chief Financial Officer of Becker College. He is a past Vice President of Administration and Finance of Emerson College, past President, Vice President and Treasurer of Newbury College, past Vice President for Business and Financial Affairs of Pine Manor College, and he was Dean of Students at Babson College. Dr. Ellis holds a Bachelor of Science degree from the University of Miami, a Master of Education degree from the University of New Hampshire, a Master of Business Administration degree from Babson College and a Doctorate from Boston College. He has held positions of leadership in a number of professional organizations for student affairs, business and financial affairs, athletics and risk management disciplines. He currently serves on the Board of Overseers for the Boys & Girls Clubs of Boston and as the Chair of the Greater Boston Council of the American Diabetes Association.

Michael Fallon, Vice Chair (member since 2017). Mr. Fallon, Chief Investment Officer of The Fallon Company, is responsible for new acquisitions of real estate development and investment. Mr. Fallon brings expertise in real estate development, permitting, acquisition, and financing, as well as experience with State and Federal regulatory agency real estate and marine permitting. Previously, Mr. Fallon served as Materials Expediter and subsequently as an Engineer for Turner Construction of Boston, involved in the scheduling, fabrication, and construction of all major structural components. Mr. Fallon holds a Bachelor of Arts degree in International Relations and European Business and Economics from Boston University, and a Master's Degree in Finance from Bentley University.

John J. Burns, Secretary-Treasurer (member since 2016). Mr. Burns is President of Black Brook Realty Corporation. He also serves as Chairman, Board of Trustees, Milford Regional Medical Center, and is a member of the Boards of Trustees of the Tri-County Medical Associates and of Salem State University, and of the Board of Overseers of Babson College. He is also a past Chairman of the Hopkinton Chamber of Commerce, the Hopkinton Board of Assessors, the Hopkinton Education Foundation, and the Milford Regional Healthcare Foundation, as well as a past member of the Board of Directors for the Beacon Society of Boston, for the Strata Bank, for the Service Bank Corporation, MHC, and for Marathon Mortgage. He is the current Corporator of the Middlesex Savings Bank and a past President of the Crohn's and Colitis Foundation New England Chapter. Mr. Burns holds a Bachelor of Science in Business Administration from Salem State College.

Rosalind Gorin (member since 2018). Ms. Gorin is the third generation to lead her family's 105-year old real estate company, HN Gorin, Inc., a real estate investment and development company that acquires, develops, manages, and owns commercial, multi-family residential, industrial, and retail real estate.

James M. Karam (member since 2014). Mr. Karam is Vice President of First Bristol Corporation of Fall River, Massachusetts, a firm that develops and manages large scale commercial real estate projects throughout New England. Mr. Karam serves as President of the Board of Directors of the Fall River Boys and Girls Club, Treasurer of the Board of Directors of the Fall River Office of Economic Development and board member of the Saint Anne's Hospital. He is a graduate of Providence College.

James A. Peyser (member since 2018). As Secretary of Education, Mr. Peyser directs the Executive Office of Education. He is Governor Baker's top advisor on education and helps shape the Commonwealth's education reform agenda. Prior to his appointment as Secretary, he served as the Managing Director at NewSchools Venture Fund; as Chairman of the Massachusetts Board of Education; as advisor to Governors Bill Weld, Jane Swift and Mitt Romney; and as Under Secretary of Education and Special Assistant to Governor Weld for Charter Schools. He previously spent seven years as Executive Director of the Pioneer Institute for Public Policy Research. Secretary Peyser holds a Master of Arts in Law and Diplomacy from The Fletcher School (Tufts University) and a Bachelor of Arts from Colgate University.

Barbara Stern (member since 2018). Ms. Stern has spent her professional career leading transformation in human resources, diversity and inclusion, talent management, and organizational development. She was Global Director of Talent Management and Human Resources at McKinsey & Company through 2017; previously she served as Chief of Staff for the CEO of Harvard Pilgrim Health Care.

In addition to its Executive Director, the Authority employs capital project and financial management personnel for the purpose of managing its overall affairs. The Authority's staff, 12 in total, is responsible for management of facility planning, design and construction, strategic asset management, financial management, including overseeing operating budgets and advising the Authority in connection with setting rates and user fees, and implementing operating procedures. The present key staff members are listed below.

Edward H. Adelman, Executive Director and Assistant Secretary-Treasurer. Mr. Adelman joined the Authority as its Director of Capital Projects in 2002; in 2005, he was promoted to the position of Executive Director, where he is responsible for managing the real estate portfolio of 55 residence halls that house 17,000 students on nine campuses, coordinating strategic and other planning to ensure future capacity and occupancy, overseeing assessments and disbursements to service $1.3 billion of debt, and directing the issuance of new money and refunding bonds. Since 1979, Mr. Adelman has managed capital project planning, design and construction for public agencies and academic institutions, including Babson College, Brandeis University and Salem State University. Mr. Adelman is a registered architect in Massachusetts and a member of the American Institute of Architects, College of Fellows. He received a Bachelor of Architecture degree from Cornell University and a Master of Architecture degree from Kent State University.

Janet L. Chrisos, Deputy Director. Ms. Chrisos joined the Authority in 2005 as Capital Projects Coordinator having worked for the Authority as a consultant since 2003. In 2007, she was promoted to Director of Capital Projects and then to Deputy Director in 2013. Ms. Chrisos manages the Authority's project management staff and all design and construction activities of the Authority from project planning through delivery. She is also responsible for development of the multi-year integrated capital plan incorporating projected housing needs of the nine state universities, anticipated facility renewal requirements and university capital improvement requests. Ms. Chrisos has 30 years of construction project management experience as an employee for General Electric and as a consultant to manufacturing, construction and higher educational clients, including Hewlett Packard and Salem State University. She has a Bachelor of Science degree in mechanical engineering from the University of Massachusetts.

Jennifer Gonzalez, Deputy Director, Administration and Finance. Ms. Gonzalez joined the Authority in February 2020, and is responsible for managing the Authority's financial controls, insurance program, human resources, information technology, accounting, reporting, debt and rate-setting process and providing oversight and direction for the administrative and financial operations of the Authority. Ms. Gonzalez has been serving public issuers since 2000, when she began working on debt financing, continuing disclosure, and capital planning while employed by a major financial advisory firm. She joined the Massachusetts School Building Authority as Director of Finance in 2012, and was appointed Chief Financial Officer in 2015. Subsequently, she served as the Chief Financial Officer for the University of Massachusetts Building Authority and Treasurer/Collector for the Town of Watertown. She has been on the board of Boston Women in Public Finance since 2014. Jennifer has an Associate of Science in Business Administration from the Community College of Rhode Island, a Bachelor of Science in Accounting from Rhode Island College, and a Juris Doctor from Roger Williams University School of Law. She is a member of the Massachusetts bar.

The Authority also engages the services of several advisors, including Bowditch & Dewey, LLP, general counsel; CohnReznick LLP, certified public accountants; and Darov & Associates, project counsel. Various architects, engineers, project managers and cost estimators are engaged from time to time to assist in project activities.

Authority Operations

The Authority's principal operations consist of financing and constructing Projects at the State Universities and overseeing their operation and maintenance. Under the Contract, each State University is required to operate and maintain the Projects located on its campus and to keep them in good order and repair. The State Universities collect rents and fees from students for the use of the Projects, procure all necessary equipment, materials and supplies, and make necessary repairs. The Authority establishes the operating budget for each of its Projects, including the fees, rents, rates and charges for their use, and maintains close oversight over the operations and maintenance of Projects. Under the Contract, the Authority retains the right to contract directly with a third party to operate and maintain its Projects, except for Projects with respect to which the Authority has neither legal title nor a leasehold interest. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Commonwealth-owned Projects."

Each year the Authority sets the fees, rents, rates and other charges for the use of its Projects and approves operating budgets for its Projects providing for the payment of all of the projected costs of operating and maintaining the Projects, projected debt service costs, the Authority's projected operating and administrative costs, and any projected required deposits to reserves. Under the Act, the Authority's fees, rents, rates and charges must be sufficient to pay all costs of its Projects, including maintenance, operations, financing and administration (and the funding of reserves and capital renewal). The annual setting of Project fees, rents, rates and charges is subject to the approval of the BHE, but if the BHE does not approve the Authority's proposed schedule of charges by March 31 of a particular year, the Authority may proceed to fix charges without BHE approval. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Annual Budget and the Fixing of Rents and Fees*" and "THE BOARD OF HIGHER EDUCATION."

The Authority regularly updates a strategic plan to determine the number, type and location of facilities to support the State Universities, as well as a facility renewal plan to maintain quality facilities over time. Once the need for a project is determined, the staff of the Authority oversees feasibility studies that determine the revenue and expense associated with the construction and operation of the proposed facility. Once financial feasibility is determined, the project is approved by the Authority and the BHE and a project manager on the staff of the Authority is assigned to coordinate master planning and architectural design services. The planning and design process is closely coordinated with a construction management firm to control budget and schedule. Detailed design and construction site activity is managed through the use of an owner's project manager, a qualified individual or professional firm that provides quality control and assurance and assists in ensuring compliance with contract documents, budget and schedule. Throughout the study, planning and construction period the Authority prepares monthly reports to track the progress of each project which are reviewed by the design and construction committee of the Authority board on a monthly basis and by the full board. After completion of a facility, the Authority continues to assist with its operation and management through the review of occupancy reports, the preparation of budgets, the development of rent assessments, the payment of debt service, the payment of insurance premiums and the annual review of all facilities to schedule facility renewal projects.

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Management's Discussion and Analysis

The following table sets forth the receipts and disbursements related to Authority Projects during fiscal years 2015 through 2019. The table combines receipts and disbursements of the various State Universities and of the Authority and, because it presents cash receipts and disbursements with no accruals of revenues or expenses, it has not been prepared in a manner consistent with either the Authority's or the State Universities' financial statements, which are prepared in accordance with generally accepted accounting standards.

Authority Project Receipts and Disbursements [1]
Unaudited

	Fiscal 2015 Actual	Fiscal 2016 Actual	Fiscal 2017 Actual	Fiscal 2018 Actual	Fiscal 2019 Actual
Combined Beginning Fund Balance[2]	$49,684,719	$47,479,022	$47,933,557	$46,489,320	$50,668,884
Building Receipts					
Room rents	109,934,726	116,536,449	121,113,210	123,708,658	123,333,401
Non-residential Campus Project fees	18,480,995	23,219,679	23,456,102	23,026,494	25,547,272
Other Receipts	6,504,845	5,266,912	4,386,168	5,986,837	5,308,678
	$134,920,566	$145,023,040	$148,955,480	$152,721,989	$154,189,351
Other Receipts					
Investment earnings	2,712,532	4,440,865	3,548,412	2,592,563	2,282,211
Transfers from Capitalized Interest Accounts	4,524,531	3,851,833	-	-	242,844
State University contributions	1,035,739	1,074,697	1,025,564	1,247,564	1,664,408
Build America Bond Subsidy	2,189,322	2,200,443	2,201,230	2,199,263	2,337,727
	$10,462,124	$11,567,838	$6,775,206	$6,039,390	$6,527,189
Total Receipts	$145,382,690	$156,590,878	$155,730,686	$158,761,379	$160,716,540
Building Disbursements					
Residence hall operations and staff[3]	23,719,167	24,687,442	26,177,347	24,848,865	23,959,039
Facility maintenance and repair[3]	9,456,905	9,784,550	8,317,741	11,045,906	8,175,954
Facility renewal	8,757,804	8,146,462	8,564,648	5,049,429	6,621,187
Utilities[3]	10,627,821	10,835,928	10,830,798	10,756,803	10,912,392
Administration[3]	2,101,922	585,777	1,424,856	1,050,111	1,747,701
	$54,663,619	$54,040,159	$55,315,390	$52,751,113	$51,416,273
Debt Service					
Prior Bonds (allocated to System Projects)	8,344,770	272,825	-	-	-
Parity Bonds	80,094,392	96,895,147	97,005,308	96,104,503	100,503,443
	$88,439,162	$97,167,972	$97,005,308	$96,104,503	$100,503,443
Other Disbursements					
Authority operating expenses and insurance	2,720,511	2,860,377	2,834,299	3,539,423	3,196,222
Housing Grant Scholarship Program[3]	1,765,095	2,067,835	2,019,926	2,186,776	2,375,938
	$4,485,606	$4,928,212	$4,854,225	$5,726,199	$5,572,160
Total Disbursements	$147,588,387	$156,136,343	$157,174,923	$154,581,815	$157,491,876
Net Change	(2,205,697)	454,535	(1,444,237)	4,179,564	3,224,664
Combined Ending Fund Balance	$47,479,022	$47,933,557	$46,489,320	$50,668,884	$53,893,548

Source: Authority.
(1) Totals may not add due to rounding.
(2) Fund balance includes the trust funds (operating reserves) held by the State Universities, the Capital Improvement Reserve Funds, and certain supplementary reserves held by the Authority. The debt service, debt service reserve, rebate, and project funds maintained under the Trust Agreement are excluded.
(3) Denotes disbursements made directly by the State Universities before Revenues are transferred to the Authority for deposit in the Revenue Fund under the Trust Agreement.

Specific reference is made to the Authority's audited financial statements for the year ended June 30, 2019, included as Appendix B to this Official Statement, and to the audited financial statements for each of the State Universities for the year ended June 30, 2019 which have been filed with the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access system ("EMMA"). Revenues and expenses related to the Authority's Projects are reported as auxiliary enterprise income and expenses in the financial statements of the individual State Universities. The Authority's financial statements include the revenues paid to the Authority by the State Universities, which are used by the Authority to defray its debt service costs, certain operating and insurance premium costs for the Projects and the Authority's own operating expenses, and certain deposits to reserves. The financial statements of the Authority for the year ended June 30, 2019 have been examined by CohnReznick LLP, certified public accountants, to the extent and for the periods indicated in its report thereon. Such financial statements have been included in reliance upon the report of CohnReznick LLP and the authority of such firm as experts in accounting and auditing. CohnReznick LLP has not been requested to consent, nor has it consented, to inclusion of its report in this Official Statement. CohnReznick LLP has not been engaged to perform and has not performed, since the date of its report referenced herein, any procedures on the financial statements included in that report. CohnReznick LLP has also not performed any procedures relating to this Official Statement.

The foregoing table summarizes a number of trends in Authority operations and developments over the past several years, including the following:

Receipts. *Room Rents* – These are the revenues for the Authority's residence hall projects. To ensure affordability and full occupancy, Authority room rents are typically maintained at or below the off-campus market rental rates in the applicable geographic area. Increases in revenue from year to year reflect the increased number of beds. In addition, regular modest increases to room rents permit the Authority to fund increases in operating expenses (salaries and utilities) and debt service and additions to capital improvement reserves.

Non-residential Project fees – These are the amounts collected to fund debt service (as well as insurance and reserves, in the case of Authority-owned projects) for non-residential projects. These projects include new construction and improvements to or renovations of campus center, dining, athletic and parking facilities, which improve the overall campus environment for student recruitment and retention. In limited circumstances, they also include other types of facilities on campus for which the Authority provides supplemental financing pursuant to Section 156, such as academic facilities. The source of this fee revenue to pay debt service includes fees generated from the use of the financed facilities, an assessment on student fees, and assessments charged to the State Universities payable from any available funds of the University, as specified in the Contract. The increases from year to year reflect increased financing of student activity facilities.

Other Receipts – This includes primarily revenue from summer room rental, conferences, commissions, and miscellaneous sources.

Investment earnings – This category includes interest earnings on investments. Year-to-year changes are a function of the amounts invested and the effective interest rates.

Transfers from Capitalized Interest Accounts – These figures reflect capitalized interest which is used to pay debt service before the revenues of a given Project are sufficient to cover all of its associated costs.

State University contributions – These figures include funding from the State Universities in order to support the residence life programs at the campuses. The majority of these contributions support initial operations of new residence halls.

Build America Bond subsidy – These figures represent credit payments received by the Authority from the United States Treasury pursuant to the American Recovery and Reinvestment Act of 2009 as a result of designating certain Bonds issued in 2009 and 2010 as Build America Bonds. The credit payments were to equal 35% of the interest payable on such Bonds, but were reduced by 7.2% in the U.S. Government's fiscal year 2014, 7.3% in fiscal year 2015, 6.8% in fiscal year 2016, 6.9% in fiscal year 2017, 6.6% in fiscal year 2018, 6.2% in fiscal year 2019 and 5.9% in fiscal year 2020 due to federal government sequestration.

Disbursements. *Residence hall operations and staff* – These amounts include salary and benefit costs for the staff who manage, operate and maintain the residence halls. Year-to-year increases reflect the use and occupancy of the new residence halls as well as funding for new collective bargaining agreements.

Facility maintenance and repair – These are the amounts spent for routine upkeep of the residence halls and for annual contracts for service and operations support.

Facility renewal – These figures reflect the use of Capital Improvement Reserve Funds to fund planned renewal and unexpected repair projects at Authority facilities.

Utilities – These figures represent the annual expense of utilities for Authority projects. Year-to-year increases reflect increases in utility rates and the increases in consumption to support new residence halls.

Housing Grant Scholarship Program – Starting in fiscal year 2005, in an effort to maintain the affordability of residence hall room rents, the Authority implemented a general rent increase sufficient to fund a $300,000 housing grant scholarship program. This program has grown each year and has recently been funded at about $2.0 million each fiscal year.

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Debt Service Obligations

The following table sets forth for each year ending May 1 the amounts required for the payment of debt service for all outstanding Bonds.

Year Ending May 1	Existing Debt Service on Outstanding Bonds*	Principal of the Series 2020A Bonds	Interest on the Series 2020A Bonds	Total Debt Service on the Series 2020A Bonds	Total Combined Debt Service*
2021	$39,476,478		$8,148,374	$8,148,374	$47,624,852
2022	63,178,809		9,777,826	9,777,826	72,956,635
2023	90,541,423		9,777,826	9,777,826	100,319,249
2024	86,196,567	$2,875,000	9,777,826	12,652,826	98,849,393
2025	86,224,831	2,830,000	9,747,811	12,577,811	98,802,643
2026	82,013,769	6,490,000	9,714,021	16,204,021	98,217,790
2027	79,355,899	9,030,000	9,622,382	18,652,382	98,008,281
2028	84,045,344	4,645,000	9,485,849	14,130,849	98,176,192
2029	66,086,837	17,615,000	9,406,837	27,021,837	93,108,674
2030	62,015,103	19,305,000	9,089,591	28,394,591	90,409,694
2031	51,040,357	27,460,000	8,722,603	36,182,603	87,222,960
2032	45,858,573	30,870,000	8,186,858	39,056,858	84,915,432
2033	42,148,330	31,595,000	7,559,889	39,154,889	81,303,219
2034	41,904,394	27,860,000	6,896,078	34,756,078	76,660,472
2035	41,161,488	26,100,000	6,282,879	32,382,879	73,544,367
2036	39,392,742	26,865,000	5,695,368	32,560,368	71,953,110
2037	37,450,888	25,545,000	4,896,940	30,441,940	67,892,829
2038	36,308,691	26,105,000	4,137,743	30,242,743	66,551,434
2039	35,342,988	19,640,000	3,361,902	23,001,902	58,344,890
2040	32,618,883	14,400,000	2,778,202	17,178,202	49,797,085
2041	23,737,268	15,095,000	2,350,234	17,445,234	41,182,501
2042	11,214,929	11,695,000	1,886,515	13,581,515	24,796,444
2043	11,949,919	8,195,000	1,527,245	9,722,245	21,672,164
2044		12,195,000	1,275,494	13,470,494	13,470,494
2045		6,220,000	900,864	7,120,864	7,120,864
2046		6,410,000	709,786	7,119,786	7,119,786
2047		6,610,000	512,870	7,122,870	7,122,870
2048		6,815,000	309,811	7,124,811	7,124,811
2049		3,270,000	100,454	3,370,454	3,370,454
Total	**$1,189,264,509**	**$395,735,000**	**$162,640,081**	**$558,375,081**	**$1,747,639,591**

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* Excludes debt service on the Refunded Bonds. Excludes the receipt of any Federal subsidies on the Series 2009C and Series 2010A Build America Bonds. Net of capitalized interest on the Series 2019A Bonds in FY 2021.

Project Delivery and Capital Improvement Program

In addition to the standard public procurement procedures, the Authority is permitted to use an alternate means of procurement for design and construction management services which has resulted in improved quality and reduced time and cost of delivering new and renovated facilities. The Authority's procurement methodology is considered exemplary in the public sector in its ability to provide high-quality, cost-effective facilities in critical timeframes while providing for the public solicitation of architectural design and construction management services and for the public bidding of trade contractor work.

The Authority maintains a facility renewal plan to identify the required periodic reinvestment necessary to maintain its facilities, including the estimated cost, desired frequency and anticipated funding source for these projects. Since 2002, the Authority has reduced estimated deferred maintenance needs from $49.3 million to $19.1 million in 2019. The implementation of facility renewal and adaption projects has resulted in the reduction of the need for debt funding of repair projects in the future. Typical renewal projects include the repair, replacement or extended use of building exterior components, mechanical systems and interior finishes. Specifically, these include replacement of roofing and windows, re-pointing of masonry and repainting of exterior trim; replacement of domestic water heaters, plumbing fixtures, boilers, electrical equipment and fixtures, fire alarm systems and elevators; repainting of interior walls and ceilings, replacement of flooring and repair of doors and hardware. Typical adaption projects include the provision of sprinkler systems and the improvement of access for individuals with disabilities.

The continuous improvement in facility condition and the expedited procurement model achieve best practices in facility renewal, reduce deferred maintenance, improve quality and cost control and mitigate the need for future borrowings.

Projects Financed by Bonds

Since 1999, the Authority has financed approximately $762.7 for new residence hall capacity and parking structures. The Authority has financed approximately $293.4 million of repairs and major renovations at numerous State Universities with bond proceeds. Such projects have included hazardous material abatement, fire safety improvements, access for the physically disabled, sprinklers and fire alarms, elevator replacement, bathroom renovations, mechanical, electrical and plumbing upgrades, masonry and roof repairs, common area improvements, interior finishes, and exterior and interior renewals. The Authority also has financed approximately $239.8 million of student life projects and $75.5 million to support projects principally financed by the Commonwealth with bond proceeds.

Commonwealth-Owned Projects

The Authority's residence halls and certain parking structures and property acquisitions are owned by the Authority and located on land that the Authority has leased from the Commonwealth. Approximately 40 student life facilities (or portions of such facilities) constitute Commonwealth-owned Projects, including: a parking facility and an student center at Bridgewater State; a dining hall, campus center and athletic fields at Fitchburg State; athletic fields, and a campus center at Framingham State; a dining hall and art gallery at the Massachusetts College of Art and Design; tennis courts, a gymnasium and the Ashland Street Facility at the Massachusetts College of Liberal Arts; parking lots and athletic facilities at Salem State; and a dining hall and a campus center at Westfield State. Under limited circumstances, the Authority may also provide supplemental financing for certain Commonwealth-owned academic facilities. To date, these projects include science centers at Framingham and Westfield State, a Center for Design + Media at Massachusetts College of Art and Design, and a wellness center at Worcester State.

The Authority has no responsibility for the operation or maintenance of Commonwealth-owned Projects, although the Authority has agreed in the Contract to maintain certain insurance policies with respect to such Projects upon written request of the Commissioner of the Division of Capital Asset Management and Maintenance of the Commonwealth. The Authority's fees, rents, rates and charges with respect to Commonwealth-owned Projects generally consist of an assessment on student fees sufficient to pay the Authority's debt service costs and direct administrative costs, without regard to the Project's overall operating costs and without any requirement of maintaining operating or capital improvement reserves.

Demand for Authority Residence Facilities

Actual occupancy of the Authority's residence halls for the fall 2019 semester was 91.0% of design capacity, after having added over 6,337 new beds since fall 2003. Consistent with historic trends of lower occupancy in the spring than in the fall, the occupancy for the spring 2020 semester was 84.4% of design capacity until the campuses were closed due to the COVID-19 pandemic and related public health mitigation efforts. See "COVID-19" herein. The predictable schedule, quality and funding of facility improvement projects reduces the likelihood of substantial unanticipated project requirements and their attendant inconvenience and expense. The revenue stream from the System Projects directly funds a system capital improvement reserve, and the revenue stream from the Campus Projects, implemented after 1999, directly funds a designated capital improvement reserve for these projects For further information relating to demand for Authority residence facilities, see Appendix A – "STATE UNIVERSITIES SELECTED FINANCIAL AND STATISTICAL INFORMATION."

THE BOARD OF HIGHER EDUCATION

The BHE is established under Chapter 15A of the General Laws of the Commonwealth. The purpose of the BHE is to define the mission of and coordinate the system of public higher education of the Commonwealth. The system includes, in addition to the State Universities, the five-campus University of Massachusetts and 15 community colleges. See "THE STATE UNIVERSITIES" herein for additional information on the State Universities. The University of Massachusetts, with campuses in Amherst, Boston, Dartmouth, Lowell and Worcester, offers four-year undergraduate programs and a broad range of graduate degrees. The 15 community colleges serve each region of the Commonwealth and offer two-year programs leading to associate degrees. Each institution in the system of public higher education is governed by a separate board of trustees. Under Chapter 15A, the BHE is responsible for working with each of the boards of trustees to hold the system accountable for achieving its goals and measuring its performance.

In addition to its powers under Chapter 15A, the BHE has certain powers with respect to the Authority under the Act. Among other things, the Authority may not initiate any project except upon written request made by authority of the BHE and may not issue refunding bonds or notes without the prior written approval of the BHE. The Authority's power to establish rules and regulations ensuring the use and occupancy of its projects and to fix and revise fees, rents, rates and other charges sufficient to cover all the costs of its projects is also subject to approval of the BHE. If the BHE does not approve the Authority's proposed schedule of fees, rents, rates and charges, the Authority may proceed without BHE approval. The BHE has the power under the Act to convey or lease to the Authority certain property owned by the Commonwealth, to provide utilities and services necessary for the operation and maintenance of Authority projects and to cooperate with the Authority in carrying out the purposes of the Authority.

The BHE consists of 13 members, nine of whom are appointed by the Governor of the Commonwealth, three of whom are chosen as described below to represent public institutions of higher education and one of whom is the Secretary of Education of the Commonwealth, serving *ex officio*. The Governor appoints one of the members to be the chairman. Of the members appointed by the Governor, at least one must be a representative of organized labor, one must be a representative of the business community, and one must be a full-time undergraduate student at an institution within the higher education system. These appointed members are also to reflect regional geographic representation. Of the three members chosen to represent public institutions of higher education, one must be a member of the board of trustees of the University of Massachusetts, selected by such board, one must be a member of the board of trustees of one of the State Universities, chosen by a vote of the chairs of the boards of trustees of the State Universities, and one must be a member of the board of trustees of a community college, chosen by a vote of the chairs of the boards of trustees of the community colleges. Three of the board members appointed by the Governor serve for terms that are coterminous with that of the Governor. The remaining appointed members serve five-year terms, except the student member, who serves for a one-year term. Appointments to the student position are cycled among community college, state university and University of Massachusetts students every three years. No member may be appointed for more than two consecutive full terms, and a student member may serve only one term. Under state law, members of the BHE whose terms have expired continue to serve until a successor is appointed.

The present members of the BHE and the expiration date of their terms are as follows:

	First Appointed	Expiration of Term
Chris Gabrieli, Chair	2015	Coterminus with Governor
Sheila M. Harrity, Ed.D, Vice Chair	2015	Coterminus with Governor
Ann Christensen	2019	2024
Veronica Conforme	2019	2024
Alex Cortez	2018	2021
Patty Zillian Eppinger	2019	2024
J.D. LaRock, J.D., Ed.D.	2016	2021
Paul Materra, J.D.	2016	2021
Judy Pagliuca	2019	2024
James A. Peyser, Secretary of Education	--	*Ex Officio*
Michael O'Brien	2018	n/a
Paul F. Toner, J.D.	2010	2020
Abby Velozo (student)	2019	2020

The Commonwealth's Secretary of Education appoints a Commissioner of Higher Education, who must be nominated by a two-thirds vote of the BHE. The Commissioner of Higher Education serves as the executive and administrative head of the Commonwealth's Department of Higher Education and as the secretary to the BHE and its chief executive officer and the chief school officer for higher education. The Commissioner is responsible for carrying out the policies established by the BHE. The Commissioner serves at the pleasure of the BHE and may be removed by majority vote of the BHE. The current Commissioner is Carlos E. Santiago.

Budget Process

The board of trustees of each institution of public higher education in the Commonwealth submits operating and capital budget requests annually to the BHE. The BHE uses the data to prepare operating and capital outlay budgets for the statewide system of public higher education. The BHE submits its operating budget to the Budget Director in the Executive Office for Administration and Finance and also to the House and Senate Committees on Ways and Means. The Legislature appropriates funds for the public higher education system in the Commonwealth's annual operating budget in various line items for each institution. Capital budget requests of the various State Universities are reviewed by the BHE and the Commonwealth's Division of Capital Asset Management, and then by the Executive Office for Administration and Finance, which maintains a rolling five-year capital finance plan for the Commonwealth. Capital outlay authorization requests are filed with the Legislature periodically by the Governor.

THE STATE UNIVERSITIES

General

The State Universities are nine Massachusetts institutions of higher learning under the jurisdiction of the BHE. Each institution is under the direct administration of its own board of trustees. The State Universities are Bridgewater, Fitchburg, Framingham, Salem, Westfield and Worcester State Universities, the Massachusetts College of Art and Design, the Massachusetts College of Liberal Arts and the Massachusetts Maritime Academy. State law empowers the State Universities generally to provide educational programs, research, extension and continuing education services in the liberal, fine and applied arts and sciences and other related disciplines through the master's degree level and to offer doctoral programs in cooperation with the University of Massachusetts.

Bridgewater State University is located on a 270-acre campus in the town of Bridgewater, 28 miles south of Boston. The university was founded as a teacher-training institution in 1840 and now offers 35 graduate degree programs, five graduate certificate programs and 32 undergraduate programs with 90 concentrations.

Fitchburg State University, located in North Central Massachusetts, was founded in 1894. Originally a teacher-training institution, today the university offers more than 50 undergraduate programs in 23 academic disciplines, and more than 30 pre-professional and graduate programs. Its offerings emphasize career-orientated learning that is firmly grounded in the liberal arts. The university features small class sizes, hands-on professional education, and an accessible faculty dedicated to teaching.

Framingham State University was founded in 1839 as the first public normal school in America. The University now offers a wide variety of programs in fields ranging from business to the sciences to fashion. In recent years, the University has begun positioning itself as a leader in the areas of STEM (Science, Technology, Engineering, and Mathematics) education as employers increasingly seek to hire graduates with these skill sets. The University offers 27 undergraduate majors and 25 graduate programs with the breadth of programs offered reflecting diverse faculty expertise.

The Massachusetts College of Art and Design, the only publicly supported professional college of the arts in the United States, was established in 1873 and is presently located on campuses on Longwood and Huntington Avenues in the city of Boston. It grants Bachelor of Fine Arts degrees in 22 concentrations and offers Master of Fine Arts and Master of Science in art education degrees.

Massachusetts College of Liberal Arts ("MCLA") is the Commonwealth's designated public liberal arts college. The College is located in Berkshire County on a 26-acre campus in the city of North Adams in northwestern Massachusetts. It was founded in 1894 and offers Bachelor of Arts and Bachelor of Science degrees in 19 academic disciplines complemented by 37 areas of concentration. MCLA offers graduate programs (M.Ed. and CAGS) in Education and launched a Professional Master of Business Administration ("PMBA") graduate program in 2010. As the Commonwealth's designated public liberal arts college, MCLA is a member of the Council for Public Liberal Arts Colleges ("COPLAC").

The Massachusetts Maritime Academy was founded in 1891 and is now the largest maritime academy in the United States. It is located on 48 acres in the village of Buzzards Bay on Cape Cod. Bachelor of Science degrees are offered in seven fields, including the traditional marine engineering and marine transportation programs that prepare cadets for qualification as licensed merchant marine officers able to sail the biggest merchant ships afloat or handle tug boats in local harbors. The Academy also grants Master of Science degrees in facilities management and emergency management.

Salem State University is located in the city of Salem on five campuses totaling 115 acres. Established in 1854, it grants Bachelor of Arts and Bachelor of Science degrees in 18 disciplines. At the graduate level, the university grants eight Master's degrees. Continuing education courses are also available for credit or non-credit.

Westfield State University was founded as a teacher-training institution in 1838 by noted educator and social reformer Horace Mann. The school was the first public co-educational college in America that accepted students without consideration of race, gender or class background. The university is located in the city of Westfield, a few miles west of Springfield, in the Connecticut River valley. It occupies a 256-acre campus and grants Bachelor of Arts and Bachelor of Science degrees in 26 majors as well as Master of Arts, Master of Science, Master of Public Administration, and Master of Education degrees. Certificates of advanced graduate study are also available.

Worcester State University was established in 1874 and is located on a 57-acre campus in the city of Worcester. It grants Bachelor of Arts or Bachelor of Science degrees in 24 disciplines and a Bachelor of Science in education. It also grants Master of Science degrees in seven disciplines, master of occupational therapy, master of education in 10 disciplines, and a certificate of graduate studies in psychology.

Certain financial and statistical information about the State Universities is provided in Appendix A. For additional information about the State Universities, specific reference is made to the audited financial statements for each of the State Universities for the fiscal year ended June 30, 2019. Copies of such financial statements have been filed with the MSRB through EMMA.

Amounts Paid by State Universities to the Authority

Under the Contract, all moneys received by a State University as payment of fees, rents, rates or other charges for the use and occupancy of a Project of the Authority are held in trust for the Authority in a trust fund at that State University. The moneys in the trust fund are expended by the State University in accordance with the Authority's annual operating budget and are remitted to the Authority or to the Trustee at such times and in such amounts as may be directed by the Authority.

The following table shows the amounts paid to the Authority by each of the State Universities in each of the fiscal years 2015 through 2019 and the estimated amount in fiscal year 2020. The amounts received by the Authority were used to pay debt service on the Bonds and all other expenses of the Authority. Amounts shown exclude debt service paid from capitalized interest on certain projects, earnings on the Debt Service Fund and Debt Service Reserve Fund, and Build America Bond interest subsidies.

State University	Fiscal 2015	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019	Estimated Fiscal 2020
Bridgewater	$ 17,637,041	$ 17,546,230	$ 18,623,435	$ 18,658,426	$ 19,696,073	$ 19,612,568
Fitchburg	9,600,500	9,899,207	10,859,589	11,465,652	12,498,210	13,090,595
Framingham	10,203,857	9,788,180	13,661,232	14,073,798	13,826,253	14,166,745
Mass. College of Art and Design	7,758,868	8,644,202	8,840,244	8,931,440	9,698,391	9,847,586
Mass. College of Liberal Arts	2,877,190	2,505,334	3,169,485	3,209,520	3,409,103	3,547,136
Mass. Maritime Academy	8,033,928	7,959,435	8,432,995	8,491,603	8,681,794	8,714,403
Salem	12,750,494	16,016,410	17,210,080	17,587,120	17,931,396	17,728,903
Westfield	11,369,613	11,876,241	13,129,477	12,968,155	13,433,023	14,326,150
Worcester	9,153,095	9,331,215	9,603,706	9,633,642	9,812,128	9,752,716
Total	$ 89,384,586	$ 93,566,454	$ 103,530,243	$ 105,019,356	$ 108,986,371	$ 110,786,802

Source: Authority

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Pledged Trust Funds

The following table sets forth, for each State University, the amount of Pledged Trust Funds (which is an amount equal to 25% of the average annual principal and interest due on the State University's allocable share of debt service on Bonds). The table does not include the estimated impact of the issuance of the Series 2020A Bonds to refund the Refunded Bonds. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Pledged Funds*."

State University	Pledged Trust Funds Authority-owned Projects	Pledged Trust Funds Commonwealth-owned Projects
Bridgewater	$4,361,732	$ 271,568
Fitchburg	1,425,650	1,135,135
Framingham	3,032,064	606,665
Mass. College of Art and Design	1,743,249	674,253
Mass. College of Liberal Arts	482,575	93,420
Mass. Maritime Academy(1)	1,455,342	276,777
Salem	3,114,729	778,317
Westfield(1)	2,330,804	413,608
Worcester	1,981,437	269,142
Total	$19,927,583	$4,518,885

Source: Authority. Totals may not add due to rounding.

(1) Subordinate to the lien granted to Bank of America, N.A. in connection with the loan obtained from the Massachusetts Health and Educational Facilities Authority financed by said Authority's Variable Rate Demand Revenue Bonds, Capital Asset Program Issue, Series M-2 (Pool 2).

COVID-19

COVID-19 is a new respiratory disease caused by a novel coronavirus that has not previously been seen in humans. The new coronavirus is highly contagious, and reported illness caused by the virus ranges from mild symptoms to death. On March 11, 2020, the World Health Organization declared the spread of COVID-19 a global pandemic. On March 13, 2020, the President of the United States declared a national emergency due to the outbreak of COVID-19.

On March 10, 2020, the Governor of Massachusetts declared a state of emergency to support the Commonwealth's response to the outbreak of COVID-19. Since then, the Governor and his administration have taken action through a series of orders and advisories intended to reduce the spread of COVID-19. Certain of these orders have had a significant impact on the local economy and on the operations of the State Universities and the Authority, including, but not limited to: an order mandating that all non-essential businesses and organizations close their physical facilities and workspaces to customers; a stay-at-home advisory; an order limiting the size of gatherings in public and private venues; and an advisory from the Department of Higher Education and the Department of Public Health strongly recommending that all public and private colleges and universities pursue strategies to reduce the need for students, faculty and staff to be on campus, including suspending in-person classes and shifting to remote learning.

On May 18, 2020, the Governor announced a four-phase plan for relaxing many of the restrictions that have been in place over the coming weeks and months, beginning with allowing limited types of businesses to open and activities to occur immediately and others to open or resume in the future, all subject to compliance with public health and safety guidelines. The timing of relaxing restrictions on businesses and activities in the future will be dependent on the Governor's assessment of the extent to which continued progress is being made in managing the spread of the virus. **The Governor initiated the second phase of his four-phase reopening plan on June 8, 2020.** Some municipalities have also issued local orders affecting activities within the applicable municipality, including the City of Boston, which in certain cases may be more restrictive than the Governor's orders.

On March 13, 2020, the Authority staff began working remotely to ensure the operations of the Authority could continue as safely as possible for employees. The staff and members of the Authority are equipped to remotely process invoices, deposits, bank requisitions, disbursements, payroll, and other services necessary to maintain business operations. Further, the Authority has issued solicitations for professional and construction services, received and accepted bids, and awarded construction contracts electronically for many years, and this capability continues through the current situation. One of the Governor's emergency orders provides for public boards, such as the Authority's board, to meet remotely. The Authority's board has been meeting remotely under this order and will continue to do so as necessary to advance its work. There have been no material impacts to the Authority's operations while conducting its business remotely. The Authority is also working closely with the Commonwealth's COVID-19 Task Force to assist with coordinating issues pertaining to higher education and to the State University campuses it supports.

The State University campuses have taken steps to comply with the advisory relating to public and private colleges and universities referenced above, including a shift to online instruction for the remainder of the spring 2020 semester and during the summer. In anticipation of the likelihood that thep on-campus presence and activities for the fall 2020 semester, and possibly for succeeding semesters, will not be consistent with past experience as a result of the pandemic and the related public health mitigation efforts, the State Universities are planning for different scenarios and the potential financial implications of those scenarios. Toward that end, the State Universities, together with the Community Colleges, engaged a private consultant to assist with that planning. The State Universities are also planning for the possibility of needing to implement various cost management measures.

A working group made up of representatives of public and private colleges and universities throughout Massachusetts, including the State Universities, made recommendations to the Governor's reopening advisory board on May 22, 2020 for the gradual resumption of activities on campuses based on the Governor's four-phase reopening plan which contemplates an increased amount of programming, activities and presence of faculty, students and others along with the implementation of public health measures, including social distancing, testing, contact tracing, quarantining, sanitizing facilities, and other restrictions and strategies. A survey conducted by the working group of 86 college and university presidents in Massachusetts found that they are confident the appropriate measures can be put in place to reopen campuses for the fall 2020 semester.

On June 8, 2020 as part of the second phase of the Governor's reopening plan, the Governor issued guidance permitting students, staff and faculty on higher education campuses for limited purposes, including to complete degree requirements and summer youth programming. The Governor's guidance requires that higher education institutions have control plans in place in order to conduct such limited activities, including social distancing measures, hygiene protocols and cleaning and disinfecting plans. In mid-June, the State Universities determined that they will invite students back to campuses during the fall semester, including to attend classes and live in dorms, and they will offer both in-person and remote class options for students. They have not yet determined, however, the occupancy levels they will allow in dorms or in classrooms, which they expect to be less than typical levels in order to comply with social distancing and other public health guidelines.

All of the State Universities have received or anticipate receiving direct federal aid in the aggregate amount of $35,952,400 under the recent federal legislation known as the CARES Act, at least 50% of which is restricted for direct grant aid to students and no more than 50% of which may be used to help address costs incurred by the State Universities as a result of the pandemic. The Authority is issuing the Series 2020A Bonds in part to refund Bonds maturing in fiscal years 2021 and 2022 to provide fiscal relief to the State Universities as they will likely face some reduction in revenues in those fiscal years.

The spread of COVID-19 and the public health mitigation efforts in response to the pandemic are causing, and are expected to continue to cause, severe disruption in the global, national and local economies. In addition, people have altered their behavior to adapt to these measures and to respond to the spread of the virus. The extent of the impact within the Commonwealth and with respect to the State Universities and the Authority is not yet fully known, and it is expected to vary greatly depending on the duration and breadth of the COVID-19 pandemic, which remain uncertain. Consequently, the following are some of the potential impacts that are not yet known: the extent to which the State Universities and the Authority will incur additional costs; the manner and extent to which student enrollment, on-campus activities and the use of the residential and other facilities financed by the Authority will be affected and any resulting revenue impacts; and the manner and extent to which the state budget and, consequently, state appropriations for the State Universities will be impacted. For these reasons, historical trends reflected elsewhere in this Official Statement may not be indicative of results since the COVID-19 outbreak and for the foreseeable future.

LEGAL MATTERS

All legal matters related to the authorization and issuance of the Series 2020A Bonds are subject to the approval of Hinckley, Allen & Snyder LLP, Boston, Massachusetts, Bond Counsel to the Authority. The approving opinion of Bond Counsel, substantially in the form attached hereto as Appendix E, will be delivered on the date of delivery of the Series 2020A Bonds. Certain matters will be passed upon for the Authority by its counsel, Bowditch & Dewey, LLP, Boston, Massachusetts. Certain matters will be passed upon for the Underwriters, by their counsel, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts.

LITIGATION

There is no litigation of any nature now pending or, to the knowledge of the Authority, threatened seeking to restrain or enjoin or restraining or enjoining the issuance, sale, execution or delivery of the Series 2020A Bonds or in any way contesting the validity of the Series 2020A Bonds or any proceedings of the Authority taken with respect to the issuance or sale thereof, or of the Contract, or any proceedings of the Authority or of the BHE taken with respect thereto, or of the pledge of any moneys or security provided for the payment of the Series 2020A Bonds or the existence or powers of the Authority or the titles of its officers to their offices.

LEGALITY FOR INVESTMENT

As declared by the Act, the Series 2020A Bonds are securities in which all public officers and public bodies of the Commonwealth and its political subdivisions, all Massachusetts savings banks, insurance companies, trust companies in their commercial departments, and, within the limits set by Section 54 of Chapter 172 of the General Laws of the Commonwealth, banking associations, investment companies, executors, trustees and other fiduciaries, and all other persons whatsoever who are now or may hereto be authorized to invest in bonds or other obligations of a similar nature, may properly and legally invest funds, including capital, in their control or belonging to them. The Series 2020A Bonds are securities which may properly and legally be deposited with and received by any state or municipal officer or any agency or political subdivision of the Commonwealth for any purpose for which the deposit of bonds or other obligations of the Commonwealth is now or may hereto be authorized by law.

TAX MATTERS

Federal Tax Matters for the Series 2020A Bonds

The following discussion summarizes certain U.S. federal tax considerations generally applicable to holders of the Series 2020A Bonds acquiring such Series 2020A Bonds in the initial offering. The discussion below is based upon laws, regulations, rulings and decisions in effect and available on the date hereof, all of which are subject to change, possibly with retroactive effect. Prospective investors should note that no rulings have been or are expected to be sought from the IRS with respect to any of the U.S. federal tax considerations discussed below, and no assurance can be given that the IRS will not take contrary positions. Further, the following discussion does not deal with U.S. tax consequences applicable to any given investor, nor does it address the U.S. tax considerations applicable to all categories of investors, some of which may be subject to special taxing rules (regardless of whether or not such investors constitute U.S. Holders), such as certain U.S. expatriates or long-term residents, individual retirement accounts or other tax-deferred accounts, banks, REITs, RICs, insurance companies, tax-exempt organizations, dealers or traders in securities or currencies, partnerships, S corporations, estates and trusts, investors that hold their Series 2020A Bonds as part of a hedge, straddle or an integrated or conversion transaction, certain accrual method taxpayers that are required to prepare certified financial statements or file financial statements with certain regulatory or governmental agencies or investors whose "functional currency" is not the U.S. dollar. Furthermore, it does not address (i) alternative minimum tax consequences, (ii) the net investment income tax imposed under Section 1411 of the Code or (iii) the indirect effects on persons who hold equity interests in a holder. This summary also does not consider the taxation of the Series 2020A Bonds under state (other than Massachusetts tax law, as set forth below), local or non-U.S. tax laws. In addition, this summary generally is limited to U.S. tax considerations applicable to investors that acquire their Series 2020A Bonds pursuant to this offering for the issue price that is applicable to such Series 2020A Bonds within the meaning of Section 1273 of the Code (i.e., the price at which a substantial amount of the Series 2020A Bonds is sold to the public) and who will hold their Series 2020A Bonds as "capital assets" within the meaning of Section 1221 of the Code.

As used herein, "U.S. Holder" means a beneficial owner of a Series 2020A Bond that for U.S. federal income tax purposes is an individual citizen or resident of the United States, a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), an estate the income of which is subject to U.S. federal income taxation regardless of its source or a trust with respect to which a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons (as defined in the Code) have the authority to control all substantial decisions of the trust (or a trust that has made a valid election under U.S. Treasury Regulations to be treated as a domestic trust). As used herein, "Non-U.S. Holder" generally means a beneficial owner of a Series 2020A Bond (other than a partnership) that is not a U.S. Holder. If a partnership holds Series 2020A Bonds, the tax treatment of such partnership or a partner in such partnership generally will depend upon the status of the partner and upon the activities of the partnership. Partnerships holding Series 2020A Bonds, and partners in such partnerships, should consult their own tax advisors regarding the tax consequences of an investment in the Series 2020A Bonds (including their status as U.S. Holders or Non-U.S. Holders). For purposes of this discussion, a partnership includes any entity or arrangement treated as a partnership for U.S. federal income tax purposes.

Prospective investors should consult their own tax advisors in determining the U.S. federal, state, local or non-U.S. tax consequences to them from the purchase, ownership and disposition of the Series 2020A Bonds in light of their particular circumstances.

U.S. Holders

Interest. Payments of interest on a Series 2020A Bond generally will be taxable to a U.S. Holder as ordinary interest income at the time such payments are accrued or are received (in accordance with the U.S. Holder's regular method of tax accounting), provided such interest is "qualified stated interest" within the meaning of section 1272 of the Code. For purposes of this discussion, the term "qualified stated interest" on a Series 2020A Bond means all interest thereon based on a fixed rate and payable unconditionally at fixed periodic intervals of one year or less during the entire term of the instrument.

Original Issue Discount. To the extent that the issue price of any maturity of the Series 2020A Bonds is less than the amount to be paid at maturity with respect to such Series 2020A Bonds (excluding amounts stated to be interest and payable at least annually over the term to maturity of such Series 2020A Bonds) by more than a *de minimis* amount (as defined under applicable Treasury Regulations), the difference may constitute original issue discount ("OID") on such Series 2020A Bonds. U.S. Holders of Series 2020A Bonds will be required to include OID in income for U.S. federal income tax purposes as it accrues, in accordance with a constant yield method based on a compounding of interest (which may be before the receipt of cash payments attributable to such income). Under this method, U.S. Holders generally will be required to include in income increasingly greater amounts of OID in successive accrual periods.

Amortizable Bond Premium. Series 2020A Bonds purchased for an amount in excess of the principal amount payable at maturity (or, in some cases, at their earlier call date) will be treated as issued at a premium. A U.S. Holder of a Series 2020A Bond issued at a premium may make an election, applicable to all debt securities purchased at a premium by such U.S. Holder, to amortize such premium, using a constant yield method over the term of such Series 2020A Bond. Such election may not be revoked without the consent of the IRS. If a U.S. Holder elects to amortize the premium, such U.S. Holder will be required to reduce its U.S. Federal income tax basis in the Series 2020A Bond by the amount of the premium amortized during the holding period of the U.S. Holder. If such U.S. Holder does not elect to amortize the premium, the amount of the premium will be included in its U.S. Federal income tax basis in the Series 2020A Bond, and such unamortized premium will decrease the amount of gain or increase the amount of loss otherwise recognized on the disposition of such Series 2020A Bond. These rules are complex and prospective purchasers of Series 2020A Bonds are urged to consult their own tax advisors regarding the application of the amortizable bond premium rules to their particular situation.

Sale or other Taxable Disposition of a Series 2020A Bond. Unless a nonrecognition provision of the Code applies, the sale, exchange, redemption, retirement (including pursuant to an offer by the Authority) or other taxable disposition of a Series 2020A Bond will be a taxable event for U.S. federal income tax purposes. In such event, a U.S. Holder of a Series 2020A Bond generally will recognize gain or loss equal to the difference between (i) the amount of cash plus the fair market value of property received (except to the extent attributable to accrued but unpaid qualified stated interest on the Series 2020A Bond, which will be taxed in the manner described above) and

(ii) the U.S. Holder's adjusted U.S. federal income tax basis in the Series 2020A Bond (generally, the purchase price paid by the U.S. Holder for the Series 2020A Bond, decreased by any amortized premium, and increased by the amount of any OID previously included in income by such U.S. Holder with respect to such Series 2020A Bond). Any such gain or loss generally will be capital gain or loss. In the case of a non-corporate U.S. Holder of the Series 2020A Bonds, the maximum marginal U.S. federal income tax rate applicable to any such capital gain generally will be lower than the maximum marginal U.S. federal income tax rate applicable to ordinary income if such U.S. Holder's holding period for the Series 2020A Bonds exceeds one year. The deductibility of capital losses is subject to limitations.

Effect of Defeasance. Pursuant to the Trust Agreement, the Series 2020A Bonds are subject to legal defeasance without the consent of the holders of the Series 2020A Bonds. Defeasance of any of the Series 2020A Bonds may be treated as a taxable constructive exchange of that Series 2020A Bond for the defeased Series 2020A Bond. Assuming that the Series 2020A Bonds are treated as publicly traded debt instruments for U.S. federal income tax purposes (which is expected to be the case), a U.S. Holder of a Series 2020A Bond generally will recognize gain or loss equal to the difference between (i) the fair market value of such U.S. Holder's Series 2020A Bonds on the date of the defeasance (except to the extent of accrued but unpaid interest on the Series 2020A Bonds which will be taxed in the manner described above under "Interest") and (ii) the U.S. Holder's adjusted U.S. federal income tax basis in the Series 2020A Bonds (generally, the purchase price paid by the U.S. Holder for the Series 2020A Bond, decreased by any amortized premium, and increased by the amount of any OID previously included in income by such U.S. Holder with respect to such Series 2020A Bond). Any such gain or loss generally will be capital gain or loss. In the case of a non-corporate U.S. Holder of the Series 2020A Bonds, the maximum marginal U.S. federal income tax rate applicable to any such capital gain generally will be lower than the maximum marginal U.S. federal income tax rate applicable to ordinary income if such U.S. Holder's holding period for the Series 2020A Bonds exceeds one year. The deductibility of capital losses is subject to limitations. The Authority may be required to report certain information regarding such a defeasance that may be relevant to U.S. Holders either (1) by filing Form 8937 with the IRS and providing copies to certain of its U.S. Holders or (2) by posting the form on its website.

Information Reporting and Backup Withholding. Payments on the Series 2020A Bonds generally will be subject to U.S. information reporting and possibly to "backup withholding." Under Section 3406 of the Code and applicable U.S. Treasury Regulations issued thereunder, a non-corporate U.S. Holder of the Series 2020A Bonds may be subject to backup withholding at the current rate of 24% with respect to "reportable payments," which include interest paid on the Series 2020A Bonds and the gross proceeds of a sale, exchange, redemption, retirement or other disposition of the Series 2020A Bonds. The payor will be required to deduct and withhold the prescribed amounts if (i) the payee fails to furnish a U.S. taxpayer identification number ("TIN") to the payor in the manner required, (ii) the IRS notifies the payor that the TIN furnished by the payee is incorrect, (iii) there has been a "notified payee underreporting" described in Section 3406(c) of the Code or (iv) the payee fails to certify under penalty of perjury that the payee is not subject to withholding under Section 3406(a)(1)(C) of the Code. Amounts withheld under the backup withholding rules may be refunded or credited against the U.S. Holder's federal income tax liability, if any, provided that the required information is timely furnished to the IRS. Certain U.S. holders (including, among others, corporations and certain tax-exempt organizations) are not subject to backup withholding. A holder's failure to comply with the backup withholding rules may result in the imposition of penalties by the IRS.

Non-U.S. Holders

Interest. Subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "Foreign Account Tax Compliance Act ("FATCA")—U.S. Holders and Non-U.S. Holders," payments of principal of, and interest on, any Series 2020A Bond to a Non-U.S. Holder, other than (1) a controlled foreign corporation, as such term is defined in the Code, which is related to the Authority through stock ownership and (2) a bank which acquires such Series 2020A Bond in consideration of an extension of credit made pursuant to a loan agreement entered into in the ordinary course of business, will not be subject to any U.S. federal withholding tax provided that the beneficial owner of the Series 2020A Bond provides a certification completed in compliance with applicable statutory and regulatory requirements, which requirements are discussed below under the heading "Information Reporting and Backup Withholding."

If a Non-U.S. Holder does not claim, or does not qualify for, the benefit of the portfolio interest exemption, the Non-U.S. Holder may be subject to a 30% withholding tax on interest payments on the Series 2020A Bonds. However, the Non-U.S. Holder may be able to claim the benefit of a reduced withholding tax rate (generally on

Form W-8BEN or Form W-8BEN-E under an applicable income tax treaty between the Non-U.S. Holder's country of residence and the United States. Non-U.S. Holders are urged to consult their own tax advisors regarding their eligibility for treaty benefits.

If, under the Code, interest on the Series 2020A Bonds is "effectively connected with the conduct of a trade or business within the United States" by a Non-U.S. Holder (and, if an applicable income tax treaty so requires, is attributable to the conduct of a trade or business through a permanent establishment or fixed base in the United States), such interest will be subject to U.S. federal income tax in a similar manner as if the Series 2020A Bonds were held by a U.S. Holder, as described above, and in the case of Non-U.S. Holders that are corporations such interest may be subject to the U.S. branch profits tax at a rate of up to 30%, unless an applicable income tax treaty provides otherwise. Such Non-U.S. Holder will not be subject to withholding taxes, however, if it provides a properly executed Form W-8ECI to the Authority or its paying agent, if any.

Sale or other Taxable Disposition of a Series 2020A Bond. Subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "Foreign Account Tax Compliance Act ("FATCA")—U.S. Holders and Non-U.S. Holders," any gain realized by a Non-U.S. Holder upon the sale, exchange, redemption, retirement (including pursuant to an offer by the Authority, or a deemed retirement due to the defeasance of the Series 2020A Bond) or other disposition of a Series 2020A Bond generally will not be subject to U.S. federal income tax, unless (i) such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business within the United States (in which case the U.S. branch profits tax may also apply), unless an applicable income tax treaty provides otherwise; or (ii) in the case of any gain realized by an individual Non-U.S. Holder, such holder is present in the United States for 183 days or more in the taxable year of such sale, exchange, redemption, retirement (including pursuant to an offer by the Authority) or other disposition and certain other conditions are met.

Information Reporting and Backup Withholding. Subject to the discussion below under the heading "Foreign Account Tax Compliance Act ("FATCA")—U.S. Holders and Non-U.S. Holders," under current U.S. Treasury Regulations, payments of principal and interest on any Series 2020A Bonds to a Non-U.S. Holder will not be subject to any backup withholding tax requirements if the Non-U.S. Holder of the Series 2020A Bond or a financial institution holding the Series 2020A Bond on behalf of the Non-U.S. Holder in the ordinary course of its trade or business provides the certifications described in the following sentence to the payor and the payor does not have actual knowledge that the certifications are false. If a Non-U.S. Holder provides such certifications, the certifications must disclose the name and address of such Non-U.S. Holder, state that such Non-U.S. Holder is not a United States person, or, in the case of an individual, that such Non-U.S. Holder is neither a citizen nor a resident of the United States, and the Non-U.S. Holder must make such certifications under penalties of perjury. The current backup withholding tax rate is 24%.

Payments of interest on the Series 2020A Bonds and proceeds from the sale or other disposition of the Series 2020A Bonds are expected to be reported to the IRS as required by applicable Treasury Regulations. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established. Payments of proceeds from the sale or other disposition of the Series 2020A Bonds generally will be subject to information reporting if the disposition is effected within the United States or through certain U.S.-related financial intermediaries unless the Non-U.S. Holder provides the applicable withholding agent with a statement certifying, among other things, that the Non-U.S. Holder is not a "United States person" within the meaning of the Code (generally on IRS Form W-8BEN or W-8BEN-E). Payments subject to information reporting may be subject to backup withholding if the Non-U.S. Holder fails to certify the holder's non-U.S. status as described above. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against the Non-U.S. Holder's U.S. federal income tax liability provided that the required information is timely furnished to the IRS. Potential holders should consult their own tax advisors regarding qualification for an exemption and the procedures for obtaining such an exemption.

Foreign Account Tax Compliance Act ("FATCA")—U.S. Holders and Non-U.S. Holders

Certain withholding rules imposed under Section 1471 through 1474 of the Code (otherwise known as the "Foreign Account Tax Compliance Act" or "FATCA") generally impose a 30% U.S. withholding tax on certain payments made (including OID, if any) to non-U.S. financial institutions and certain other non-U.S. financial entities (whether such financial institutions or nonfinancial entities are beneficial owners or intermediaries), unless they satisfy certain due diligence and information reporting requirements. An intergovernmental agreement between the United States and the holder's jurisdiction may modify these requirements. While withholding under FATCA would also have applied to payments of gross proceeds from the sale or other disposition of the Series 2020A Bonds on or after January 1, 2019, proposed U.S. Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Although these U.S. Treasury Regulations are not final, they can be relied upon until final U.S. Treasury Regulations are issued. Failure to comply with the additional certification, information reporting and other specified requirements imposed under FATCA could also result in the 30% withholding tax being imposed on certain "passthru" payments with respect to, Series 2020A Bonds held by or through a foreign entity. However, under current guidance, withholding under FATCA will apply to certain "passthru" payments no earlier than the date that is two years after publication of final U.S. Treasury Regulations defining the term "foreign passthru payments." Prospective holders are encouraged to consult with their own tax advisors regarding the implications of this legislation and the applicable regulations on their investment in a Series 2020A Bond.

The foregoing summary is included herein for general information only and does not discuss all aspects of U.S. federal taxation that may be relevant to a particular holder of Series 2020A Bonds in light of the holder's particular circumstances and income tax situation. Prospective investors are urged to consult their own tax advisors as to any tax consequences to them from the purchase, ownership and disposition of the Series 2020A Bonds, including the application and effect of state, local, non-U.S. and other tax laws.

Certain ERISA Considerations

The Employee Retirement Income Security Act of 1974, as amended ("ERISA"), imposes certain restrictions on employee pension and welfare benefit plans subject to ERISA ("ERISA Plans") regarding prohibited transactions and also imposes certain obligations on those persons who are fiduciaries with respect to ERISA Plans. Section 4975 of the Code imposes similar prohibited transaction restrictions on certain plans, including (i) tax-qualified retirement plans described in Section 401(a) and 403(a) of the Code, which are exempt from tax under section 501(a) of the Code and which are not governmental or church plans as defined herein ("Qualified Retirement Plans"), and (ii) individual retirement accounts described in Section 408(b) of the Code (the plans described to in clauses (i) and (ii) being hereinafter referred to as "Tax-Favored Plans"). Certain employee benefit plans, such as governmental plans (as defined in Section 3(32) of ERISA), non-U.S. plans (as described in Section 4(b)(4) of ERISA) and, if no election has been made under Section 410(d) of the Code, church plans (as defined in Section 3(33) of ERISA), are not subject to ERISA requirements or Section 4975 of the Code, but may be subject to requirements or prohibitions under applicable federal, state, local, non-U.S. or other laws or regulations that are, to a material extent, similar to the requirements of ERISA and Section 4975 of the Code ("Similar Law").

In addition to the imposition of general fiduciary obligations, including those of investment prudence and diversification and the requirement that a plan's investment be made in accordance with the documents governing the plan, ERISA Plans are subject to prohibited transaction restrictions imposed by Section 406 of ERISA. ERISA Plans and Tax-Favored Plans are also subject to prohibited transaction restrictions imposed by Section 4975 of the Code.

These rules generally prohibit a broad range of transactions between (i) ERISA Plans, Tax-Favored Plans and entities whose underlying assets include plan assets by reason of ERISA Plans or Tax-Favored Plans investing in such entities (collectively, "Benefit Plans") and (ii) persons who have certain specified relationships to the Benefit Plans (such persons are referred to as "Parties in Interest" or "Disqualified Persons"), in each case unless a statutory, regulatory or administrative exemption is available. The definitions of "Party in Interest" and "Disqualified Person" are expansive. While other entities may be encompassed by those definitions, they include most notably: (1) a fiduciary with respect to a Benefit Plan; (2) a person providing services to a Benefit Plan; and (3) an employer or employee organization any of whose employees or members are covered by a Benefit Plan. Certain Parties in Interest (or Disqualified Persons) that participate in a non-exempt prohibited transaction may be subject to a penalty (or an excise tax) imposed pursuant to Section 502(i) of ERISA (or Section 4975 of the Code) unless a statutory, regulatory or administrative exemption is available.

Certain transactions involving the purchase, holding or transfer of the Series 2020A Bonds might be deemed to constitute prohibited transactions under ERISA and the Code if assets of the Authority were deemed to be assets of a Benefit Plan. Under final regulations issued by the United States Department of Labor at 29 C.F.R.

section 2510.3-101, as modified by Section 3(42) of ERISA (the “Plan Assets Regulation”), the assets of the Authority would be treated as plan assets of a Benefit Plan for the purposes of ERISA and the Code if the Benefit Plan acquires an “equity interest” in the Authority and none of the exceptions contained in the Plan Assets Regulation is applicable. An equity interest is defined under the Plan Assets Regulation as an interest in an entity other than an instrument that is treated as indebtedness under applicable local law and that has no substantial equity features. Although there can be no assurances in this regard, it appears that the Series 2020A Bonds should be treated as debt without substantial equity features for purposes of the Plan Assets Regulation and accordingly the assets of the Authority should not be treated as the assets of Benefit Plans investing in the Series 2020A Bonds.

However, without regard to whether the Series 2020A Bonds are treated as an equity interest for such purposes, the acquisition or holding of Series 2020A Bonds by or on behalf of a Benefit Plan could be considered to give rise to a prohibited transaction if the Authority or the Trustee, or any of their respective affiliates, is or becomes a Party in Interest or a Disqualified Person with respect to such Benefit Plan. The fiduciary of a Benefit Plan that proposes to purchase and hold any Series 2020A Bonds should consider, among other things, whether such purchase and holding may involve (i) the direct or indirect extension of credit to a Party in Interest, (ii) the sale or exchange of any property between a Benefit Plan and a Party in Interest and (iii) the transfer to, or use by or for the benefit of, a Party in Interest, of any Benefit Plan assets.

Certain status-based exemptions from the prohibited transaction rules could be applicable depending on the type and circumstances of the plan fiduciary making the decision to acquire a Series 2020A Bond. These are commonly referred to as prohibited transaction class exemptions or “PTCEs”. Included among these exemptions are:

- PTCE 75-1, which exempts certain transactions between a Benefit Plan and certain brokers-dealers, reporting dealers and banks

- PTCE 96-23, which exempts transactions effected at the sole discretion of an “in-house asset manager”

- PTCE 90-1, which exempts certain investments by an insurance company pooled separate account

- PTCE 95-60, which exempts certain investments effected on behalf of an “insurance company general account”

- PTCE 91-38, which exempts certain investments by bank collective investment funds

- PTCE 84-14, which exempts certain transactions effected at the sole discretion of a “qualified professional asset manager”

In addition, Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code generally provide for a statutory exemption from the prohibitions of Section 406(a) of ERISA and Section 4975 of the Code, commonly referred to as the “Service Provider Exemption”. The Service Provider Exemption covers transactions involving “adequate consideration” between Benefit Plans and persons who are Parties in Interest solely by reason of providing services to such Benefit Plans or who are persons affiliated with such service providers, provided generally that such persons are not fiduciaries with respect to “plan assets” of any Benefit Plan involved in the transaction and that certain other conditions are satisfied.

The availability of each of these PTCEs and/or the Service Provider Exemption is subject to a number of important conditions which the Benefit Plan’s fiduciary must consider in determining whether such exemptions apply. There can be no assurance that all the conditions of any such exemptions will be satisfied at the time that the Series 2020A Bonds are acquired by a purchaser, or thereafter, if the facts relied upon for utilizing a prohibited transaction exemption change, or that the scope of relief provided by these exemptions will necessarily cover all acts that might be construed as prohibited transactions. Therefore, a Benefit Plan fiduciary considering an investment in the Series 2020A Bond should consult with its own tax advisor prior to making such purchase.

By its acceptance of a Series 2020A Bond, each purchaser will be deemed to have represented and warranted that either (i) no “plan assets” of any Benefit Plan or a plan subject to Similar Law have been used to purchase such Series 2020A Bond or (ii) the purchase and holding of such Series 2020A Bonds is exempt from the prohibited transaction restrictions of ERISA and Section 4975 of the Code pursuant to a statutory, regulatory or administrative exemption and will not violate Similar Law.

The foregoing discussion is general in nature and is not intended to be all-inclusive. Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that any Benefit Plan fiduciary or other person considering whether to purchase Series 2020A Bonds on behalf of Benefit Plan should consult with its own tax advisor regarding the applicability of the fiduciary responsibility and prohibited transaction provisions of ERISA and the Code to such investment and the availability of any of the exemptions referred to above. In addition, persons responsible for considering the purchase of Series 2020A Bonds by a governmental plan, non-electing church plan or non-U.S. plan should consult with its own tax advisor regarding the applicability of any Similar Law to such an investment.

THE FOREGOING SUMMARY IS INCLUDED HEREIN FOR GENERAL INFORMATION ONLY AND DOES NOT DISCUSS ALL ASPECTS OF U.S. FEDERAL INCOME TAXATION THAT MAY BE RELEVANT TO A PARTICULAR BENEFICIAL OWNER OF SERIES 2020A BONDS IN LIGHT OF THE BENEFICIAL OWNER'S PARTICULAR CIRCUMSTANCES AND INCOME TAX SITUATION. PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO ANY TAX CONSEQUENCES TO THEM FROM THE PURCHASE, OWNERSHIP AND DISPOSITION OF SERIES 2020A BONDS, INCLUDING THE APPLICATION AND EFFECT OF STATE, LOCAL, FOREIGN AND OTHER TAX LAWS.

State Tax Matters for the Series 2020A Bonds

In the opinion of Bond Counsel, interest on the Series 2020A Bonds and any profit made on the sale thereof are exempt from Massachusetts personal income taxes, and the Series 2020A Bonds are exempt from Massachusetts personal property taxes. Bond Counsel has not opined as to other Massachusetts tax consequences arising with respect to the Series 2020A Bonds. Prospective purchasers should be aware, however, that the Series 2020A Bonds are included in the measure of Massachusetts estate and inheritance taxes, and the Series 2020A Bonds and the interest thereon are included in the measure of Massachusetts corporate excise and franchise taxes. Bond Counsel has not opined as to the taxability of the Series 2020A Bonds, their transfer and the income therefrom, including any profit made on the sale thereof, under the laws of any state other than Massachusetts.

Opinion of Bond Counsel

On the date of delivery of the Series 2020A Bonds, the Underwriters of the Series 2020A Bonds will be furnished with an opinion of Bond Counsel substantially in the applicable form shown in "Proposed Form of Opinion of Bond Counsel" attached hereto as Appendix E.

RATINGS

Moody's Investors Service, Inc. ("Moody's") has assigned the Series 2020A Bonds an enhanced rating of "Aa2," with a stable outlook, based in part on the Pledged Appropriations. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – The Contract; *Pledged Funds*" and "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Commonwealth Appropriation Intercept." S&P Global Ratings ("S&P") has assigned the Series 2020A Bonds a rating of "AA-," with a stable outlook. Such ratings reflect only the respective views of such organizations, and an explanation of the significance of such ratings may be obtained from the rating agency furnishing the same. There is no assurance that a particular rating will continue for any given period of time or that a rating will not be revised or withdrawn entirely by the rating agency, if in the judgment of such rating agency, circumstances so warrant. Any revision or withdrawal of the rating could have an adverse effect on the market price of the Series 2020A Bonds.

MUNICIPAL ADVISOR

Acacia Financial Group, Inc. is acting as municipal advisor to the Authority in connection with the issuance of the Series 2020A Bonds.

UNDERWRITING

The underwriters identified on the cover page hereof (the "Underwriters"), represented by BofA Securities, Inc., have agreed to purchase the Series 2020A Bonds from the Authority at a price of $394,108,582.83 (which amount represents the principal amount of the Series 2020A Bonds, less an underwriting discount of $1,626,417.17). The Underwriters may offer and sell the Series 2020A Bonds to certain dealers and others (including dealers depositing bonds into investment trusts) at prices lower than the public offering prices (or yields higher than the offering yields) stated on the inside cover hereof. The purchase contract provides that the Underwriters will purchase all of the Series 2020A Bonds, and the obligation to make such purchase is subject to certain terms and conditions set forth in the purchase contract.

In addition, certain of the Underwriters have entered into distribution agreements with other broker-dealers (that have not been designated by the Authority as Underwriters) for the distribution of the Series 2020A Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers. UBS Financial Services Inc. ("UBS FSI") an underwriter of the Series 2020A Bonds has entered into a distribution and service agreement with its affiliate UBS Securities LLC ("UBS Securities") for the distribution of certain municipal securities offerings, including the Series 2020A Bonds. Pursuant to such agreement, UBS FSI will share a portion of its underwriting compensation with respect to the Series 2020A Bonds with UBS Securities. UBS FSI and UBS Securities are each subsidiaries of UBS Group AG.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may, including with respect to this transaction, provide, a variety of these services to the Authority and to persons and entities with relationships with the Authority, for which they received or will receive customary fees and expenses. Under certain circumstances, the Underwriters and their affiliates may have certain creditor and/or other rights against the Authority and its affiliates in connection with such activities.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the Authority (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationship with the Authority. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research reviews in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

VERIFICATION OF MATHEMATICAL CALCULATIONS

American Municipal Tax-Exempt Compliance Corporation d/b/a AMTEC, of Avon, Connecticut, and Michael Torsiello, C.P.A. (an independent Certified Public Accountant) of Morrisville, North Carolina (together, the "Verification Agents") will deliver to the Authority on or before the date of delivery of the Series 2020A Bonds their verification report indicating that they have verified, in accordance with the standards established by the American Institute of Certified Public Accountants, the mathematical accuracy of certain computations showing the adequacy of the cash and the maturing principal of and interest on certain government obligations held in the refunding escrow fund to provide for the payment of the principal of and interest and redemption premiums, if any, on the Refunded Bonds and the yield on the investments in the refunding escrow fund. The verification report will state that the Verification Agents have no obligation to update the report because of events occurring, or data or information coming to their attention, subsequent to the date of the report.

CONTINUING DISCLOSURE

The Authority and the BHE will undertake to provide annual reports and notices of certain events. A description of these undertakings is set forth in Appendix F attached hereto.

Certain of the Authority's and State Universities' financial statements and annual financial information and operating data, though filed on a timely basis, did not appear under all of the applicable CUSIP numbers on EMMA. In addition, after the publication and timely filing of all of the original audited financial statements required to be filed for fiscal year 2018, five of the State Universities published restated audited financial statements for fiscal year 2018 which were not filed. All corrective filings have been made.

MISCELLANEOUS

All quotations from and summaries and explanations of the Act, Chapter 15A, the Trust Agreement and the Contract contained herein do not purport to be complete and reference is made to said laws and documents for full and complete statements of their provisions. The Appendices attached hereto are a part of this Official Statement. Copies, in reasonable quantity, of the Act, the Trust Agreement and the Contract may be obtained upon request directed to the Massachusetts State College Building Authority, 10 High Street, Suite 201, Boston, Massachusetts 02110, Attention: Executive Director.

Any statements in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not to be construed as a contract or agreement between the Authority and the purchasers or holders of any of the Series 2020A Bonds.

The execution and delivery of this Official Statement by its Executive Director have been duly authorized by the Authority.

MASSACHUSETTS STATE COLLEGE BUILDING AUTHORITY

By: *<u>/s/ Edward H. Adelman</u>*
Edward H. Adelman
Executive Director

June 16, 2020

STATE UNIVERSITIES SELECTED FINANCIAL AND STATISTICAL INFORMATION

State University Revenue Sources

To illustrate the relative importance of State University revenue sources in recent years, the following table sets forth revenues for each of the State Universities for fiscal years 2016 through 2019. Fees collected by State Universities for the use of Authority projects are included in auxiliary enterprise income in the table below and on the financial statements of the individual State Universities. Tuition receipts are generally remitted to the Commonwealth, and the tuition figures below include such remitted receipts. Recent state budgets have authorized the Massachusetts College of Art and Design and the Massachusetts Maritime Academy to retain all tuition and fees received by such institutions rather than remitting tuition to the state treasury. The Massachusetts College of Liberal Arts has been similarly authorized to retain out-of-state tuition and fees. The figures for state support in the table below include all unrestricted funds received by the State Universities from the Commonwealth, including appropriations and fringe benefit support, less tuition remitted to the Commonwealth.

	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019
Bridgewater State				
Tuition and fees	$96,402,691	$103,612,951	$111,057,593	$114,269,850
Grants and contracts	19,966,803	20,467,984	21,621,193	23,343,212
State support	55,286,190	58,090,595	58,883,631	65,098,681
Auxiliary enterprises	26,814,973	26,706,122	26,441,631	26,754,128
Other revenues	2,201,100	1,863,742	1,568,141	665,907
Scholarship allowance (credit)	(13,431,243)	(13,534,275)	(14,691,947)	(15,462,598)
Total revenues	$187,240,514	$197,207,119	$204,880,242	$214,669,180
Fitchburg State				
Tuition and fees	$44,135,990	$46,731,201	$49,533,454	$51,779,802
Grants and contracts	8,243,711	7,984,831	8,605,188	8,741,473
State support	37,159,087	38,873,231	39,403,569	43,794,742
Auxiliary enterprises	9,269,731	9,647,200	10,675,346	10,503,522
Other revenues	2,402,812	2,436,114	3,209,372	2,915,667
Scholarship allowance (credit)	(7,728,440)	(7,711,629)	(7,722,510)	(7,527,347)
Total revenues	$93,482,891	$97,960,948	$103,704,419	$110,207,859
Framingham State				
Tuition and fees	$42,531,161	$43,927,462	$44,796,259	$45,694,570
Grants and contracts	12,284,096	9,882,318	8,030,560	10,270,352
State support	35,477,537	37,022,123	37,753,236	42,832,614
Auxiliary enterprises	14,706,516	15,630,123	16,001,360	15,897,282
Other revenues	2,038,867	3,116,759	3,661,029	3,629,359
Scholarship allowance (credit)	(8,110,544)	(8,173,683)	(9,568,815)	(9,709,072)
Total revenues	$98,927,633	$101,405,102	$100,673,629	$108,615,105
Massachusetts College of Art and Design				
Tuition and fees	$31,490,137	$34,094,935	$36,956,558	$37,500,957
Grants and contracts	3,072,493	3,060,410	3,555,441	3,583,606
State support	25,324,221	26,901,808	27,398,873	29,797,353
Auxiliary enterprises	13,019,180	13,333,190	14,268,030	14,551,817
Other revenues	5,509,190	6,162,877	7,172,580	9,840,946
Scholarship allowance (credit)	(9,072,041)	(10,580,043)	(11,219,086)	(10,906,294)
Total revenues	$69,343,180	$72,973,177	$78,132,396	$84,368,385

	Fiscal 2016	Fiscal 2017	Fiscal 2018	Fiscal 2019
Mass. College of Liberal Arts				
Tuition and fees	$14,506,480	$14,931,915	$15,041,472	$14,501,828
Grants and contracts	6,015,580	5,883,254	5,992,334	5,688,772
State support	20,773,988	21,770,331	22,048,689	24,153,955
Auxiliary enterprises	7,810,159	7,976,381	8,076,303	7,804,273
Other revenues	2,501,130	1,665,224	1,409,283	1,709,874
Scholarship allowance (credit)	(5,276,611)	(5,258,907)	(5,312,365)	(5,081,277)
Total revenues	$46,330,726	$46,968,198	$47,255,716	$48,777,425
Massachusetts Maritime Academy				
Tuition and fees	$24,100,116	$26,858,016	$28,848,256	$30,198,475
Grants and contracts	1,849,983	2,828,203	2,582,533	3,722,518
State support	20,359,425	22,640,314	22,815,958	24,925,617
Auxiliary enterprises	18,961,567	20,537,837	21,331,705	22,250,945
Other revenues	709,905	647,275	594,672	935,074
Scholarship allowance (credit)	(4,989,333)	(5,156,776)	(5,987,062)	(6,135,868)
Total revenues	$60,991,663	$68,354,869	$70,186,062	$75,896,761
Salem State				
Tuition and fees	$79,474,916	$84,587,147	$88,009,192	$87,523,360
Grants and contracts	18,820,269	19,306,162	19,472,136	19,900,630
State support	56,416,180	58,767,638	60,128,013	65,735,152
Auxiliary enterprises	20,976,201	22,398,146	23,423,196	22,569,201
Other revenues	1,723,701	1,697,399	1,748,687	1,163,364
Scholarship allowance (credit)	(16,790,060)	(17,694,347)	(18,442,753)	(19,331,472)
Total revenues	$160,621,207	$169,062,145	$174,338,471	$177,560,235
Westfield State				
Tuition and fees	$51,693,910	$54,007,683	$55,554,507	$57,377,085
Grants and contracts	11,691,682	12,171,899	13,540,086	13,114,205
State support	33,425,461	35,049,389	35,255,242	39,022,622
Auxiliary enterprises	28,457,775	29,150,749	28,304,371	26,579,581
Other revenues	4,642,967	5,255,339	4,843,559	4,631,229
Scholarship allowance (credit)	(10,277,457)	(10,220,586)	(10,701,997)	(10,967,197)
Total revenues	$119,634,338	$125,414,473	$126,795,768	$129,757,525
Worcester State				
Tuition and fees	$43,982,183	$45,060,846	$47,455,790	$49,364,735
Grants and contracts	10,924,592	11,975,305	12,637,198	12,763,645
State support	33,605,906	35,169,690	35,415,371	39,400,435
Auxiliary enterprises	12,142,798	12,277,532	12,960,428	13,291,511
Other revenues	1,146,016	1,032,424	1,265,178	1,468,693
Scholarship allowance (credit)	(8,752,320)	(8,414,317)	(9,262,374)	(9,426,624)
Total revenues	$93,049,175	$97,101,480	$100,471,591	$106,862,395

Source: University Financial Statements

Enrollment

The following table sets forth enrollment information for the system of public higher education for the fall semesters of 2015 through 2019 on the basis of full-time equivalent students and headcount. Both degree and non-degree students are included.

	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
Full-Time Equivalent					
Bridgewater	9,176	9,054	9,086	9,047	8,976
Fitchburg	4,452	4,498	4,667	4,745	4,659
Framingham	4,881	4,732	4,537	4,405	4,333
Mass. College of Art and Design	1,717	1,761	1,839	1,820	1,863
Mass. College of Liberal Arts	1,450	1,441	1,401	1,288	1,320
Mass. Maritime Academy	1,669	1,749	1,781	1,786	1,791
Salem	7,285	7,226	7,105	6,778	6,260
Westfield	5,680	5,617	5,497	5,345	5,081
Worcester	4,873	4,860	4,954	4,930	4,850
State Universities	41,182	40,938	40,867	40,144	39,133
Community Colleges	56,119	52,947	50,396	47,535	45,494
University of Massachusetts	62,416	63,048	63,597	64,296	64,883
Total	159,718	156,933	154,860	151,975	149,510
Headcount					
Bridgewater	11,089	10,998	11,019	10,990	10,881
Fitchburg	6,598	6,763	7,075	7,199	7,252
Framingham	6,398	5,977	5,691	5,565	5,463
Mass. College of Art and Design	1,990	1,982	2,064	2,087	2,095
Mass. College of Liberal Arts	1,641	1,644	1,588	1,452	1,507
Mass. Maritime Academy	1,674	1,751	1,780	1,802	1,792
Salem	9,215	9,001	8,702	8,338	7,706
Westfield	6,496	6,335	6,237	6,101	5,798
Worcester	6,306	6,471	6,435	6,217	6,204
State Universities	51,407	50,922	50,591	49,751	48,698
Community Colleges	92,671	87,527	83,397	79,948	76,327
University of Massachusetts	72,591	73,261	73,368	73,388	73,656
Total	216,669	211,710	207,356	203,087	198,681

Source: Massachusetts Department of Higher Education
Totals may not add due to rounding.

Tuition and Fees

The following are the tuition rates and fees for Massachusetts residents for each of the State Universities, the Community Colleges and the University of Massachusetts for the academic years 2015-2016 through 2019-2020. Fees which are payable by some students but not others, including fees for the use of Authority residence halls and other Authority projects are not included.

	Academic Year 2015-2016		Academic Year 2016-2017		Academic Year 2017-2018		Academic Year 2018-2019		Academic Year 2019-2020	
	Tuition	Fees	Tuition	Fees	Tuition	Fees	Tuition	Fees	Tuition	Fees
Bridgewater	$910	$7,994	$910	$8,718	$910	$9,102	$910	$9,658	$910	$9,822
Fitchburg	970	8,964	970	9,164	970	9,184	970	9,384	970	9,534
Framingham	970	7,734	970	8,374	970	8,950	970	9,550	970	10,130
Mass. College of Art and Design	1,030	10,694	1,030	11,170	1,030	11,670	1,030	12,170	1,030	12,670
Mass. College of Liberal Arts	1,030	8,446	1,030	8,846	1,030	9,106	1,030	9,530	1,030	9,900
Mass. Maritime Academy	1,554	6,076	1,632	6,374	1,714	6,684	1,782	7,946	1,836	8,182
Salem	910	8,336	910	8,826	910	9,368	910	9,972	910	10,374
Westfield	970	7,846	970	8,306	970	8,746	970	9,460	970	9,880
Worcester	970	7,888	970	8,232	970	8,562	970	9,192	970	9,192
State Universities*	$975	$8,153	$980	$8,634	$986	$9,023	$990	$9,618	$994	$9,901
Community Colleges*	$732	$4,802	$732	$5,079	$732	$5,299	$731	$5,648	$732	$5,846
University of Massachusetts*	$1,619	$11,882	$13,914	$372	$14,346	$389	$14,710	$441	$15,073	$556

Source: Board of Higher Education
* Represents the average, weighted by number of students

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Room Rates of Residence Facilities at State Universities

The following table shows the range of annual rates charged for the Authority's residence facilities for the academic years 2015-2016 through 2019-2020. The Authority conducts a biennial market evaluation to ensure that rents are at or below the cost of off-campus housing in the area served by each university. In addition, a program for housing financial aid makes about $2.0 million available annually as part of financial aid for students with need. See "THE AUTHORITY – Management's Discussion and Analysis; Debt Service – *Housing Grant Scholarship Program*." Regular modest rent increases are implemented to ensure adequate funding for debt service, operating cost increases and to fund capital improvements:

State University	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Bridgewater	$6,940-8,080	$7,220-8,400	$7,510-8,862	$7,698-9,128	$7,948-9,425
Fitchburg	$5,440-6,840	$5,770-7,470	$6,044-8,273	$6,331-8,666	$6,331-9,034
Framingham	$6,680-9,280	$6,980-9,580	$7,280-9,880	$7,560-10,160	$7,840-10,440
Mass. College of Art and Design	$8,350-11,670	$8,560-11,960	$8,820-12,320	$9,261-13,378	$9,358-13,378
Mass. College of Liberal Arts	$5,500-5,700	$5,750-5,950	$6,050-6,250	$5,000-6,550	$5,000-6,850
Mass. Maritime Academy	$6,790	$7,130	$7,340	$7,560	$7,790
Salem	$7,280-10,320	$7,570-10,730	$7,870-11,160	$8,110-11,490	$8,350-11,820
Westfield	$5,730-8,680	$5,940-9,000	$6,110-9,260	$4,380-9,540	$4,510-9,830
Worcester	$7,270-8,370	$7,485-8,585	$7,646-8,746	$7,778-8,878	$7,778-8,878

Source: Authority

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Occupancy as a Percentage of Design Capacity at Residence Facilities of State Universities

The following table shows for the academic years 2014-2015 through 2019-2020 the occupancy rates of the Authority's residence facilities at State Universities expressed as a percentage of design capacity. Actual occupancy can exceed 100% of design capacity when, for example, a double room is occupied by three students and/or when lounge spaces are converted to residence space (consistent with prevailing codes). This level of occupancy has been achieved while adding approximately 6,337 additional beds to the system since the fall of 2003.

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020*
Bridgewater	99.2%	98.2%	96.4%	94.8%	94.8%	95.7%
Fitchburg	103.1	100.9	96.0	92.1	84.8	76.2
Framingham	97.9	97.9	93.8	92.9	89.9	87.9
Mass. College of Art and Design	98.6	98.2	99.2	99.0	96.2	99.9
Mass. College of Liberal Arts	85.7	78.6	77.4	74.4	70.8	73.4
Mass. Maritime Academy	92.5	100.5	104.6	102.0	101.8	101.3
Salem	106.8	99.7	96.3	95.7	89.9	79.0
Westfield	98.3	102.4	99.2	93.9	86.0	82.2
Worcester	86.6	94.0	92.3	95.5	96.0	95.6
State University Average	97.6%	97.9%	95.8%	93.9%	90.5%	87.7%

Source: Authority

* The 2019-2020 academic year occupancy reflects actual occupancy prior to the actions taken to protect public health. See also "COVID-19" herein.

Total Number of Residence Hall Beds by State University

The following table shows the total number of residence hall beds by State University for the academic years 2014-2015 through 2019-2020:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Bridgewater	3,295	3,281	3,295	3,295	3,294	3,294
Fitchburg	1,580	1,580	1,580	1,712	1,712	1,706
Framingham	1,931	1,925	1,996	1,978	1,978	1,972
Mass. College of Art and Design	919	919	919	919	890	919
Mass. College of Liberal Arts	1,033	1,033	1,045	1,045	1,026	1,026
Mass. Maritime Academy	1,411	1,411	1,411	1,411	1,411	1,411
Salem	1,929	2,282	2,282	2,282	2,282	2,282
Westfield	2,797	2,765	2,752	2,752	2,752	2,752
Worcester	1,577	1,577	1,577	1,577	1,577	1,577
Total State Universities	16,472	16,773	16,857	16,971	16,922	16,939

Source: Authority

State Higher Education Admissions Data

The following table sets forth freshman application, acceptance and the percentage registered information for the system of public higher education for fall 2016 through fall 2019. This information is based solely on fall semester statistics.

	Fall 2016			Fall 2017			Fall 2018			Fall 2019		
	Applied	Accepted	% Registered	Applied	Accepted	% Registered	Applied	Accepted	% Registered	Applied	Accepted	% Registered
Bridgewater	6,862	4,849	29.28%	6,466	5,152	30.10%	6,068	5,339	29.50%	9,025	7,668	21.57%
Fitchburg	3,567	2,663	28.65%	3,609	2,889	26.00%	3,234	2,810	25.40%	2,902	2,564	26.29%
Framingham	6,203	4,019	18.64%	6,039	4,113	18.60%	5,706	4,182	18.30%	5,945	4,415	17.58%
Mass. College of Art and Design	1,531	1,085	34.47%	1,920	1,336	31.70%	2,566	1,724	21.10%	3,087	1,784	21.47%
Mass. College of Liberal Arts	2,013	1,552	21.07%	1,946	1,494	19.30%	1,931	1,423	18.40%	1,754	1,432	19.90%
Mass. Maritime Academy	825	664	60.54%	839	698	56.30%	759	676	59.20%	774	707	57.14%
Salem	6,139	4,517	25.35%	6,186	5,067	21.60%	6,562	5,558	20.00%	5,825	4,985	20.28%
Westfield	4,735	3,691	28.94%	4,381	3,735	27.10%	4,302	3,702	27.10%	4,455	3,883	26.86%
Worcester	3,876	2,735	28.92%	3,747	2,860	31.80%	4,076	3,173	28.10%	3,896	3,145	28.17%
Total State Universities	35,751	25,775	27.31%	35,133	27,344	26.30%	35,204	28,587	24.80%	35,204	28,587	24.80%
Community Colleges	40,599	35,318	49.26%	41,963	36,475	48.87%	41,198	36,339	44.09%	37,997	34,923	48.99%
University of Massachusetts	69,432	44,139	21.30%	72,960	46,395	21.49%	75,787	49,631	21.90%	78,607	52,745	22.00%
Total	145,782	105,232	32.15%	150,056	110,214	31.74%	152,189	114,557	31.64%	151,808	116,255	31.64%

Source: Massachusetts Board of Higher Education

State University Faculty Levels

The following table sets forth for each State University the number of full-time faculty members for the fall semester of the academic years 2014-2015 through 2018-2019.

	Academic Year 2014-2015	Academic Year 2015-2016	Academic Year 2016-2017	Academic Year 2017-2018	Academic Year 2018-2019
Bridgewater	332	335	362	357	355
Fitchburg	193	197	204	203	200
Framingham	186	194	198	197	200
					114
Mass. College of Art and Design	106	109	112	111	
Mass. College of Liberal Arts	88	90	91	87	90
Mass. Maritime Academy	79	75	83	89	88
Salem	349	351	349	340	325
Westfield	230	235	226	228	232
Worcester	206	202	204	211	207
Total	1,769	1,791	1,829	1,823	1,811

Source: Integrated Postsecondary Education Data System

FINANCIAL STATEMENTS OF THE AUTHORITY

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Massachusetts State College Building Authority
(A Component Unit of the
Commonwealth of Massachusetts)

Financial Statements
(With Supplementary Information)
and Independent Auditor's Reports

June 30, 2019 and 2018

CohnReznick
Accounting • Tax • Advisory

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Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Index

Independent Auditor's Report

To the Board
Massachusetts State College Building Authority

Report on the Financial Statements

We have audited the accompanying financial statements of the Massachusetts State College Building Authority (the "Authority"), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2019 and 2018, 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 an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 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 entity'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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2019 and 2018, and the changes in its financial position and its cash flows 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 and the pension and other postemployment benefit schedules on pages 4 to 16 and 57 to 62, respectively, be presented to supplement the basic financial statements. Such information, although not a 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. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The statistical section contained on pages 63 to 67 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 10, 2019, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

CohnReznick LLP

Boston, Massachusetts
October 10, 2019

Management's Discussion and Analysis
For the Years Ended June 30, 2019 and 2018
Unaudited

The following discussion and analysis provide management's overview of the financial position of the Massachusetts State College Building Authority (the Authority) as of June 30, 2019 and 2018, and the results of its operations and cash flows for the years then ended. This management's discussion and analysis is unaudited and should be read in conjunction with the Authority's audited financial statements and notes, which are attached hereto.

Introduction

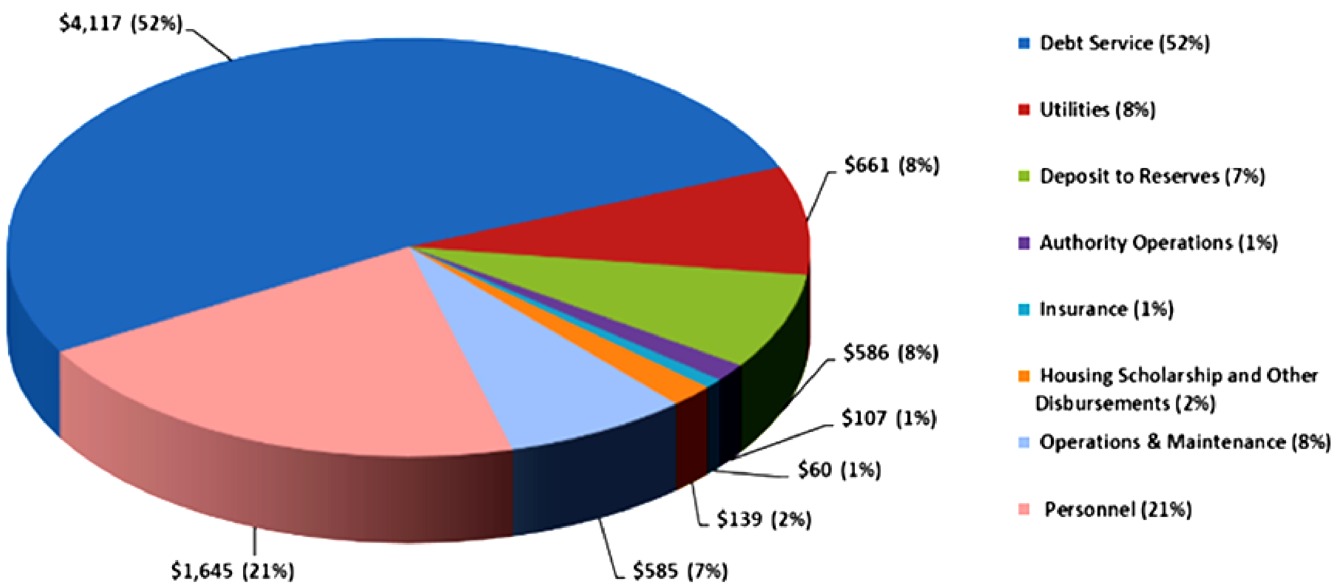
The Massachusetts State College Building Authority is a public instrumentality of the Commonwealth of Massachusetts (the Commonwealth) charged with financing, designing, constructing, and overseeing the management of - housing, dining, athletic, parking, and other student activity facilities - for the nine state universities and fifteen community colleges (collectively, the state colleges). The Authority is also able to finance certain academic facility projects located at the state universities and community colleges. The Authority was created pursuant to Chapter 703 of the Acts of 1963 (the Act) of the Commonwealth of Massachusetts.

The state university segment of the public institutions of higher education includes: Bridgewater, Fitchburg, Framingham, Salem, Westfield, and Worcester State Universities, Massachusetts College of Liberal Arts, Massachusetts College of Art and Design, and Massachusetts Maritime Academy. The community college segment includes the following institutions: Berkshire, Bristol, Bunker Hill, Cape Cod, Greenfield, Holyoke, Massachusetts Bay, Massasoit, Middlesex, Mount Wachusett, North Shore, Northern Essex, Quinsigamond, Roxbury, and Springfield Technical Community Colleges.

As required by statute, the offices of the Authority are in Boston, Massachusetts. The nine board members of the Authority are appointed by the Governor; three members must be appointive members of the Commonwealth's Board of Higher Education.

Revenue

The Authority receives no appropriation from the Commonwealth; all revenues to support facility design, construction, and operation are derived from the rents and fees paid by students for the use of these facilities and services. Pursuant to the Act and a Contract for Financial Assistance, Management and Services between the Commonwealth acting by and through the Board of Higher Education (BHE) (the Contract), the Authority annually sets and assesses rents and fees sufficient to provide for the payment of all costs of its facilities. The average rent in academic year 2018/19 was $7,901 and included maintenance, operation, administration, reserves and to pay debt service on revenue bonds issued to finance its projects.



Enrollment and Occupancy

The state universities certify residence hall occupancy to the Authority and to the Commonwealth's Department of Higher Education on a semi-annual basis. For the academic years 2018/19 and 2017/18, the number of students housed in on-campus housing owned by the Authority was 90.5% and 93.9% of design occupancy, respectively.

As of June 30, 2019, approximately 14,800 students reside in the 57 residential complexes owned by the Authority. These facilities house 37% of fall 2018 full-time undergraduate students and comprise about 4.5 million square feet of space on the nine state university campuses. In addition, the Authority owns three parking structures that provide spaces for 2,114 vehicles.

The following table shows average annual residence hall occupancy from academic year 2009/10 through 2018/19. During this period the authority increased design occupancy by 33%, or over 4,000 beds.

	Academic Years									
State University	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Bridgewater	101.0%	100.0%	100.0%	98.9%	94.6%	99.2%	96.7%	96.0%	95.0%	94.8%
Fitchburg	105.0%	104.0%	100.0%	100.8%	99.6%	103.1%	101.0%	96.4%	92.0%	84.8%
Framingham	101.0%	104.0%	100.0%	100.3%	100.3%	97.9%	97.9%	93.8%	93.0%	89.9%
Mass. College of Art	100.0%	99.0%	100.0%	99.3%	99.2%	98.6%	98.2%	99.2%	99.0%	96.2%
Mass. College of Liberal Arts	94.0%	99.0%	94.0%	91.1%	85.8%	85.7%	78.6%	77.4%	74.0%	70.8%
Mass. Maritime Academy	100.0%	103.0%	106.0%	107.9%	111.2%	92.5%	100.5%	104.6%	102.0%	101.8%
Salem	106.0%	94.0%	102.0%	106.7%	105.9%	106.8%	99.7%	96.3%	96.0%	89.9%
Westfield	105.0%	104.0%	106.0%	101.1%	98.1%	98.3%	102.4%	99.2%	94.0%	86.0%
Worcester	102.0%	100.0%	103.0%	101.9%	101.1%	86.6%	94.0%	92.3%	96.0%	96.0%
Average Occupancy	**102.0%**	**101.0%**	**101.4%**	**101.0%**	**99.1%**	**97.5%**	**97.6%**	**95.8%**	**94.0%**	**90.5%**
Design Occupancy	**12,700**	**14,138**	**14,344**	**15,290**	**15,717**	**16,458**	**17,289**	**16,857**	**16,957**	**16,922**

Financial Statements

The Authority's financial statements (pages 17 - 55 of this report) have been prepared in accordance with accounting principles generally accepted in the United States of America as promulgated by the Governmental Accounting Standards Board (GASB).

The *Statement of Net Position (Deficiency in Net Position)* presents assets and deferred outflows of resources, less liabilities and deferred inflows of resources, with the residual balance being reported as *net position (deficiency in 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 *Statement of Revenues, Expenses, and Changes in Net Position* presents information showing how the Authority's net position changed during the fiscal year presented. 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 payment for accrued compensated absences, or the receipt of amounts due from state colleges and others for services rendered).

The *Statement of Cash Flows* is 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 for financial assistance, management and services) and disbursements (e.g., cash paid to employees, contractors, consultants, or vendors for services). GASB Statements 34 and 35 require this method to be used.

The notes to the financial statements describe significant accounting policies adopted by the Authority and provide additional information that is essential to a full understanding of the data provided in the financial statements.

Financial Highlights

- The Authority issued $15.4 million Project Revenue Bonds Series 2019A on January 15, 2019. The proceeds of these bonds will fund residence hall renewal and adaption projects at Fitchburg State University, Framingham State University, and Salem State University. Series 2019A also provided funds for dining and recreation facilities projects at Fitchburg State University, Framingham State University, and Massachusetts College of Liberal Arts. The bonds were issued with a true interest cost of 2.96%.

- The Authority issued $52.3 million Refunding Revenue Bonds Series 2019B (Federally Taxable) to restructure a portion of Series 2012A Bonds. The refunding bonds resulted in level debt service for the bonds originally issued to fund University Hall at Westfield State University. The Series 2019B Bonds were issued on a taxable basis as the Tax Cuts and Jobs Act of 2017 eliminated the ability to issue tax-exempt advance refunding bonds. The bonds were issued with a true interest cost of 3.97%.

- The Authority adopted GASB 75 Accounting and Reporting for Post-Employment Benefits other than Pensions (OPEB) in FY18, recording a liability calculated as the Authority's proportionate share of the total Commonwealth's OPEB liability based on number of employees. In FY19, the Authority engaged an actuarial firm to calculate the liability based on demographic factors specific to the Authority. This change in assumptions resulted in a decrease of the OPEB liability from $6.1 million in FY18 to $1.3 million in FY19.

- The total assets of the Authority declined from $1.29 billion at June 30, 2018 to $1.26 billion at June 30, 2019. This decline largely relates to depreciation exceeding investment in new capital assets on Authority-owned facilities by $23.3 million. Details of capital assets are provided on pages 33 - 34.

- Total liabilities decreased $34.1 million, from $1.37 billion in FY18 to $1.34 billion in FY19. This decline is due to a combination of reduced debt outstanding ($27 million), a reduction in campus funds held by the Authority ($6.5 million), $4.4 million net adjustment for the FY18 pension and OPEB liabilities, net of an increase in accounts payable of $3.8 million.

- FY19 operating revenues increased $2.5 million or 2.9% from FY18 due to increased assessment revenues used to fund debt obligations, Authority operations, and deposits to capital reserves.

- The Authority's interest income increased in FY19 due to an active investment strategy and an increased interest rate environment. The Authority conducted competitive bids for the investment of proceeds of the Series 2019A Bonds and the reinvestment of certain debt service reserve fund investments. The result was an increase in net investment income of 48%, or $4.8 million from FY18 despite average total cash/investments only increasing 2.3% or $3.7 million, from FY18 to FY19.

Financial Analysis

Statements of Net Position (Deficiency in Net Position)

The Authority's net position reflects its investment in capital assets, including land, buildings, furniture and equipment, less accumulated depreciation and related outstanding debt used to acquire those assets. These assets provide on-going services to the state universities and consequently they are generally not available to be used to liquidate liabilities. In fiscal year 2002, the Authority began depreciating its capital assets in accordance with GASB Statements 34 and 35. At that time, the initial accumulated depreciation of $81.45 million represented the depreciation on its capital assets dating back to 1963. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets in accordance with guidelines established by the Commonwealth. The Authority's net position is as follows:

Summary - Statements of Net Position at June 30, 2019, 2018, and 2017

	Fiscal year ended June 30,		
	2019	2018	2017
Current assets	$ 86,766,119	$ 85,986,555	$ 76,122,131
Capital assets, net	886,078,640	909,377,246	932,977,708
Other noncurrent assets	289,907,347	294,178,547	302,588,784
Total assets	1,262,752,106	1,289,542,348	1,311,688,623
Deferred outflows of resources	41,263,105	42,298,738	41,831,016
Current liabilities	81,737,089	81,530,088	77,073,715
Noncurrent liabilities	1,257,506,644	1,291,845,929	1,316,866,154
Total liabilities	1,339,243,733	1,373,376,017	1,393,939,869
Deferred inflows of resources	5,904,838	1,149,656	251,890
Net position:			
Net investment in capital assets	(44,021,651)	(29,027,598)	(23,187,500)
Unrestricted (deficit)	2,888,291	(13,656,989)	(17,484,620)
Deficiency in net position	$ (41,133,360)	$ (42,684,587)	$ (40,672,120)

Current assets include cash related to project spending, debt service, and Authority operations, current accounts receivable, and prepaid expenses.

- For the year ended June 30, 2019, current assets increased $779 thousand or 0.9% from the prior year. Unrestricted cash increased by $4.3 million, reflecting increased capital reserves of $3.7 million while restricted cash and investments declined by $3.4 million driven by capital project spending of bond proceeds and campus funds at a greater rate than new bond proceeds and new campus funds were received. The Authority sustains a capital reserve program consistent with the requirements of the Contract to ensure adequate reserves for building renewal. This reserve program is funded through annual assessments based on building age. Total capital reserves were $28.5 million at June 30, 2019.

- For the year ended June 30, 2018, current assets increased $9.9 million from prior year due to an increase in campus funded initiatives, increased interest earnings, and a decreased spending rate of new money bonds from prior year.

Capital assets include land, buildings and furniture and equipment, net of depreciation. Due to the reduction in Authority capital spending on Authority-owned assets in recent years, capital assets have decreased $23.3 million, or 2.5% in FY19 and $23.6 million, or 2.5%, in FY18. Further detail of capital assets is discussed on pages 33 - 34.

Other non-current assets include the non-current portion of restricted cash and investments, including debt service reserve funds, pension reserves, and long-term accounts receivable related to debt service on university-owned assets.

- For the year ended June 30, 2019, restricted investments increased by $10.1 million due to a shift of debt service reserve funds from cash to investments due to the more favorable interest rate environment.

- Debt service reserve fund balances are represented in the restricted cash and cash equivalents and restricted investments line items. For the year ended June 30, 2019, total debt service reserve fund balances increased by $2.7 million, or 3% to $85.0 million. This increase is driven by the increase in investment value at year end. For the year ended June 30, 2018, the debt service reserve funds balance was $82.3 million, a $5.3 million reduction from prior year. This reduction was attributed to reserves in excess of the required level of reserves applied as a source of funds to the Refunding Bond Series 2017D and Series 2016A, respectively.

- Net accounts receivable related to university-owned assets were reduced by $7.1 million from the year ended June 30, 2018 to June 30, 2019 due to payments of receivables, offset by $4.9 million in new receivables related to university-owned projects funded with Series 2019A Bonds. Accounts receivable decreased in FY18 reflecting payments from the universities that exceeded new additions of debt incurred on behalf of universities in FY18.

Deferred outflow of resources includes deferred outflows for pensions and OPEB ($1.5 million) and deferred losses on refunding of debt ($39.7 million).Total deferred outflows for resources was $41.2 for the year ended June 30, 2019, a decrease of $1 million or 2%. This decrease was driven by a reduction in the deferred losses of prior refundings offset by the $2.2 million increase for the 2019B refunding.

Total liabilities include debt service, accounts payable, payroll related liabilities, liabilities related to university funds held by the Authority, and the net pension liability of the Authority.

- For the year ended June 30, 2019, total liabilities decreased $34.1 million, or 2.5% from FY18. This decrease was driven by a $27 million decrease in bonds payable, a $6.5 million decrease in interagency payables to the campuses, and a $4.4 million net adjustment for the FY18 pension and OPEB liabilities, net of an increase in accounts payable of $3.8 million.

- For the year ended June 30, 2018, total liabilities were $1.3 billion, a decrease of $20.6 million, or 1.5% from the year ended June 30, 2017. This decrease was largely driven by the decrease in bonds payable, due to FY18 debt service payments, offset by the 2017D refunding.

- Beginning with FY15, the Authority implemented GASB 68 which requires the Authority to report the net pension liability which is the difference between the total pension liability and the value of the assets available in the pension plan's trust to pay pension benefits. The Commonwealth calculated the Authority's proportional share of the Commonwealth's net pension liability in FY19 to be $4.1 million compared to $3.8 million in FY18. The Authority invests its retirement trust fund with the Commonwealth's Pension Reserve Investment Trust. This investment was valued at $5.2 million as of June 30, 2019, which is $1.1 million greater than the liability assigned to the Authority by the Commonwealth.

- Beginning in FY18, the Authority implemented GASB 75 which requires the Authority to report the net other postemployment benefits liability, which is the difference between the total liability and the value of the assets available to pay other postemployment benefits. The Commonwealth calculated the Authority's proportional share of the Commonwealth's net OPEB liability in FY18 to be $6.1 million. This assumption was based on the Authority's current contributions for employee healthcare to the Group Insurance Commission (GIC) as a percentage of total contributions. In December 2018, the Commonwealth restated their total OPEB liability, with the Authority's proportionate share decreasing to $5.4 million. In addition to the Commonwealth's adjustment, in FY19 the Authority engaged an actuarial consultant to calculate the Authority's liability using demographic data specific to the Authority's employee profile and actual retiree data. This change in assumption led to a decrease of total OPEB liability by $4.7 million, to $1.3 million for the year ended June 30, 2019.

- University-owned student activity facilities are not carried as capital assets of the Authority. Project funds associated with university-owned assets are carried as interagency payable liabilities of the Authority. Debt associated with university-owned facilities is carried as receivables due from the college. Interest payments received from the colleges are recognized as investment income by the Authority.

- Debt administration is discussed on pages 15 - 16.

- A deficiency in total net position exists primarily due to depreciation and interest expenses exceeding operating and non-operating revenues over a period. The deficiency in net position at June 30, 2019 decreased by $1.5 million compared to the net position at June 30, 2018. The deficiency in net position at June 30, 2018 increased by $2.0 million compared to the net position at June 30, 2017. This increase is due to increases to assessment revenues offset by an increase in depreciation and interest expense and a decrease in net transfers from colleges. The net position for the years ended June 30, 2019 and 2018, excluding depreciation, was $4.0 million and $1.7 million, respectively.

Statements of Revenues, Expenses and Changes in Net Position

Authority revenue is primarily derived from assessments of state college residence hall rents and student activity fees pursuant to the Contract, in which the BHE commits the state colleges to meet the statutory and financial obligations related to the projects undertaken by the Authority. The assessments provide the revenue sufficient to fund annual debt service requirements associated with bonds issued to finance capital projects, capital improvement reserve deposits, insurance premiums, and Authority operating expenses.

Summary - Operating and Non-Operating Revenues and Expense

	Fiscal year ended June 30,		
	2019	2018	2017
Total operating revenues	$ 90,772,308	$ 88,207,425	$ 86,528,566
Total operating expenses	49,014,849	48,102,769	46,866,913
Operating income	41,757,459	40,104,656	39,661,653
Nonoperating expenses, net	(40,206,232)	(42,117,123)	(46,719,770)
Increase (decrease) in net position	1,551,227	(2,012,467)	(7,058,117)
Restatement			(5,920,165)
Net position - beginning of the year	(42,684,587)	(40,672,120)	(27,693,838)
Net position - end of the year	$ (41,133,360)	$ (42,684,587)	$ (40,672,120)

Operating revenues include contracts for assistance, management and services, management fees on campus owned projects, and other miscellaneous revenue.

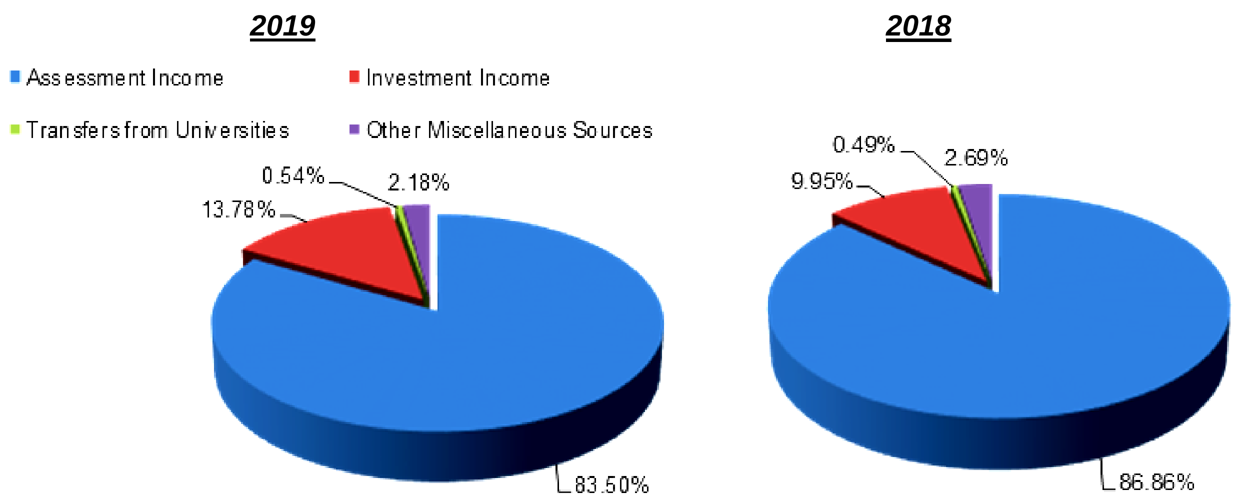
- For the year ended June 30, 2019, operating income grew $2.5 million, or 2.9% from $88.2 million at June 30, 2018 due to increases in assessment revenues.
- For the year ended June 30, 2018, operating income grew 1.9% to $88.2 million from $86.5 million in FY17 due to increased assessment revenues.
- Miscellaneous revenue includes management fees on campus-owned projects, revenue from a laundry operation contract, and other one-time revenue. This decreased from $452 thousand to $158 thousand due to a decrease in management fees and one-time revenues in FY18.

Nonoperating expenses, net include other revenue including investment income on project funds and reserves, net transfers between the Authority and the state universities in support of capital projects, and interest subsidy from the U.S. Treasury relating to the Authority's outstanding Build America Bonds.

- For the year ended June 30, 2019, net investment income increased $4.9 million, a 49% increase over FY18.
- Nonoperating revenue from Build America Bonds, net transfers to/from state universities, and other miscellaneous revenues was stable year over year, increasing in aggregate less than 1%.
- For the year ended June 30, 2018, the $4.6 million decrease in nonoperating expenses was due to an increase in net investment income and a decrease in interest expense.

The charts below compare total revenue for FY19 with FY18.

Summary - Total Revenue Fiscal Years 2019 and 2018



Operating expenses include depreciation, insurance premium costs and operating expenses associated with Authority operations.

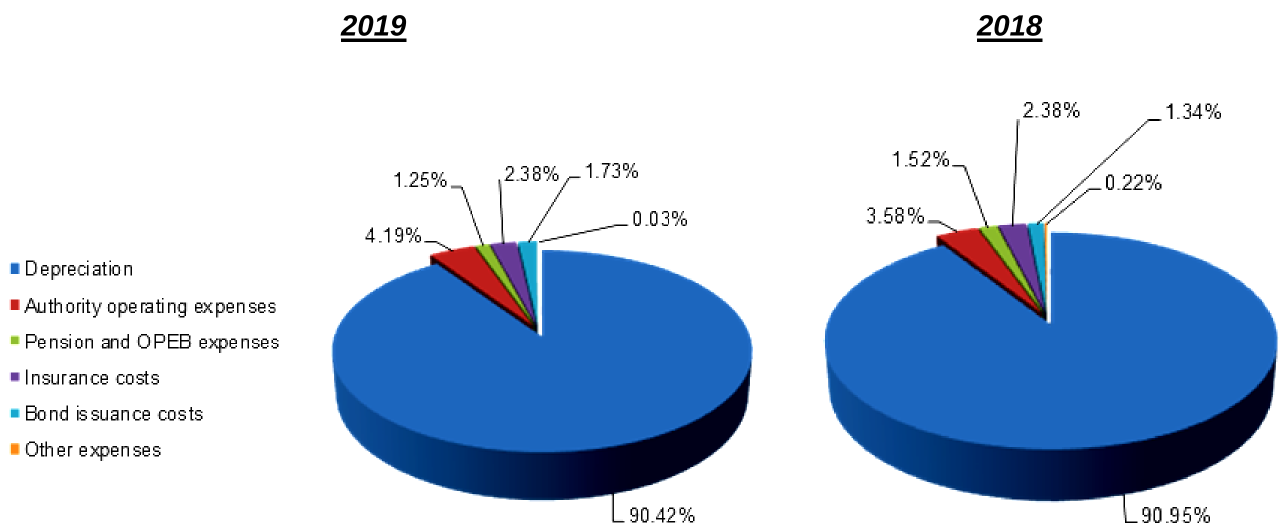
- For the year ended June 30, 2019, the $912 thousand increase in operating expenses was due to a $753 thousand increase in depreciation expense and an increase in Authority operating costs due to one-time investments and increased retiree health payments.
- For the year ended June 30, 2018, the $1.2 million increase in operating expenses was due to a $1.0 million increase in depreciation expense, slight increase in insurance costs, and slight increase in Authority operating expense.
- Net nonoperating expenses include annual interest expense incurred on the Authority's debt obligations, less investment income used to offset debt service requirements, bond issuance costs, and other one-time expenses.
  - In the year ended June 30, 2019, the Authority had interest expense of $57.1 million, an increase of $2.8 million, or 5% from FY18. For the year ended June 30, 2018, the interest expense decreased by $2.9 million, or 5%.
  - In the year ended June 30, 2018, the Authority distributed settlement funds related to the escrow restructuring of the Series 2003A&B bonds. These funds totaled $2.5 million and are included in net nonoperating expenses.
  - In the year ended June 30, 2019, bond issuance costs were $864 thousand, related to the 2019A and 2019B bond issuances. For the year ended June 30, 2018, bond issuance costs were $656 thousand, related to the 2017B, 2017C and 2017D bond issuances.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Management's Discussion and Analysis
For the Years Ended June 30, 2019 and 2018
Unaudited

The charts below compare total expenses, excluding interest expense, for FY19 with FY18.

Summary - Total Expenses (excluding Interest Expense) Fiscal Years 2019 and 2018



Statements of Cash Flows

Authority cash in-flows are primarily generated from assessments received from the state colleges and proceeds from bond issuances. Cash out-flows are primarily from continued payments for additions to Authority capital assets, payments for additions to university-owned assets, and payment of principal and interest on Authority debt.

Summary - Statements of Cash Flows

	Fiscal year ended June 30, 2019	2018	2017
Cash received from operations	$ 90,693,937	$ 88,207,426	$ 86,528,566
Cash expended for operations	(2,610,797)	(4,016,821)	(2,238,963)
Net cash provided by operations	88,083,140	84,190,605	84,289,603
Net cash provided by (used in) capital and related financing activities	(92,040,591)	(82,897,124)	(93,917,907)
Net cash provided by (used in) investing activities	(8,146,118)	5,916,543	3,448,845
Net increase (decrease) in cash and cash equivalents	(12,103,569)	7,210,024	(6,179,459)
Cash and cash equivalents, beginning of year	83,768,393	76,558,369	82,737,828
Cash and cash equivalents, end of year	$ 71,664,824	$ 83,768,393	$ 76,558,369

- Cash and cash equivalents were $71.7 million at June 30, 2019 compared to $83.8 million at June 30, 2018. The $12 million decrease reflects the investment of the 2019A project funds, spending campus held funds at a faster rate than contribution of campus funds, and an increase in spending on capital assets and debt service. This is offset by an increase in cash provided by assessments.

- Cash and cash equivalents were $83.8 million at June 30, 2018 compared to $76.6 million at June 30, 2017. The $7.2 million increase is due primarily to increased campus held project funds and increased project reserves. In addition, spending of current year bond proceeds was at a slower rate in fiscal year 2018 (for bond funds 2017B and 2017C) than in fiscal year 2017 (for bond series 2017A) leading to increased cash balances at year end.

Cash provided by operations includes cash received for contract revenue from campus, cash spent on insurance, operating and Authority and other miscellaneous revenues.

- Cash provided by operations increased by $3.9 million to $88.1 in FY19. This increase is due to increased assessments of $2.9 million offset by a $1.7 million impact of the timing of insurance premium payments from FY18 to FY19.

Cash used in capital and related financing activities includes proceeds and cash paid related to bond issuances and refunding, payments for capital assets, payments and transfers for interagency payments and receipts between the Authority and the universities, and principal and interest paid on capital debt.

- In FY19, net cash used in capital and related financing activities was $92.0 million compared to $82.9 million in FY18. The change between fiscal years is primarily attributable to a $3.2 million year net impact of the 2019AB bond issuance compared to prior year bond issuance, net spending of campus assets of $3.2 million greater than campus cash received, $1.9 million in cash spent for capital assets, and $1.2 million increase in cash spent for debt service

Cash provided by investing activities includes proceeds from sales and maturities of investments, purchases of investments, and interest earned on investments.

- For the year ended June 30, 2019, net cash provided by investing activities decreased by $14.1 million, reflecting the investment strategy implemented in the year ended June 30, 2019. These funds were held in investments at year end.

Capital Assets

The Authority's investment in capital assets as of June 30, 2019 was $886 million, net of accumulated depreciation, compared to $909.4 million as of June 30, 2018 and $933 million as of June 30, 2017. Capital assets include land, buildings and improvements thereon, furnishings and equipment. Capital assets comprised approximately 70.2% of total assets at June 30, 2019 and 70.5% at June 30, 2018 and June 30, 2017. During the years ended June 30, 2019 and 2018, the Authority had additions to capital assets of $21.8 million and $20.7 million, respectively, in constructing new assets and improvements on assets already in service, inclusive of construction in progress. The major components of capital assets are presented below.

- Construction in progress represents the balance of additions to Authority assets for projects currently underway. The construction in progress balance was $10.9 million at June 30, 2019 compared to $9.9 million at June 30, 2018.

- The buildings and improvements balance were $1.32 billion at June 30, 2019 compared to $1.30 billion at June 30, 2018 and $1.28 billion at June 30, 2017.
- The furnishings and equipment balance was $60.8 million at June 30, 2019, compared to $59.5 million at June 30, 2018 and $57.8 million at June 30, 2017. The $1.3 million increase in furnishings and equipment in FY19 was attributable to purchases across the state colleges.
- The Authority did not enter into any real estate transactions for the year ended June 30, 2019. Land value is unchanged at $21.6 million at June 30, 2019 and June 30, 2018.
- The Authority has entered into various commitments for the purchase of equipment, construction of certain facilities and other improvements relating to both Authority assets and university-owned assets. As of June 30, 2019, and 2018, respectively, such commitments were approximately $21.6 million and $25.5 million.

Additions to university-owned facilities have no effect on the Authority's capital assets. Project funds associated with university-owned assets are held as interagency payable liabilities of the Authority. As university-owned asset project funds are spent, the corresponding payable balances are reduced accordingly.

Debt Administration
The Act authorizes the Authority to issue bonds to finance the design and construction of residence facilities, dining commons, parking, athletic, cultural, and other student activity facilities at the state colleges. Also, under certain circumstances, the Authority may provide financing for certain projects that are managed by the Commonwealth. Authority bonds are special obligations of the Authority payable solely from revenues and certain pledged funds provided under the provisions of the Act, the Contract and the Trust Agreement between the Authority and trustee. Annually, the Authority collects assessments from each state college in amounts sufficient for the payment of, among other things, the debt service on the Authority's bonds. These assessments are primarily derived from the rents and fees on the Authority's facilities, and on university-owned facilities financed by the Authority, as annually set by the Authority. As additional security for the Authority's bonds, the Act and the Contract provide for an intercept of legislative appropriations to the state colleges, if the Authority otherwise lacks sufficient funds to pay debt service in full and on time. This intercept mechanism was clarified and streamlined by amendments to the Act in 2009 and 2011 and the Contract was amended to conform to the statutory changes.

As of June 30, 2019, the Authority had $1.18 billion in principal amount of bonds outstanding compared to $1.20 billion and $1.23 billion at June 30, 2018 and 2017, respectively. The outstanding bond obligations carried unamortized premium balances of $112.5 million, $116.9 million, and $113.9 million respectively, as of June 30, 2019, 2018 and 2017. The $27.0 million decrease in bonds outstanding in fiscal year 2019 is attributable to $41.9 million of principal payments and $48.5 million reduction in principal related to the 2019B refunding, offset by $67.8 million in new debt related to the 2019A and 2019B issuances. All the outstanding bonds carry fixed interest rates payable semi-annually on May and November 1st. For all state university program bonds, principal is payable annually on May 1st, with a final maturity of 2049. Principal is payable semi-annually on May 1 and November 1 for the Community College Bonds, Series 2 issued in 2017 and Series 1, which was issued in fiscal year 2014. The Authority's outstanding debt has no associated interest rate exchange agreements. Of the amount outstanding, $109.5 million are taxable Build America Bonds for which the Authority was to receive a

35% interest rate subsidy directly from the U.S. Treasury. In fiscal years 2019, 2018 and 2017, a portion of the Authority's interest rate subsidy was reduced by approximately 6.2%, 6.6%, and 6.9%, respectively, due to the federal government budgetary sequestration. The Authority has no Commonwealth-guaranteed debt outstanding and no authorization to issue any.

The Authority's state university program bonds are rated Aa2 by Moody's and AA- by S&P Global as of June 30, 2019. On June 17, 2017, S&P Global lowered the Authority's credit rating from AA, mirroring its one notch lowering of the Commonwealth of Massachusetts rating from AA+ to AA. The Community College Program, Series 1 and Series 2 bonds are not rated.

Requests for Information

The Authority's financial statements are designed to present readers with a general overview of the Authority's finances. Additional financial information, including official statements relating to the Authority's bonds, can be found on the Authority's website www.mscba.org. Questions concerning the financial statements or requests for additional financial information should be addressed to the Executive Director, Massachusetts State College Building Authority, 253 Summer Street, Suite 300, Boston, Massachusetts 02210.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Net Position (Deficiency in Net Position)
June 30, 2019 and 2018

Assets

	2019	2018
Current assets		
Cash and cash equivalents	$ 35,991,804	$ 31,725,140
Restricted cash and cash equivalents	32,148,913	41,181,416
Restricted investments, including amounts held by trustee	5,621,784	-
Accounts receivable, net	12,901,825	12,209,389
Prepaid expenses	101,793	870,610
Total current assets	86,766,119	85,986,555
Noncurrent assets		
Restricted cash and cash equivalents	3,524,107	10,861,837
Restricted investments, including amounts held by trustee	81,559,632	71,465,567
Restricted investments, retirement fund	5,230,241	5,194,143
Accounts receivable, net	199,593,367	206,657,000
Capital assets, net	886,078,640	909,377,246
Total noncurrent assets	1,175,985,987	1,203,555,793
Total assets	1,262,752,106	1,289,542,348
Deferred outflows of resources		
Deferred outflows for pensions	1,001,702	1,008,486
Deferred outflows for OPEB	512,764	682,316
Deferred losses on refunding of debt	39,748,639	40,607,936
Total deferred outflows of resources	41,263,105	42,298,738

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Net Position (Deficiency in Net Position)
June 30, 2019 and 2018

Liabilities

	2019	2018
Current liabilities		
Accounts payable and accrued liabilities	$ 21,481,041	$ 17,606,682
Accrued payroll	262,637	252,905
Interagency payables	10,593,639	17,069,615
Compensated absences	102,607	112,902
Current portion of bonds payable	49,297,165	46,487,984
Total current liabilities	81,737,089	81,530,088
Noncurrent liabilities		
Compensated absences	131,611	146,884
Interagency payables	9,294,150	9,294,150
Bonds payable, net of current portion	1,242,589,172	1,272,469,094
MSCBA portion of net pension liability	4,121,111	3,828,162
MSCBA portion of net OPEB liability	1,370,600	6,107,639
Total noncurrent liabilities	1,257,506,644	1,291,845,929
Total liabilities	1,339,243,733	1,373,376,017
Deferred inflows of resources		
Deferred inflows for pensions	349,235	336,714
Deferred inflows for OPEB	5,555,603	812,942
Total deferred inflows of resources	5,904,838	1,149,656
Net position (deficiency in net position)		
Net investment in capital assets	(44,021,651)	(29,027,598)
Unrestricted (deficit)	2,888,291	(13,656,989)
Total net position (deficiency in net position)	$ (41,133,360)	$ (42,684,587)

See Notes to Financial Statements.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Revenues, Expenses and Changes in Net Position
Years Ended June 30, 2019 and 2018

	2019	2018
Operating revenues		
Income from contracts for financial assistance, management, and services	$ 90,613,525	$ 87,755,221
Other miscellaneous revenues	158,783	452,204
Total operating revenues	90,772,308	88,207,425
Operating expenses		
Insurance costs	1,188,922	1,160,311
Authority operating expenses	2,092,144	1,747,327
Depreciation	45,099,077	44,346,059
Pension and OPEB expenses	621,723	742,906
Other expenses	12,983	106,166
Total operating expenses	49,014,849	48,102,769
Operating income	41,757,459	40,104,656
Nonoperating revenues (expenses)		
Net investment income	14,950,924	10,053,652
Interest expense	(57,085,975)	(54,281,857)
Bond issuance costs	(864,282)	(655,786)
Net transfers to/from State Universities	585,251	498,508
Build America Bonds interest subsidy	2,181,789	2,198,010
Miscellaneous nonoperating revenue (expense)	26,061	70,350
Net nonoperating revenues (expenses)	(40,206,232)	(42,117,123)
Increase (decrease) in net position	1,551,227	(2,012,467)
Net position (deficiency in net position) Beginning of year	(42,684,587)	(40,672,120)
Net position (deficiency in net position) End of year	$ (41,133,360)	$ (42,684,587)

See Notes to Financial Statements.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Cash flows from operating activities		
Cash received from contracts for financial assistance, management, and services	$ 90,613,525	$ 87,755,221
Other miscellaneous receipts	80,412	452,205
Payments for insurance costs	(420,105)	(2,079,456)
Payments for operating expenses	(812,097)	(761,431)
Payments to employees	(1,231,317)	(1,052,585)
Payments for other expenses	(147,278)	(123,354)
Net cash provided by operating activities	88,083,140	84,190,600
Cash flows from capital and related financing activities		
Proceeds from bond issuance	69,847,327	95,319,217
Cash paid to bond trustee related to advanced refunding	(50,919,164)	(73,170,370)
Build America Bonds interest subsidy	2,188,112	2,201,624
Payments of bond issuance costs	(864,282)	(655,786)
Payments for capital assets	(21,228,956)	(19,307,869)
Miscellaneous receipts (expenditures)	26,061	70,350
Collections of debt service receivables	18,784,822	18,257,461
Transfer of funds from State Universities	585,251	498,508
Payments from funds held for others	(26,657,503)	(17,829,091)
Funds received and held for others	18,664,103	13,021,086
Principal paid on capital debt	(43,410,197)	(45,295,633)
Interest paid on capital debt	(59,056,165)	(56,006,621)
Net cash used in capital and related financing activities	(92,040,591)	(82,897,124)
Cash flows from investing activities		
Proceeds from sales and maturities of investments	65,016,485	11,920,371
Purchases of investments	(78,397,804)	(10,274,450)
Interest on investments	5,235,201	4,270,622
Net cash (used in) provided by investing activities	(8,146,118)	5,916,543
Net (decrease) increase in cash and cash equivalents	(12,103,569)	7,210,019
Cash and cash equivalents, beginning of year	83,768,393	76,558,374
Cash and cash equivalents, end of year	$ 71,664,824	$ 83,768,393

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Cash Flows
Years Ended June 30, 2019 and 2018

	2019	2018
Reconciliation of operating income to net cash provided by operating activities		
Operating income	$ 41,757,459	$ 40,104,656
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	45,099,077	44,346,059
Change in net pension liability	312,254	308,865
Change in unfunded net OPEB liability	175,174	318,100
Changes in assets and liabilities		
Accounts receivable	(78,371)	-
Prepaid expenses	768,817	(803,130)
Accounts payable and accrued liabilities	64,566	(116,020)
Accrued payroll and compensated absences	(15,836)	32,070
Net cash provided by operating activities	$ 88,083,140	$ 84,190,600

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Statements of Cash Flows
Years Ended June 30, 2019 and 2018

Supplemental cash flows information

Schedule of noncash investing, capital and financing activities

	2019
Acquisition of capital assets	$ 21,800,471
Accounts payable thereon	
Beginning of year	5,696,258
End of year	(6,193,928)
Net interest incurred and earned, capitalized in construction in progress	(73,845)
Payments for capital assets	$ 21,228,956
Accounts receivable and Interagency payables related to State College capital projects on State College owned property	$ 4,949,405
Unearned interest income on accounts receivable related to State College capital projects on State College owned property	$ 1,683,964
Contractor accounts payable related to State projects on State College owned property	$ 5,332,727
Unrealized gain (loss) on investment securities	$ 2,370,612

	2018
Acquisition of capital assets	$ 20,745,597
Accounts payable thereon:	
Beginning of year	4,258,530
End of year	(5,696,258)
Payments for capital assets	$ 19,307,869
Accounts receivable and Interagency payables related to State College capital projects on State College owned property	$ 7,565,000
Unearned interest income on accounts receivable related to State College capital projects on State College owned property	$ 3,118,506
Contractor accounts payable related to State College capital projects on State College owned property	$ 1,900,729
Unrealized gain (loss) on investment securities	$ (1,776,896)

See Notes to Financial Statements.

Note 1 - Summary of significant accounting policies

Organization

Massachusetts State College Building Authority (the "Authority") was created pursuant to Chapter 703 of the Acts of 1963 of the Commonwealth of Massachusetts (the "State" or the "Commonwealth"), as amended (the "Act"), as a body politic and corporate and a public instrumentality for the general purpose of providing dormitories, dining commons and other facilities primarily for use by students and staff of certain state colleges of the Commonwealth of Massachusetts and their dependents. Such facilities may be provided in collaboration with and for joint use by, other agencies, boards, commissions, or authorities of the Commonwealth. The Act defines State Colleges as the state university and community college segments of the Commonwealth's public higher education system. The state universities include Bridgewater, Fitchburg, Framingham, Salem, Westfield and Worcester State Universities, Massachusetts College of Liberal Arts, Massachusetts College of Art and Design and Massachusetts Maritime Academy (collectively, the "State Universities"). The community colleges include Berkshire, Bristol, Bunker Hill, Cape Cod, Greenfield, Holyoke, Massachusetts Bay, Massasoit, Middlesex, Mount Wachusett, North Shore, Northern Essex, Quinsigamond, Roxbury and Springfield Technical (collectively, the "Community Colleges"). The Authority provides bond financing, design and construction management of new facilities, major renovations, adaption and capital repairs for its projects at the State Colleges. Annual obligations of the Authority include rent setting and oversight of State University residence hall operating budgets. The Authority's operations are primarily governed by a Contract for Financial Assistance, Management and Services with the Board of Higher Education of the Commonwealth ("BHE"), in which the BHE commits the State Colleges to meet the statutory and financial obligations related to the projects.

The Authority is a component unit of the Commonwealth of Massachusetts. Accordingly, the accompanying financial statements may not necessarily be indicative of the conditions that would have existed if the Authority had been operated as an independent organization. The Authority's financial statements are included in the Commonwealth's financial statements as a blended component unit.

Basis of presentation

The accompanying financial statements have been prepared using the "economic resources measurement focus" and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America, as prescribed by the Governmental Accounting Standards Board ("GASB"). Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

The Authority has determined that it functions as a Business-Type Activity, as defined by GASB.

The Authority's policy for defining operating activities in the statements of revenues, expenses, and changes in net position are those that generally result from exchange transactions such as the payment received for services and payment made for the purchase of goods and services. Certain other transactions are reported as nonoperating activities in accordance with GASB Statement No. 35. These nonoperating activities include the Authority's net investment income and interest expense.

Net position

GASB Statement No. 34 requires that resources be classified for accounting purposes into the following three net position categories:

- **Net investment in capital assets:** Capital assets, which are net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction, repair, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

- **Restricted:**

  Nonexpendable - Net position which use is subject to externally imposed conditions that the Authority must maintain them in perpetuity.

  Expendable - Net position which use is subject to externally imposed conditions that can be fulfilled by the actions of the Authority pursuant to those conditions or that expire by the passage of time.

- **Unrestricted:** All other categories of net position. Unrestricted net position may be designated for specific purposes by action of the Authority's Board.

The Authority has adopted a policy of reviewing, on an individual basis, all restricted - expendable funds, for the purpose of determining the order in which restricted - expendable and unrestricted funds would be utilized.

In accordance with the requirements of the Act, the Authority's operations are accounted for in several trust funds. All of these trust funds have been consolidated and are included in these financial statements.

Use of estimates

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

Cash equivalents

The Authority considers all highly liquid debt instruments purchased with an original maturity date of three months or less to be cash equivalents.

Investments

Investments in marketable securities are stated at fair value. Realized and unrealized gains and losses are included in nonoperating revenues. Gains and losses on the disposition of investments are determined based on specific identification of securities sold or the average cost method. Investment income is recognized when earned and is generally credited to the trust fund holding the related assets. There were no significant realized gains or losses on investments during the years ended June 30, 2019 and 2018.

The Authority has no donor-restricted endowments.

The Authority is currently authorized by its Board and the statutes of the Commonwealth to invest funds of the Authority. The Board shall establish investment policy, but delegate to the Finance and Audit Committee of the Authority to direct an investment advisor.

Accounts receivable
Accounts receivable are stated at the total amount of the future minimum payments to be received less unearned interest income. Interest income is recognized using the effective interest method. No allowance for doubtful accounts has been made as of June 30, 2019 and 2018, as management considers all amounts fully collectible.

Capital assets
The accompanying financial statements include the transactions of all of the Authority-owned capital assets, which include residence halls for approximately 17,000 students in 2019 and 2018, some with dining facilities as well as some with student activity facilities and land, at the State Universities.

Project costs include land acquisition, architectural and engineering services, construction, furnishings and equipment and related expenses for legal, accounting, and financial services. Such expenses have been incurred for the construction of new facilities and for capital improvements to existing facilities. Fire alarm system improvements, the installation of automatic sprinkler systems, the repair and replacement of roofs and windows, and improvements to make the facilities accessible for use by handicapped persons are examples of capital improvements to existing facilities undertaken by the Authority.

Real estate assets, including improvements, are generally stated at cost. Furnishings and equipment are stated at cost at date of acquisition. In accordance with the Authority's capitalization policy, only those items with a total project cost of more than $50,000, and all furniture, fixtures and equipment, are capitalized. Interest costs on debt related to capital assets are capitalized during the construction period. Authority capital assets, with the exception of land and construction in progress, are depreciated on a straight-line basis over their estimated useful lives, which range from 3 to 40 years.

Bond issuance costs
Bond issuance costs are expensed as incurred. During fiscal 2019 and 2018, the Authority incurred $864,282 and $655,786, respectively, of bond issuance costs.

Fringe benefits
The Authority participates in the Commonwealth's fringe benefit programs, including health insurance, unemployment, pension and other postemployment benefits for which it is billed by the Commonwealth. Worker's compensation insurance is purchased as a separate policy within the Authority's insurance portfolio.

Other postemployment benefits
For purposes of measuring the net postemployment benefits other than pensions ("OPEB") liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Commonwealth of Massachusetts OPEB Plan (the "Plan") and additions to/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. Investments are reported at fair value.

Pension plan

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Massachusetts State Employees' Retirement System ("MSERS") and additions to/deductions from MSERS's fiduciary net position have been determined on the same basis as they are reported by MSERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Compensated absences

Employees earn the right to be compensated during absences for vacation leave and sick leave. Accrued vacation is the amount earned and unused by all eligible employees through June 30 of each year. The accrued sick leave balance represents 20% of amounts earned at the end of the fiscal year. Upon retirement, these employees are entitled to receive payment for these accrued balances.

Interest expense and capitalization

The Authority may capitalize interest costs incurred during the construction period of qualifying property assets. The amount of interest costs capitalized on qualifying assets acquired with proceeds of tax-exempt borrowings consists of all interest costs of the borrowing less any interest earned on related interest-bearing investments acquired with proceeds of the related tax-exempt borrowings from the date of the borrowing until the assets are ready for their intended use. Bond premiums are amortized to interest expense on a straight-line basis over the terms of the related bonds. Deferred losses on bond refundings are amortized to interest expense principally on the effective interest method over the terms of the old trust or new trust agreements, whichever is shorter. During fiscal 2019 and 2018, total interest costs were accounted for as follows:

	2019	2018
Total interest incurred	$ 58,936,290	$ 56,505,592
Amortization of bond premium	(4,841,604)	(5,201,225)
Amortization of deferred loss	3,112,195	2,977,490
Less: capitalized portion of interest incurred	(120,906)	-
Interest expense	$ 57,085,975	$ 54,281,857
Capitalized portion of interest incurred	$ 120,906	$ -
Less interest income on unused funds from tax-exempt borrowings	(47,061)	-
Net capitalized interest	$ 73,845	$ -

Income tax status

The Authority is a component unit of the Commonwealth and is therefore exempt from federal and state income taxes.

Reclassifications

Certain reclassifications have been made to the 2018 financial statements to conform to the 2019 presentation.

Note 2 - Cash and cash equivalents, and investments

Credit risk

Credit risk includes the risk that securities that the Authority has invested in will default.

The Authority's Trust Agreement stipulates that only certain highly rated securities are eligible investments. The Authority has a formal investment policy consistent with the Trust Agreement in which permissible investment obligations include: (i) certain direct or agency obligations which are unconditionally guaranteed by the United States of America; (ii) certain interest-bearing instruments issued by a banking institution with a long-term unsecured debt rating in one of the two highest long-term rating categories, (iii) commercial paper rated in the highest rating category; and (iv) obligations of state or local governments or authorities thereof rated in the two highest rating categories. The Authority is also required to comply with the Commonwealth of Massachusetts' deposit and investment policies which are principally defined in the Massachusetts General Laws, Chapter 29. The Authority's deposit and investment policies are generally consistent with those of the State Statutes.

Custodial credit risk

Custodial credit risk is the risk that, in the event of a bank failure, the Authority's deposits and/or investments may not be returned to it. The Authority does not have a formal policy with respect to the custodial credit risk.

The Authority has two primary commercial banking relationships: Citizens Bank, N.A. ("Citizens") is the Authority's primary depository bank, U.S. Bank National Association ("U.S. Bank") is the Authority's trustee bank and holds all bond and related funds pursuant to the Trust Agreement. The Authority is party to a third party custodian agreement in which Citizens provides the Authority with collateral equal to the Authority's uninsured deposits and the custodian provides safekeeping services and holds the collateral on behalf of and for the benefit of the Authority. Pursuant to the agreement, eligible collateral is limited to only those obligations which are guaranteed as to the payment of principal and interest by the United States of America. All of the Authority's bank balances held by Citizens of $49,801,275 and $45,459,722 as of June 30, 2019 and 2018, respectively, were secured and fully collateralized pursuant to this agreement.

The Authority does not have a formal deposit policy for custodial credit risk with U.S. Bank. As of June 30, 2019 and 2018, the fair market value of the Authority's cash equivalent balances with U.S. Bank of $21,726,216 and $38,301,087, respectively, were exposed to custodial credit risk because they were uninsured and uncollateralized. These funds were invested in U.S. Bank money market deposit accounts and Fidelity Institutional Money Market Government Fund 57 (the "Fund 57") as of June 30, 2019, and solely in Fund 57 as of June 30, 2018. Fund 57 invests primarily in U.S. government securities, repurchase agreements, and may invest in reverse repurchase agreements guaranteed by U.S. Treasury obligations. Fund 57 seeks to preserve the investment value of $1 per share and the investment securities maintain a weighted average maturity of 60 days or less. Fund 57 was not rated for average credit quality at June 30, 2019 and 2018.

In addition to the commercial banking relationships, the Authority invests its retirement trust fund (Note 12) with the Massachusetts Pension Reserve Investment Trust ("PRIT"). PRIT consists of two investment funds, the Capital Fund and the Cash Fund. Each of these funds is managed, accounted for, and held separately by PRIT's custodian bank, Bank of New York ("BNY") Mellon. The Cash Fund consists of short-term investments, which are used to meet liquidity requirements. All Cash Fund earnings are reinvested. The Cash Fund maintains a stable net asset value of $1.00 per unit. The Capital Fund is invested in the General Allocation Account, which invests in all asset classes of PRIT in accordance with its asset allocation plan and investment policy guidelines. The Capital Fund serves as the investment portfolio of PRIT and consists of the following investments at June 30, 2019 and 2018: General Allocation (holds units of other accounts), Domestic Equity, Core Fixed Income, Value-Added Fixed Income, International Equity, Emerging Markets, Real Estate, Real Assets, Timberland, Timber/Natural Resources, Hedge Funds and Private Equity Investments. The funds held in the amount of $5,230,241 and $5,194,143 as of June 30, 2019 and 2018, respectively, with PRIT are intended to be used to fund the net pension liability. These funds were not rated for average credit quality at June 30, 2019 and 2018.

The Authority's investments are held at U.S. Bank, Citizens and PRIT and are represented by the following at June 30, 2019 and 2018:

	2019		2018	
	Cost	Fair value	Cost	Fair value
U.S. Government Agencies	$ 37,611,503	$ 38,186,433	$ 33,720,224	$ 33,962,392
State taxable bonds	16,155,000	20,430,714	16,155,000	19,316,330
U.S. Treasuries	20,487,450	22,942,485	16,639,226	18,186,845
Mutual funds	10,565,139	10,852,025	4,923,149	5,194,143
	$ 84,819,092	$ 92,411,657	$ 71,437,599	$ 76,659,710

The Authority classifies its restricted cash and cash equivalents, and investments between current and noncurrent classifications in the accompanying statements of net position (deficiency in net position) according to its plans for their use in liquidating associated liabilities. Investments with maturities of less than one year that are not required to be used to liquidate current liabilities are reflected as noncurrent assets in accordance with management's intention to reinvest the proceeds of those investments upon their maturity.

Investments held by the bond trustee represent project funds, as well as debt service and certain reserve funds.

At June 30, 2019, the Authority's investments in debt securities by contractual maturities and credit quality ratings, based on Moody's Investors Service, Inc., are as follows:

		Investment maturities (in years)				
Investment Type	Fair market value	Less Than 1	1-5	6-10	Greater than 10	Credit rating
Fannie Mae Corporation ("FNMA") discount notes	$ 7,547,494	$ 7,547,494	$ -	$ -	$ -	Aaa
Strip Coupon Bonds - U.S. Govt. Issues	2,930,691	-	2,930,691	-	-	Aaa
Federal Home Loan Mortgage Corp. MTN ("FHLMCMTN") U.S. Govt. Issues	7,020,763	7,020,763	-	-	-	Aaa
Federal Home Loan Mortgage Corp. ("FHLMC") discount notes	9,972,688	9,972,688	-	-	-	Aaa
Federal Farm Credit Banks ("FFCB") U.S. Govt. Issues	10,714,797	-	10,714,797	-	-	Aaa
Various Massachusetts ST Bonds	20,430,714	-	-	-	20,430,714	Aaa1
U.S. Government Securities - Treasury Notes	22,942,485	4,591,593	5,206,592	4,248,318	8,895,982	Aaa
Total	$ 81,559,632	$ 29,132,538	$ 18,852,080	$ 4,248,318	$ 29,326,696	

At June 30, 2018, the Authority's investments in debt securities by contractual maturities and credit quality ratings, based on Moody's Investors Service, Inc., are as follows:

		Investment Maturities (in years)				
Investment type	Fair market value	Less than 1	1-5	6-10	Greater than 10	Credit rating
Fannie Mae Corporation ("FNMA") discount notes	$ 7,549,698	$ 7,549,698	$ -	$ -	$ -	Aaa
Strip Coupon Bonds - U.S. Govt. Issues	2,804,232	-	2,804,232	-	-	Aaa
Federal Home Loan Mortgage Corp. MTN ("FHLMCMTN") U.S. Govt. Issues	16,046,644	16,046,644	-	-	-	Aaa
Federal Farm Credit Banks ("FFCB") U.S. Govt. Issues	7,561,818	-	7,561,818	-	-	Aaa
Various Massachusetts ST Bonds	19,316,330	-	-	-	19,316,330	Aaa1
U.S. Government Securities - Treasury Notes	18,186,845	9,981,727	-	-	8,205,118	Aaa
Total	$ 71,465,567	$ 33,578,069	$ 10,366,050	$ -	$ 27,521,448	

Certain investments are covered by the Securities Investor Protection Corporation ("SIPC") up to $500,000, including $250,000 of cash from sale or for purchase of investments, but not cash held solely for the purpose of earning interest. SIPC protects securities such as notes, stocks, bonds, debentures, certificates of deposit and money funds.

The following Authority investments at June 30, 2019 and 2018 are held by US Bank as custodian and, therefore, are subject to custodial credit risk as follows:

	2019	2018
U.S. Government Agencies	$ 38,186,433	$ 33,962,392
State taxable bonds	20,430,714	19,316,330
U.S. Treasuries	22,942,485	18,186,845
	81,559,632	71,465,567
Less insured amounts	(500,000)	(500,000)
	$ 81,059,632	$ 70,965,567

The Authority investments have been categorized based upon the fair value hierarchy in accordance with GASB 72 below:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Authority can access at measurement date.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly.

Level 3: Unobservable inputs for an asset or liability.

The Authority's investments at fair value measurement are as follows at June 30, 2019:

	Level 1	Level 2	Level 3	Total
Investment Assets:				
U.S. Government Agencies	$ 38,186,433	$ -	$ -	$ 38,186,433
State taxable bonds	20,430,714	-	-	20,430,714
U.S. Treasuries	22,942,485	-	-	22,942,485
Mutual funds	-	10,852,025	-	10,852,025
Total investment assets	$ 81,559,632	$ 10,852,025	$ -	$ 92,411,657

The Authority's investments at fair value measurement are as follows at June 30, 2018:

	Level 1	Level 2	Level 3	Total
Investment Assets:				
U.S. Government Agencies	$ 33,962,392	$ -	$ -	$ 33,962,392
State taxable bonds	19,316,330	-	-	19,316,330
U.S. Treasuries	18,186,845	-	-	18,186,845
Mutual funds	-	5,194,143	-	5,194,143
Total investment assets	$ 71,465,567	$ 5,194,143	$ -	$ 76,659,710

Note 3 - Accounts receivable

Accounts receivable include the following at June 30, 2019 and 2018:

	2019	2018
Debt service receivables	$ 211,512,332	$ 217,921,810
Interest receivable on investments	543,753	577,520
Other miscellaneous receivables	82,303	3,932
Build America Bonds interest subsidy receivable	356,804	363,127
	$ 212,495,192	$ 218,866,389

The Authority anticipates that all of its interest receivables will be collected within a one-year time frame.

The Commonwealth's policy for accounting for capital and renovation projects provides for the State University with ownership of the underlying asset to also own any related improvements to these facilities. Under this policy, the Authority recognizes as accounts receivable the minimum payments, net of unearned interest income, to be received from the State Colleges. Conversely, the State Colleges recognize a corresponding liability to the Authority.

During fiscal 2019, accounts receivable, net of unearned interest income, totaling $4,949,405 were added in connection with projects at three state universities. During fiscal 2018, accounts receivable, net of unearned interest income, totaling $7,565,000 were recorded in connection with a project at one state university. A corresponding Interagency payable was recorded by the Authority in 2019 and 2018 as discussed further in Note 6.

The components of the Authority's debt service receivables in these State College-owned projects as of June 30, 2019 and 2018 are as follows:

	2019	2018
Total payments to be received	$ 274,740,502	$ 286,891,955
Less: Unearned income	(63,228,170)	(68,970,145)
Net debt service receivables in State College-owned projects	$ 211,512,332	$ 217,921,810

The following table sets forth the total payments to be received under these agreements as of June 30, 2019:

Year ending June 30:	
2020	$ 19,189,107
2021	19,149,819
2022	19,161,665
2023	19,618,932
2024	19,735,905
2025 - 2029	94,348,647
2030 - 2034	61,061,201
2035 - 2039	15,831,970
2040 - 2044	6,355,837
2045 - 2049	287,419
Total	$ 274,740,502

Note 4 - Capital assets

Capital assets activity for the year ended June 30, 2019 are as follows:

	2019			
	Totals June 30, 2018	Additions	Reclassifications and reductions	Totals June 30, 2019
Land	$ 21,569,817	$ -	$ -	$ 21,569,817
Construction in progress	9,938,763	19,048,154	(18,100,566)	10,886,351
Total not being depreciated	31,508,580	19,048,154	(18,100,566)	32,456,168
Buildings and improvements	1,299,618,890	1,442,133	18,100,566	1,319,161,589
Furnishings and equipment	59,534,862	1,310,184	-	60,845,046
Total depreciable assets	1,359,153,752	2,752,317	18,100,566	1,380,006,635
Total capital assets	1,390,662,332	21,800,471	-	1,412,462,803
Less accumulated depreciation:				
Buildings and improvements	(447,782,235)	(41,866,821)	-	(489,649,056)
Furnishings and equipment	(33,502,851)	(3,232,256)	-	(36,735,107)
Total accumulated depreciation	(481,285,086)	(45,099,077)	-	(526,384,163)
Capital assets, net	$ 909,377,246	$ (23,298,606)	$ -	$ 886,078,640

Capital assets activity for the year ended June 30, 2018 are as follows:

	2018			
	Totals June 30, 2017	Additions	Reclassifications and reductions	Totals June 30, 2018
Land	$ 19,218,163	$ 2,351,654	$ -	$ 21,569,817
Construction in progress	10,959,904	15,208,186	(16,229,327)	9,938,763
Total not being depreciated	30,178,067	17,559,840	(16,229,327)	31,508,580
Buildings and improvements	1,281,947,465	1,442,098	16,229,327	1,299,618,890
Furnishings and equipment	57,791,203	1,743,659	-	59,534,862
Total depreciable assets	1,339,738,668	3,185,757	16,229,327	1,359,153,752
Total capital assets	1,369,916,735	20,745,597	-	1,390,662,332
Less accumulated depreciation:				
Buildings and improvements	(406,751,634)	(41,030,601)	-	(447,782,235)
Furnishings and equipment	(30,187,393)	(3,315,458)	-	(33,502,851)
Total accumulated depreciation	(436,939,027)	(44,346,059)	-	(481,285,086)
Capital assets, net	$ 932,977,708	$ (23,600,462)	$ -	$ 909,377,246

The Authority has considered the requirements of GASB Statement No. 49, *Accounting and Financial Reporting for Pollution Remediation Obligations*, and has noted no implications of this standard to the Authority's financial statements for the years ended June 30, 2019 and 2018.

The Authority has entered into various purchase commitments with contractors for the purchase of equipment, construction of certain facilities and other improvements. The amounts under commitment were approximately $21,600,000 and $25,500,000, respectively, as of June 30, 2019 and 2018.

Note 5 - Accounts payable and accrued liabilities

Accounts payable and accrued liabilities consisted of the following at June 30, 2019 and 2018:

	2019	2018
Capital assets and construction payables	$ 6,193,928	$ 5,696,258
Accrued bond interest payable	9,865,598	9,985,473
Contractor payables for State College owned assets	5,332,727	1,900,729
Authority operating expenses	88,788	24,222
	$ 21,481,041	$ 17,606,682

Note 6 - Interagency payables

Under the provisions of the Community College Program Series 1 and Series 2, the State University Program Series 2019A, 2017C, 2017B, 2017A, 2015A, 2014C, 2014B, 2014A, 2012C, 2012A, 2010A, 2010B, 2009C, 2009B, 2009A, 2008A, 2006A, 2005A, 2003A and 1999A Trust Agreements (see Note 7), a portion of the bond proceeds, together with certain earnings thereon, are being or have been used to finance the costs of capital projects for certain of the State Colleges on State College-owned property. The State Colleges are required to pay to the Authority the amount necessary to pay the applicable portion of the bond issuance costs and bond principal and interest payments when they become due. The Authority has recorded accounts receivable from the State Colleges reflecting its net debt service receivables in these capital projects as discussed further in Note 3. The unspent bond proceeds for the costs of these projects and related bond amounts are included in the Authority's financial statements under restricted cash and cash equivalents, and restricted investments.

Certain of the State Colleges may also be required to commit additional funding for the projects over and above the amounts provided from bond proceeds. Such amounts (the "State College contributions") received from the State Colleges are also included in restricted cash and cash equivalents, and restricted investments. The Authority has recorded corresponding Interagency payables to the State Colleges for the unspent State College contributions, and unspent bond proceeds and related bond amounts. As capital and construction costs relating to these projects are incurred and paid, restricted cash and cash equivalents, and restricted investments, and the corresponding Interagency payables are reduced.

As of June 30, 2019 and 2018, the Authority has an aggregate liability for Interagency payables of $19,887,789 and $26,363,765, respectively.

Note 7 - Bonds payable

The Authority issues debt to finance the design and construction of new facilities, major renovations and capital repairs for its projects at State Colleges, pursuant to the Act. The Authority has created separate bond programs for the State Universities and the Community Colleges. The Authority's outstanding debt is secured by revenues received by the Authority from State Colleges relating to Authority projects and other pledged funds. Prior to 1999, all of the Authority's bonds were guaranteed by the Commonwealth. The final series of guaranteed bonds (Series 2004B) were retired as of May 1, 2016. Pursuant to the Act, the Authority is precluded from issuing any additional bonds guaranteed by the Commonwealth. Interest on the Authority's debt is payable on May 1 and November 1 and principal is due annually on May 1. The Authority's outstanding debt for the State University Program is rated Aa1 and Aa2 by Moody's and S&P Global, respectively. The Authority's outstanding debt for the Community College Program is not rated.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Notes to Financial Statements
June 30, 2019 and 2018

The following table summarizes the Authority's outstanding debt as of June 30, 2019:

	Issue date	Par amount	Interest rates (%)	Due May 1,	Effective interest rates (%)*	Par amount outstanding	Unamortized premiums	Total bonds payable
Project Revenue Bonds								
Refunding Series 2003B	03/05/2003	$ 117,513,022	2.00 - 5.50	2003 - 2039	9.44	$ 73,103,312	$ 4,381,186	$ 77,484,498
Series 2009A	01/28/2009	128,570,000	3.00 - 5.75	2010 - 2049	4.71	-	-	-
Series 2009B	12/22/2009	82,085,000	2.00 - 5.00	2011 - 2040	3.71	1,125,000	-	1,125,000
Series 2009C, Build America Bonds	12/22/2009	66,410,000	4.58 - 5.93	2018 - 2040	5.77	63,720,000	-	63,720,000
Series 2010B, Build America Bonds	12/17/2010	47,880,000	4.89 - 6.54	2020 - 2040	6.13	45,830,000	-	45,830,000
Refunding Series 2011A	06/08/2011	51,610,000	2.00 - 5.00	2012 - 2025	5.00	26,965,000	3,315,295	30,280,295
Series 2012A	01/04/2012	154,345,000	3.00 - 5.00	2013 - 2041	3.91	95,560,000	8,518,052	104,078,052
Refunding Series 2012B	03/01/2012	149,275,000	3.00 - 5.00	2018 - 2043	4.70	142,430,000	17,837,077	160,267,077
Series 2012C	12/20/2012	153,840,000	2.00 - 5.00	2014 - 2042	3.14	128,930,000	6,954,900	135,884,900
Series 2014A	01/07/2014	130,875,000	2.00 - 5.00	2015 - 2048	4.93	116,875,000	9,530,218	126,405,218
Series 2014B	12/17/2014	91,375,000	3.00 - 5.00	2016 - 2044	4.98	85,115,000	12,878,873	97,993,873
Series 2014C	12/17/2014	10,065,000	3.00 - 5.00	2016 - 2034	4.96	8,760,000	1,367,166	10,127,166
Refunding Series 2014D	12/17/2014	36,110,000	1.00 - 5.00	2015 - 2041	5.00	27,000,000	4,292,447	31,292,447
Series 2015A	12/17/2015	15,935,000	2.00 - 5.00	2017 - 2036	4.72	14,550,000	2,294,006	16,844,006
Refunding Series 2016A	02/25/2016	177,315,000	4.00 - 5.00	2019 - 2049	4.52	175,060,000	27,746,114	202,806,114
Series 2017A	01/25/2017	20,590,000	3.00 - 4.00	2018 - 2027	3.89	19,440,000	1,129,206	20,569,206
Series 2017B	12/21/2017	10,590,000	4.00 - 5.00	2019 - 2038	5.86	10,430,000	1,675,718	12,105,718
Series 2017C	12/21/2017	7,565,000	2.10 - 3.60	2019 - 2038	4.02	7,365,000	-	7,365,000
Refunding Series 2017D	12/21/2017	66,225,000	4.00 - 5.00	2019 - 2038	4.44	64,995,000	8,555,408	73,550,408
Series 2019A	01/15/2019	15,440,000	3.38 - 5.00	2020 - 2039	1.84	15,440,000	1,138,932	16,578,932
Refunding Series 2019B	01/15/2019	52,355,000	4.00	2019 - 2035	3.57	51,415,000	873,143	52,288,143
Total Project Revenue Bonds		1,585,968,022				1,174,108,312	112,487,741	1,286,596,053
Community College Program Bonds								
Series 1	03/06/2014	3,000,000	4.25	2015 - 2034	4.20	2,485,000	-	2,485,000
Series 2	01/20/2017	3,055,000	1.84 - 3.35	2021 - 2036	2.50	2,805,284	-	2,805,284
Total Community College Program Bonds		6,055,000				5,290,284	-	5,290,284
Total Bonds		$ 1,592,023,022				$ 1,179,398,596	$ 112,487,741	$ 1,291,886,337

*Effective Interest Rates are calculated by dividing total interest paid during the year by the average outstanding balance of bonds payable.

The following table summarizes the Authority's outstanding debt as of June 30, 2018:

	Issue date	Par amount	Interest rates (%)	Due May 1,	Effective interest rates (%)*	Par amount outstanding	Unamortized premiums	Total bonds payable
Project Revenue Bonds								
Refunding Series 2003B	03/05/2003	$ 117,513,022	2.00 - 5.50	2003 - 2039	4.41	$ 78,957,559	$ 4,601,157	$ 83,558,716
Series 2008A	03/12/2008	95,670,000	3.0 - 5.0	2009 - 2038	5.00	-	-	-
Series 2009A	01/28/2009	128,570,000	3.00 - 5.75	2010 - 2049	4.68	3,080,000	30,877	3,110,877
Series 2009B	12/22/2009	82,085,000	2.00 - 5.00	2011 - 2040	2.06	2,120,000	-	2,120,000
Series 2009C, Build America Bonds	12/22/2009	66,410,000	4.58 - 5.93	2018 - 2040	5.75	64,960,000	-	64,960,000
Series 2010A	12/17/2010	12,120,000	3.0 - 5.0	2012 - 2018	5.00	-	-	-
Series 2010B, Build America Bonds	12/17/2010	47,880,000	4.89 - 6.54	2020 - 2040	6.12	47,880,000	-	47,880,000
Refunding Series 2011A	06/08/2011	51,610,000	2.00 - 5.00	2012 - 2025	5.00	31,855,000	3,881,447	35,736,447
Series 2012A	01/04/2012	154,345,000	3.00 - 5.00	2013 - 2041	4.76	145,965,000	10,379,026	156,344,026
Refunding Series 2012B	03/01/2012	149,275,000	3.00 - 5.00	2018 - 2043	4.69	147,420,000	18,585,486	166,005,486
Series 2012C	12/20/2012	153,840,000	2.00 - 5.00	2014 - 2042	3.18	133,970,000	7,259,494	141,229,494
Series 2014A	01/07/2014	130,875,000	2.00 - 5.00	2015 - 2048	4.93	120,635,000	9,860,521	130,495,521
Series 2014B	12/17/2014	91,375,000	3.00 - 5.00	2016 - 2044	4.96	87,175,000	13,397,123	100,572,123
Series 2014C	12/17/2014	10,065,000	3.00 - 5.00	2016 - 2034	4.93	9,150,000	1,459,278	10,609,278
Refunding Series 2014D	12/17/2014	36,110,000	1.00 - 5.00	2015 - 2041	4.92	27,000,000	4,488,917	31,488,917
Series 2015A	12/17/2015	15,935,000	2.00 - 5.00	2017 - 2036	4.70	15,120,000	2,428,948	17,548,948
Refunding Series 2016A	02/25/2016	177,315,000	4.00 - 5.00	2019 - 2049	4.52	177,315,000	28,680,671	205,995,671
Series 2017A	01/25/2017	20,590,000	3.00 - 4.00	2018 - 2027	4.61	20,135,000	1,192,823	21,327,823
Series 2017B	12/21/2017	10,590,000	4.00 - 5.00	2019 - 2038	2.71	10,590,000	1,765,090	12,355,090
Series 2017C	12/21/2017	7,565,000	2.10 - 3.60	2019 - 2038	1.86	7,565,000	-	7,565,000
Refunding Series 2017D	12/21/2017	66,225,000	4.00 - 5.00	2019 - 2038	4.73	65,555,000	8,965,865	74,520,865
Total Project Revenue Bonds		1,625,963,022				1,196,447,559	116,976,723	1,313,424,282
Community College Program Bonds								
Series 1	03/06/2014	3,000,000	4.25	2015 - 2034	4.21	2,600,000	-	2,600,000
Series 2	01/20/2017	3,055,000	1.84 - 3.35	2021 - 2036	2.94	2,932,796	-	2,932,796
Total Community College Program Bonds		6,055,000				5,532,796	-	5,532,796
Total Bonds		$ 1,632,018,022				$ 1,201,980,355	$ 116,976,723	$ 1,318,957,078

*Effective Interest Rates are calculated by dividing total interest paid during the year by the average outstanding balance of bonds payable.

The following table is the amortization schedule for the Authority's long-term debt:

Year ending June 30:	Total principal	Total interest	Total debt service
2020	$ 44,204,310	$ 58,401,478	$ 102,605,788
2021	46,055,056	56,591,457	102,646,513
2022	48,298,668	54,835,592	103,134,260
2023	52,942,202	53,005,181	105,947,383
2024	50,812,907	50,785,193	101,598,100
2025-2029	281,530,093	217,336,898	498,866,991
2030-2034	256,789,582	126,346,974	383,136,556
2035-2039	242,075,778	66,403,995	308,479,773
2040-2044	130,760,000	18,453,426	149,213,426
2045-2049	25,930,000	2,783,275	28,713,275
Total	1,179,398,596	$ 704,943,469	$ 1,884,342,065
Plus: Unamortized premiums	112,487,741		
	$ 1,291,886,337		

Defeasance of debt

From time-to-time, the Authority issues refunding bonds to defease outstanding bonds. The proceeds of the refunding bonds are placed in irrevocable trusts to provide for all future debt service on the refunded or defeased bonds. Accordingly, the trust account assets and liability for the defeased bonds are not included in the accompanying financial statements. The differences between the reacquisition prices and net carrying amount of the bonds defeased with refunding debt are reported in the accompanying statements of net position (deficiency in net position) as deferred outflows of resources and charged annually to interest expense over the shorter of the remaining life of the refunded or refunding bonds principally using the effective interest method.

Refunding revenue bonds

The Refunding Series 2003B Bonds refunded the Authority's Series 1999A, 1999-1, and 2000-1 Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $1,769,263 and a present value economic gain at issuance of $729,611. The refunding resulted in a deferred outflow of resources at issuance of $21,535,590, of which $10,264,156 and $11,043,390 were unamortized as of June 30, 2019 and 2018, respectively. In November 2011 and May 2010, the Authority exercised call options to fully redeem the remaining unpaid principal of the Series 1999-1 and 2000-1 Bonds, respectively. As of June 30, 2019, the assets held in escrow for the repayment of the remaining Series 1999A Bonds have an aggregate market value of $75,214,457 with an unpaid principal balance, plus accreted interest, of $70,906,019.

The Refunding Series 2011A Bonds refunded portions of the Authority's Series 2003A and 2004A Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $3,518,799 and a present value economic gain at issuance of $2,822,354. The refunding resulted in a deferred outflow of resources at issuance of $2,638,154, of which $1,108,294 and $1,297,862 were unamortized as of June 30, 2019 and 2018, respectively. During 2014, the Authority exercised the call option to fully redeem the related unpaid principal of these bonds.

The Refunding Series 2012B Bonds refunded portions of the Authority's Series 2003A, 2004A, 2005A, and 2006A Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $20,587,474 and a present value economic gain at issuance of $13,285,676. The refunding resulted in a deferred outflow of resources at issuance of $14,347,581, of which $8,959,196 and $9,704,191 were unamortized as of June 30, 2019 and 2018, respectively. During 2016 and 2015, the Authority exercised the call options to fully redeem the related unpaid principal of the 2006A bonds and 2005A bonds, respectively.

The Refunding Series 2014D Bonds refunded portions of the Authority's Series 2005A and 2006A Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $6,449,975 and a net present value economic savings at issuance of $3,604,695. The refunding resulted in a deferred outflow of resources at issuance of $244,383, of which $189,815 and $200,952 were unamortized as of June 30, 2019 and 2018, respectively. During 2016 and 2015, the Authority exercised the call options to fully redeem the remaining unpaid principal of the 2006A bonds and 2005A bonds, respectively.

The Refunding Series 2016A Bonds refunded portions of the Authority's Series 2008A and 2009A Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $43,977,921 and a net present value economic savings at issuance of $27,959,783. The refunding resulted in a deferred outflow of resources at issuance of $18,147,495, of which $14,527,055 and $15,664,366 were unamortized as of June 30, 2019 and 2018, respectively. During 2019, the Authority exercised the call options to fully redeem the related unpaid principal of the 2009A bonds in the amount of $107,980,000. During 2018, the Authority exercised the call options to fully redeem the related unpaid principal of the 2008A bonds in the amount of $82,825,000. As of June 30, 2019 and 2018, the assets held in escrow for the repayment of the remaining Series 2008A and 2009A Bonds have an aggregate market value of $7,200 and $111,263,911, respectively, with an unpaid principal balance of $0 and $107,980,000, respectively.

The Refunding Series 2017D Bonds refunded portions of the Authority's Series 2009B Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $19,934,951 and a net present value economic savings at issuance of $12,745,369. The refunding resulted in a deferred outflow of resources at issuance of $2,771,434, of which $2,493,870 and $2,697,175 were unamortized as of June 30, 2019 and 2018, respectively. As of June 30, 2019 and 2018, the assets held in escrow for the repayment of the remaining Series 2009B Bonds have an aggregate market value of $72,379,309 and $73,717,269, respectively, with an unpaid principal balance of $70,275,000 each year.

The Refunding Series 2019B Bonds refunded portions of the Authority's Series 2012A Bonds. These bonds were refinanced to achieve a total reduction of debt service at issuance of $2,891,916 and a net present value economic savings at issuance of $134,178. The refunding resulted in a deferred outflow of resources at issuance of $2,252,897, of which $2,206,253 was unamortized as of June 30, 2019. As of June 30, 2019, the assets held in escrow for the repayment of the remaining Series 2012A Bonds have an aggregate market value of $51,290,641 with an unpaid principal balance of $48,150,000.

Debt service reserve fund investment agreements

In connection with the issuance of the Series 2003A Bonds, Series 2005A Bonds, Series 2006A Bonds, and Series 2009A Bonds, the Authority entered into debt service reserve fund investment agreements which provide for a guaranteed rate of return on the applicable debt service reserve funds to support the Authority's future debt service payments. The agreements provide for termination under certain circumstances as more fully described in the agreements. Termination of the agreements may generate a gain or loss to the Authority depending on the nature and circumstances of the termination. The 2012B Refunding Bonds refunded a portion of the Series 2005A Bonds which necessitated that a portion ($1,800,000) of the original Series 2005A debt service reserve fund investment agreement be terminated. The funds received from this termination payment are being held in the Series 2005A Bonds Rebate Account. The 2014D Refunding Bonds refunded a portion of the Series 2005A Bonds which necessitated that a portion ($1,069,938) of the original Series 2005A debt service reserve fund investment agreement be terminated. The funds received from this termination payment are being held in the Series 2005A Bonds Rebate Account. The 2016A Refunding Bonds refunded a portion of the Series 2008A Bonds and the Forward Delivery Agreement associated with those bonds was assigned by the provider proportionately to the 2016A Refunding Bonds. The 2016A Refunding Bonds refunded a portion of the Series 2009A Bonds. A portion ($3,600,000) of the original Series 2009A debt service reserve fund was liquidated and used as a source of funds for the 2016A Refunding Bonds. The 2017D Refunding Bonds refunded a portion of the Series 2009B Bonds. A portion ($940,998) of the Series 2014B debt service reserve fund was liquidated and used as a source of funds for the 2017D Refunding Bonds. The 2019B Refunding Bonds refunded a portion of the Series 2012A Bonds.

Unamortized bond premiums are reflected as an addition to the outstanding principal balance of the bonds payable and consisted of the following at June 30, 2019 and 2018:

	2019	2018
Unamortized balance, beginning	$ 116,976,723	$ 113,916,934
Current year additions	2,052,328	10,939,217
Unamortized premium on bonds refunded	(1,699,706)	(2,678,203)
Current year amortization	(4,841,604)	(5,201,225)
Unamortized balance, ending	$ 112,487,741	$ 116,976,723

Deferred losses on bond refundings are reflected as deferred outflows of resources in the accompanying statements of net position (deficiency in net position) and consisted of the following at June 30, 2019 and 2018:

	2019	2018
Balance, beginning	$ 40,607,936	$ 40,813,990
Current year additions	2,252,897	2,771,434
Current year amortization	(3,112,194)	(2,977,488)
Balance, ending	$ 39,748,639	$ 40,607,936

Note 8 - Long-term liabilities

Long-term liabilities at June 30, 2019 consisted of the following:

	2019				
	Beginning balance	Additions	Reductions	Ending balance	Current portion
Bonds payable, par	$ 1,201,980,355	$ 67,795,000	$ (90,376,759)	$ 1,179,398,596	$ 44,204,310
Unamortized premiums	116,976,723	2,052,327	(6,541,309)	112,487,741	5,092,855
Total bonds payable	1,318,957,078	69,847,327	(96,918,068)	1,291,886,337	49,297,165
Interagency payables	26,363,765	23,564,103	(30,040,079)	19,887,789	10,593,639
Net pension liability	3,828,162	292,949	-	4,121,111	-
Net OPEB liability	6,107,639	-	(4,737,039)	1,370,600	-
Other liabilities					
Compensated absences	259,786	39,972	(65,540)	234,218	102,607
Total long-term liabilities	$ 1,355,516,430	$ 93,744,351	$ (131,760,726)	$ 1,317,500,055	$ 59,993,411

Long-term liabilities at June 30, 2018 consisted of the following:

	2018				
	Beginning balance	Additions	Reductions	Ending balance	Current portion
Bonds payable, par	$ 1,230,612,559	$ 84,380,000	$ (113,012,204)	$ 1,201,980,355	$ 41,286,759
Unamortized premiums	113,916,934	10,939,217	(7,879,428)	116,976,723	5,201,225
Total bonds payable	1,344,529,493	95,319,217	(120,891,632)	1,318,957,078	46,487,984
Interagency payables	25,372,932	20,521,086	(19,530,253)	26,363,765	17,069,615
Net pension liability	3,612,661	215,501	-	3,828,162	-
Net OPEB liability	5,920,165	187,474	-	6,107,639	-
Other liabilities					
Compensated absences	259,945	55,825	(55,984)	259,786	112,902
Total long-term liabilities	$ 1,379,695,196	$ 116,299,103	$ (140,477,869)	$ 1,355,516,430	$ 63,670,501

Note 9 - Net position

The net investment in capital assets of ($44,021,651) at June 30, 2019, includes the effect of deferring the recognition of the losses on bond refundings. The $39,748,639 balance of the deferred outflows of resources on refunding of debt at June 30, 2019 will be amortized to interest expense over the terms of the old trust or new trust agreements, whichever is shorter, which will decrease the unrestricted net position and increase the net investment in capital assets over those periods (see Note 7).

Note 10 - Contingencies

Pending or threatened lawsuits against the Authority arise in the ordinary course of operations. In the opinion of management, no litigation is now pending, or threatened, that would materially affect the Authority's financial position.

Note 11 - Operating expenses

The Authority's operating expenses for the years ended June 30, 2019 and 2018 on a natural classification basis, are comprised of the following:

	2019	2018
Insurance	$ 1,188,922	$ 1,160,311
Compensation	1,215,481	1,084,655
Supplies and service	889,646	768,838
Pension and OPEB expenses	621,723	742,906
Depreciation	45,099,077	44,346,059
	$ 49,014,849	$ 48,102,769

Note 12 - Retirement plan

Substantially all of the Authority's full-time employees are covered by the Massachusetts State Employees' Retirement System ("MSERS"). MSERS, a public employee retirement system ("PERS"), is a cost-sharing multi-employer defined benefit plan that is administered by the Massachusetts State Retirement Board and covers substantially all non-student employees. The Commonwealth does not issue separately audited financial statements for the plan. The financial position and results of operations of the plan are incorporated into the Commonwealth's financial statements, a copy of which may be obtained from the Office of the State Comptroller, Commonwealth of Massachusetts, One Ashburton Place, Room 901, Boston, MA 02108.

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

Members become vested after 10 years of creditable service. A superannuation retirement allowance may be received upon the completion of 20 years of creditable service or upon reaching the age of 55 with 10 years of service. Normal retirement for most employees occurs at age 65; for certain hazardous duty and public safety positions, normal retirement is at age 55. Most employees who joined the system after April 1, 2012 cannot retire prior to age 60.

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

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

Hire Date	% of Compensation
Prior to 1975	5% of regular compensation
1975 to 1983	7% of regular compensation
1984 to June 30, 1996	8% of regular compensation
July 1, 1996 to present	9% of regular compensation
1979 to present	An additional 2% of regular compensation in excess of $30,000

For active Authority employees covered by MSERS, the Authority is not required to make contributions to the Plan. For retired Authority employees, the Commonwealth computes the projected benefit obligation of the retired employee. The Authority is responsible to contribute any shortfall that exists as a result of this computation. The total amount paid by the Authority to the Massachusetts State Retirement Board amounted to $134,295, $115,941 and $115,941 for the years ended June 30, 2019, 2018 and 2017, respectively, which equaled the required contributions each year.

At June 30, 2019, the Authority reported a liability of $4,121,111 for its proportionate share of the net pension liability. The net pension liability was measured as of January 1, 2018 and the State's total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Authority's proportion of the net pension liability was based on an effective contribution methodology which allocates total contributions amongst the employers in a consistent manner based on an employer's share of total covered payroll. At June 30, 2019, the Authority's proportion was 0.03115%.

At June 30, 2018, the Authority reported a liability of $3,828,162 for its proportionate share of the net pension liability. The net pension liability was measured as of January 1, 2017 and the State's total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Authority's proportion of the net pension liability was based on an effective contribution methodology which allocates total contributions amongst the employers in a consistent manner based on an employer's share of total covered payroll. At June 30, 2018, the Authority's proportion was 0.02985%.

For the years ended June 30, 2019 and 2018, the Authority recognized pension expense of $446,549 and $424,806, respectively.

At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	$ 417,649	$ -
Net difference between projected and actual earnings on pension plan investments	-	143,246
Differences between expected and actual experience	130,687	83,988
Changes in proportion	453,366	122,001
Total	$ 1,001,702	$ 349,235

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending June 30:	
2020	$ 327,938
2021	187,755
2022	9,829
2023	77,363
2024	49,582
Total	$ 652,467

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	$ 398,379	$ -
Net difference between projected and actual earnings on pension plan investments	-	45,613
Differences between expected and actual experience	148,012	104,155
Changes in proportion	462,095	-
Changes in proportion from Commonwealth	-	186,946
Total	$ 1,008,486	$ 336,714

The total pension liability for the June 30, 2018 measurement date was determined by an actuarial valuation as of January 1, 2018 rolled forward to June 30, 2018. The total pension liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of January 1, 2017 rolled forward to June 30, 2017. These valuations used the following assumptions each measurement date, unless otherwise noted:

1. (a) 7.35% and 7.5% investment rates of return for the June 30, 2018 and 2017 measurement dates, respectively, (b) 3.5% interest rate credited to the annuity savings fund and (c) 3.0% cost of living increase per year.

2. Salary increases are based on analyses of past experience but range from 4.0% to 9.0% depending on group and length of service.

3. Mortality rates were as follows:

   (i) Pre-retirement - reflects RP-2014 Blue Collar Employees table projected generationally with Scale MP-2016 and set forward 1 year for females.

   (ii) Post-retirement - reflects RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2016 and set forward 1 year for females.

   (iii) Disability - the morality rate for the June 30, 2018 measurement date is assumed to be in accordance with the RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2016, set forward 1 year. The morality rate for the June 30, 2017 measurement date is assumed to be in accordance with the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct).

4. Experience studies were performed as follows:

   (i) Dated February 27, 2014 and encompasses the period January 1, 2006 to December 31, 2011.

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

Best estimates of geometric rates of return for each major asset class included in the PRIT Fund's target asset allocation as of June 30, 2018 and 2017 are summarized in the following table:

		Long-term expected real rate of return	
Asset class	Target allocation	2018	2017
Global equity	39.00%	5.00%	5.00%
Portfolio completion strategies	13.00%	3.70%	3.60%
Core fixed income	12.00%	0.90%	1.10%
Private equity	12.00%	6.60%	6.60%
Value added fixed income	10.00%	3.80%	3.80%
Real estate	10.00%	3.80%	3.60%
Timberland/natural resources	4.00%	3.40%	3.20%
Total	100.00%		

The discount rate used to measure the total pension liability for the measurement years ended June 30, 2018 and 2017 was 7.35% and 7.5%, respectively. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rates and the Authority's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rates. Based on those assumptions, the net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the Authority's proportionate share of the net pension liability calculated using the discount rate of 7.35% and 7.5% for the measurement years ended June 30, 2018 and 2017, respectively, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.35% and 6.5%, respectively) or 1-percentage-point higher (8.35% and 8.5%, respectively) than the current rate for each year:

Measurement year ended	1% decrease	Discount rate	1% increase
June 30, 2017	$ 5,213,840	$ 3,828,162	$ 2,712,022
June 30, 2018	5,554,606	4,121,111	2,896,296

Detailed information about the pension plan's fiduciary net position is available in the Commonwealth's financial statements.

Note 13 - Retiree health plan

The Authority contributes to the Commonwealth's Group Insurance Commission ("GIC"), which manages a single-employer defined benefit postemployment healthcare plan for the Commonwealth and other governments within the Commonwealth. GIC provides medical benefits to retired employees of participating governments. Chapter 32A of the General Laws of the Commonwealth of Massachusetts assigns the Authority to establish and amend benefit provisions to the GIC board of commissioners. The GIC does not issue separately audited financial statements. The financial position and results of operations of the plan are incorporated into the Commonwealth's financial statements, a copy of which may be obtained from the Office of the State Comptroller, Commonwealth of Massachusetts, One Ashburton Place, Room 901, Boston, MA 02108.

Under Chapter 32A, the Commonwealth is required to provide certain health care and life insurance benefits for retired employees of the Commonwealth. Substantially all of the Commonwealth's employees may become eligible for these benefits if they reach retirement age while working for the Commonwealth. Chapter 32A provides that contribution requirements of the plan members and the participating governments are established and may be amended by the GIC. Plan members or beneficiaries receiving benefits contribute anywhere from 0% to 20% depending on entry age.

Participating governments are contractually required to contribute at a rate assessed each year by GIC on a premium basis. The Authority's contributions to GIC for the years ended June 30, 2019, 2018, and 2017, were $153,937, $117,538 and $151,421, respectively, which equaled the required contributions each year. Required contributions include contributions for the total health plan costs for both active and retired employees.

At June 30, 2019 and 2018, the Authority reported a liability of $1,370,600 and $6,107,639, respectively, for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2018 and 2017, respectively. The total OPEB liability at June 30, 2018 and 2017 was measured by an actuarial valuation as of December 31, 2018 and June 30, 2017, respectively, and the State's total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of those dates.

At June 30, 2019, the Authority's proportion of the net OPEB liability was revalued by a third party actuary, as further described in Note 15. At June 30, 2018, the Authority's proportion of the net OPEB liability was based on an effective contribution methodology which allocates total contributions amongst the employers in a consistent manner based on an employer's share of total covered payroll. At June 30, 2018, the Authority's proportion was 0.03089%.

For the years ended June 30, 2019 and 2018, the Authority recognized OPEB expense of $175,174 and $318,100, respectively.

At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	$ -	$ 5,532,656
Net difference between projected and actual earnings on OPEB plan investments	-	10,952
Differences between expected and actual experience	-	11,995
Changes in proportion	512,764	-
Total	$ 512,764	$ 5,555,603

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ending June 30:	
2020	$ (483,875)
2021	(483,875)
2022	(483,875)
2023	(446,083)
2024	(449,305)
Thereafter	(2,695,826)
Total	$ (5,042,839)

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred outflows of resources	Deferred inflows of resources
Changes of assumptions	$ -	$ 787,074
Net difference between projected and actual earnings on OPEB plan investments	-	9,875
Differences between expected and actual experience	-	15,993
Changes in proportion	682,316	-
Changes in proportion from Commonwealth	-	-
Total	$ 682,316	$ 812,942

The total OPEB liability for the June 30, 2018 measurement date was determined by an actuarial valuation as of December 31, 2018 rolled backward to June 30, 2018. This valuation used the following assumptions:

1. The following annual healthcare cost trend rates: (a) 7.5% decreasing by 0.5% each year to 5.5% decreasing by 0.25% each year to an ultimate rate of 5.0% per year for medical, (b) 5.0% for EGWP and (c) 5.0% for administration costs.
2. The mortality rate was in accordance with RP 2014 Healthy Annuitant Mortality Table projected generationally with scale MP-2018, gender distinct.
3. Wage inflation and salary increases of 3.0%.
4. Participation rates:

(i) 80% of active employees are assumed to elect retiree medical and life insurance coverage. 100% of all retirees who currently have health care coverage will continue with the same coverage, except those with POS/PPO coverage, 85% are assumed to move into the indemnity plan and 15% are assumed to move into the HMO.

(ii) All future retirees are assumed to have Medicare coverage upon attainment of age 65.

(iii) 40% of future retirees are assumed to elect a GIC indemnity plan upon retirement, 50% are assumed to elect a POS/PPO plan upon retirement and 10% are assumed to elect a GIC HMO plan. 100% of future retirees are assumed to be eligible for Medicare, with 85% electing a GIC indemnity plan upon reaching age 65 and 15% electing a GIC HMO plan upon reaching age 65.

The total OPEB liability for the June 30, 2017 measurement date was determined by an actuarial valuation as of January 1, 2017 rolled forward to June 30, 2017. This valuation used the following assumptions:

1. The following annual healthcare cost trend rates: (a) 8.5%, decreasing by 0.5% each year to an ultimate rate of 5.0% in 2024 for medical, (b) 5.0% for EGWP and (c) 5.0% for administration costs.

2. The mortality rate was in accordance with RP 2014 Blue Collar Mortality Table projected with scale MP-2016 from the central year, with females set forward one year.

3. Participation rates:

(i) 100% of all retirees who currently have health care coverage will continue with the same coverage, except that retirees under age 65 with POS/PPO coverage switch to Indemnity at age 65 and those over age 65 with POS/PPO coverage switch to HMO.

(ii) All current retirees, other than those indicated on the census data as not being eligible by Medicare, have Medicare coverage upon attainment of age 65, as do their spouses. All future retirees are assumed to have Medicare coverage upon attainment of age 65.

(iii) 80% of current and future contingent eligible participants will elect health care benefits at age 65, or current age if later.

(iv) Actives, upon retirement, take coverage, and are assumed to have the following coverage:

	Retirement Age	
	Under 65	Age 65 +
Indemnity	40%	85%
POS/PPO	50%	0%
HMO	10%	15%

Investment assets of the Plan are with the PRIT Fund. See Note 12.

The discount rate used to measure the total OPEB liability for the measurement year ended June 30, 2018 was 3.87%. This rate was based on the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rate of AA/Aa or higher as shown in the Bond Buyer 20-Bond General Obligation Index. The discount rate used to measure the total OPEB liability for the measurement year ended June 30, 2017 was 3.63%. This rate was based on the Bond Buyer Index rate of 3.58% and the expected rates of return. The Plan's fiduciary net position was not projected to be available to make all projected future benefit payments for current plan members. The projected "depletion date" when projected benefits are not covered by projected assets is 2023. Therefore, the long-term expected rate of return on plan investments of 7.5% per annum was not applied to all periods of projected benefit payments to determine the total OPEB liability as of June 30, 2017.

The following presents the Authority's proportionate share of the net OPEB liability calculated using the discount rates of 3.87% and 3.63% for the measurement years ended June 30, 2018 and 2017, respectively, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate for each year:

Measurement year ended	1% decrease	Current discount	1% increase
June 30, 2017	$ 7,269,086	$ 6,107,639	$ 4,893,409
June 30, 2018	1,623,279	1,370,600	1,170,269

(a) - The discount rates as of June 30, 2017 are as follows: 3.63% (current); 2.63% (1% decrease) and 4.63% (1% increase)

(b) - The discount rates as of June 30, 2018 are as follows: 3.87% (current); 2.87% (1% decrease) and 4.87% (1% increase)

The following presents the Authority's proportionate share of the net OPEB liability calculated using the healthcare cost trend rates of 9.0% and 9.0% for the measurement years ended June 30, 2018 and 2017, respectively, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate for each year:

Measurement year ended	1% decrease	Current rate	1% increase
June 30, 2017	$ 4,849,057	$ 6,107,639	$ 7,358,928
June 30, 2018	1,161,889	1,370,600	1,640,149

(a) - The healthcare cost trend rates as of June 30, 2017 are as follows: 9.0% (current); 8.0% (1% decrease) and 10.0% (1% increase) for medical costs and 5.0% (current); 4.0% (1% decrease) and 6.0% (1% increase) for EGWP and administration costs

(b) - The healthcare cost trend rates as of June 30, 2018 are as follows: 7.5% (current); 6.5% (1% decrease) and 8.5% (1% increase) for medical costs and 5.0% (current); 4.0% (1% decrease) and 6.0% (1% increase) for EGWP and administration costs

Detailed information about the OPEB plan's fiduciary net position is available in the Commonwealth's financial statements.

Note 14 - Lease commitments and receivables

On July 24, 2009, the Authority entered into a lease agreement with an unrelated third party for office space located in Boston, Massachusetts. The lease was amended in January 2010 increasing the leased space to approximately 5,700 square feet. As amended, the lease provides for a minimum annual base rent of $115,885 for the initial year of the lease agreement and increases to $184,470 for year eight and each of the remaining two years thereafter in the lease term. The initial year base rent also reflects a two-month free rent period. The lease is for a term of 120 months and expires in February 2020. The Authority is also required to pay, as additional rent, its pro rata share of real estate tax and operating expense escalations, as specified in the lease agreement.

For the years ended June 30, 2019 and 2018, rent expense incurred, including additional costs for monthly storage and parking which are not provided under the terms of the lease agreement, amounted to $228,899 and $225,570, respectively.

Future minimum rental payment remaining under this operating lease agreement totals $122,980 through maturity in February 2020.

On June 25, 2010, the Authority entered into a lease agreement with the Massachusetts College of Pharmacy and Health Sciences ("MCPHS") for the purpose of leasing a portion of the dormitory residences of the new student residence hall at the Massachusetts College of Art and Design ("MCAD") which was completed in May 2012. Occupancy of the leased space began in the Fall 2012 academic semester. The lease was amended as of May 9, 2012 to allow for, among other matters, additional bed spaces, revised extension terms and revised total rent payments. The cost of the portion of the property that is leased to MCPHS and included in buildings and improvements in the accompanying statements of net position (deficiency in net position) amounted to approximately $35,101,000 at June 30, 2018, with accumulated depreciation of $6,142,546 as of June 30, 2018. In accordance with the lease agreement, MCPHS deposited $100,000 with the Authority in December 2009, which together with interest earned thereon, in the amount of $100,391, was credited towards the payment of MCPHS's first installment of annual rent during fiscal 2013.

The lease agreement provided for an initial term of five academic years for the original bed spaces and four academic years for the new bed spaces per the lease amendment. The lease commenced in August 2012. The lease term for the original bed spaces may be extended for three additional, consecutive five-year periods and the term of the new bed spaces may be extended for one additional one-year period. The option to extend a term shall be exercised not less than one year prior to the expiration of the term then in effect. MCPHS has exercised the option to extend both leases for one five-year period and two one-year periods, respectively. Annual rent for an academic year shall be due and payable in equal installments in September and February. Annual rent during the periods of extension provide for rent increases as defined in the lease agreement. The lease for the new bed spaces terminated on May 15, 2018.

On June 30, 2017, the Authority entered into a lease agreement with Plus One Holdings, Inc. ("Plus One") to lease approximately 2,395 square feet of space at MCAD for the purpose of operating a student health services clinic. The lease agreement provides for an initial term of five years commencing in July 2017, and thereafter, at the option of Plus One, may be extended for three additional, five-year periods. The option to extend a term shall be exercised not less than one year prior to the expiration of the term then in effect. Annual rent shall be due in advance on the anniversary of the commencement date. Annual rent shall increase two and a half percent per year during the initial lease term and all extension periods.

The Authority has entered into an agreement with MCAD, whereby the MCPHS and Plus One lease payments will be made on a semiannual basis directly to MCAD, as payment of rent, and held in MCAD's residence hall trust fund and shall be used by MCAD for the operation of the leased property in a similar manner in which residence hall fees are used by the University and the Authority. In accordance with the lease agreement, Plus One paid MCAD $28,477 during fiscal 2019. MCPHS and Plus One paid MCAD $3,361,288 and $27,782, respectively, during fiscal 2018. The Authority assesses annual obligations to MCAD, which include the pro rata share of the building occupied by Plus One, on the same debt assessment basis the Authority uses for their other residence halls.

Future minimum rental income to be remitted to MCAD are as follows:

Year ending June 30:	Plus One Holdings
2020	$ 29,189
2021	29,919
2022	30,667
	$ 89,775

Note 15 - Change in actuarial assumptions

During the year ended June 30, 2019, the Authority consulted a third party actuary for the purpose of valuating the Authority's proportionate share of the Commonwealth's net OPEB liability using assumptions the Authority believes more accurately reflect the nature of the Authority's business. These assumptions included, but were not limited to, salary increases, mortality rates, and retirement and trend assumptions. The effect of this change in estimate on current operations is not material to the financial statements.

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Supplementary Information

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Schedule of the Authority's Proportionate Share of the Net Pension Liability of the Commonwealth of Massachusetts
June 30, 2019

	2019	2018	2017	2016	2015	2014
Authority's proportion of the net pension liability (asset)	0.0312%	0.0299%	0.0262%	0.0289%	0.0253%	0.0264%
Authority's proportionate share of the net pension liability (asset)	$ 4,121,111	$ 3,828,162	$ 3,612,661	$ 3,286,731	$ 1,878,277	$ 2,350,479
Authority's covered payroll	$ 1,705,680	$ 1,787,296	$ 1,704,399	$ 1,459,312	$ 1,431,639	$ 1,408,627
Authority's proportionate share of the net pension liability (asset) as a percentage of its covered payroll	241.61%	214.19%	211.96%	225.22%	131.20%	166.86%
Plan fiduciary net position as a percentage of the total pension liability	67.91%	67.21%	63.48%	67.87%	76.32%	70.31%

* The amounts presented for each fiscal year were determined as of 6/30.

** This schedule is intended to present 10 years of data. Additional years will be presented when available.

See Independent Auditor's Report on page 3 and Notes to Required Supplementary Information.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Schedule of Authority Pension Contributions
June 30, 2019

	2019	2018	2017	2016	2015	2014
Contractually required contribution	$ 134,295	$ 115,941	$ 115,941	$ 115,955	$ 101,546	$ 97,745
Contributions in relation to the contractually required contribution	(134,295)	(115,941)	(115,941)	(115,955)	(101,546)	(97,745)
Contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -	$ -
Authority's covered payroll	$ 1,705,680	$ 1,787,296	$ 1,704,399	$ 1,459,312	$ 1,431,639	$ 1,408,627
Contributions as a percentage of covered payroll	7.87%	6.49%	6.80%	7.95%	7.09%	6.94%

* This schedule is intended to present 10 years of data. Additional years will be presented when available.

See Independent Auditor's Report on page 3 and Notes to Required Supplementary Information.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Schedule of the Authority's Proportionate Share of the Net OPEB Liability of the Commonwealth of Massachusetts June 30, 2019

	2019	2018	2017
Authority's proportion of the net OPEB liability (asset)	0.0309%	0.0309%	0.0271%
Authority's proportionate share of the net OPEB liability (asset)	$ 1,370,600	$ 6,107,639	$ 5,920,165
Authority's covered payroll	$ 1,705,680	$ 1,787,296	$ 1,704,399
Authority's proportionate share of the net OPEB liability (asset) as a percentage of its covered payroll	80.36%	341.73%	347.35%
Plan fiduciary net position as a percentage of the total OPEB liability	7.38%	4.80%	3.81%

* The amounts presented for each fiscal year were determined as of 6/30.

** This schedule is intended to present 10 years of data. Additional years will be presented when available.

See Independent Auditor's Report on page 3 and Notes to Required Supplementary Information.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Schedule of Authority OPEB Contributions
June 30, 2019

	2019	2018	2017
Contractually required contribution	$ 134,295	$ 135,943	$ 115,253
Contributions in relation to the contractually required contribution	(134,295)	(135,943)	(115,253)
Contribution deficiency (excess)	$ -	$ -	$ -
Authority's covered payroll	$ 1,705,680	$ 1,787,296	$ 1,704,399
Contributions as a percentage of covered payroll	7.87%	7.61%	6.76%

* This schedule is intended to present 10 years of data. Additional years will be presented when available.

See Independent Auditor's Report on page 3 and Notes to Required Supplementary Information.

Note 1 - Changes in net pension benefit terms and assumptions

FY2018 Changes in Actuarial Assumptions

Changes in benefit terms

None in 2018.

Changes in assumptions

The investment rate of return changed to 7.35% from 7.5%.

The mortality assumption changed as follows:

- Disability - was changed to reflect the RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2016 set forward 1 year for females from RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2015 (gender distinct).

FY2017 Changes in Actuarial Assumptions

Changes in benefit terms

None in 2017.

Changes in assumptions

The mortality assumptions changed as follows:

- Pre-retirement - was changed to reflect the RP-2014 Blue Collar Employees table projected generationally with Scale MP-2016 set forward 1 year for females from RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct).

- Post-retirement - was changed to reflect the RP-2014 Blue Collar Healthy Annuitant table projected generationally with Scale MP-2016 set forward 1 year for females from RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct).

Note 2 - Changes in net OPEB benefit terms and assumptions

FY2018 Changes in Actuarial Assumptions

Changes in benefit terms

None in 2018.

Changes in assumptions

The methodology was changed such that liabilities were calculated separately from the Commonwealth.

The turnover, disability and pre-retirement mortality assumptions were eliminated and the retirement assumption was revised.

The per-capita claim costs were updated.

The trend assumptions were revised.

The discount rate was increased to 3.87% from 3.63%.

The mortality assumption changed as follows:

- Post-retirement - was changed to reflect the RP-2014 Healthy Annuitant Mortality table projected generationally using Scale MP-2018, gender distinct from RP-2014 Blue Collar Healthy Annuitant Mortality table projected generationally using Scale MP-2016 and set forward 1 year for females.

The participation rate assumptions changed to the following:

- 80% of active employees are assumed to elect retiree medical and life insurance coverage. 100% of all retirees who currently have health care coverage will continue with the same coverage, except those with POS/PPO coverage, 85% are assumed to move into the indemnity plan and 15% are assumed to move into the HMO.
- All future retirees are assumed to have Medicare coverage upon attainment of age 65.
- 40% of future retirees are assumed to elect a GIC indemnity plan upon retirement, 50% are assumed to elect a POS/PPO plan upon retirement and 10% are assumed to elect a GIC HMO plan. 100% of future retirees are assumed to be eligible for Medicare, with 85% electing a GIC indemnity plan upon reaching age 65 and 15% electing a GIC HMO plan upon reaching age 65.

The participation rate assumptions were formerly:

- 100% of all retirees who currently have health care coverage will continue with the same coverage, except that retirees under age 65 with POS/PPO coverage switch to Indemnity at age 65 and those over age 65 with POS/PPO coverage switch to HMO.
- All current retirees, other than those indicated on the census data as not being eligible by Medicare, have Medicare coverage upon attainment of age 65, as do their spouses. All future retirees are assumed to have Medicare coverage upon attainment of age 65.
- 80% of current and future contingent eligible participants will elect health care benefits at age 65, or current age if later.
- Actives, upon retirement, take coverage, and are assumed to have the following coverage:

	Retirement Age	
	Under 65	Age 65 +
Indemnity	40%	85%
POS/PPO	50%	0%
HMO	10%	15%

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Statistical Information (Unaudited)

Schedule of Net Position (Deficiency) by Category

	2010 (as restated)	2011 (as restated)	2012	2013	2014 (as restated)	2015	2016	2017 (as restated)	2018	2019
Net investment in capital assets	$ (21,689,811)	$ (3,693,773)	$ 1,380,597	$ 405,186	$ (3,080,091)	$ (12,717,572)	$ (26,837,719)	$ (23,187,500)	$ (29,027,598)	$ (44,021,651)
Restricted - expendable	2,555,116	1,897,286	2,415,383	2,231,469	905,631	905,721	-	-	-	-
Unrestricted	585,170	(17,664,638)	(19,618,320)	(24,880,753)	(21,970,305)	(17,193,251)	(856,119)	(17,484,620)	(13,656,989)	2,888,291
Total Net Position (Deficiency)	**$ (18,549,525)**	**$ (19,461,125)**	**$ (15,822,340)**	**$ (22,244,098)**	**$ (24,144,765)**	**$ (29,005,102)**	**$ (27,693,838)**	**$ (40,672,120)**	**$ (42,684,587)**	**$ (41,133,360)**

See Independent Auditor's Report on page 3.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Statistical Information (Unaudited)

Changes in Net Position

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	(as restated)	(as restated)			(as restated)			(as restated)		
Operating Revenue										
Income from assessments	$ 42,453,490	$ 51,349,024	$ 55,373,353	$ 59,081,652	$ 67,825,646	$ 74,214,554	$ 76,187,363	$ 85,979,296	$ 87,755,221	$ 90,613,525
Federal grants for debt service	211,890	211,890	211,886	58,414	-	-	-	-	-	-
Other miscellaneous revenue	119,636	568,661	499,035	548,131	426,352	598,515	943,094	549,270	452,204	158,783
Total operating revenue	**42,785,016**	**52,129,575**	**56,084,274**	**59,688,197**	**68,251,998**	**74,813,069**	**77,130,457**	**86,528,566**	**88,207,425**	**90,772,308**
Non-Operating Revenue										
Net investment income	6,393,208	3,977,455	12,643,482	3,045,359	10,763,298	10,702,249	15,374,812	7,981,303	10,053,652	14,950,924
Transfers (to)/from State Universities	440,267	3,352,687	3,050,414	3,981,309	4,221,388	4,009,535	7,056,055	421,418	498,508	585,251
Transfers (to)/from DCAM	-	-	-	(497,294)	-	-	-	-	-	-
State capital appropriations	6,881,873	-	-	-	-	-	-	-	-	-
Build America Bonds interest subsidy	700,809	1,887,838	2,360,991	2,302,924	2,161,590	2,189,322	2,200,443	2,201,230	2,198,010	2,181,789
Gain (loss) on sale of assets	-	400,141	-	-	-	-	-	-	-	-
Miscellaneous nonoperating revenue	-	201,756	546,385	56,777	912,114	150,866	99,082	49,691	70,350	26,061
Capital grants	293,073	-	-	-	-	-	-	-	-	-
Total non-operating revenue	**14,709,230**	**9,819,877**	**18,601,272**	**8,889,075**	**18,058,390**	**17,051,972**	**24,730,392**	**10,653,642**	**12,820,520**	**17,744,025**
Total Revenue	**57,494,246**	**61,949,452**	**74,685,546**	**68,577,272**	**86,310,388**	**91,865,041**	**101,860,849**	**97,182,208**	**101,027,945**	**108,516,333**
Operating Expenses										
Insurance costs	(535,276)	(668,168)	(740,425)	(735,970)	(892,842)	(939,566)	(1,024,658)	(1,086,763)	(1,160,311)	(1,188,922)
Authority operating expenses	(1,392,357)	(1,483,170)	(1,481,186)	(1,621,486)	(1,660,589)	(2,208,557)	(2,312,194)	(2,338,033)	(2,490,233)	(2,713,867)
Depreciation	(20,854,040)	(24,968,701)	(28,603,149)	(29,888,212)	(33,711,899)	(38,884,197)	(41,762,241)	(43,333,694)	(44,346,059)	(45,099,077)
Other expenses	(583,365)	(162,258)	(294,516)	(426,570)	(235,606)	(402,886)	(46,879)	(108,423)	(106,166)	(12,983)
Total operating expenses	**(23,365,038)**	**(27,282,297)**	**(31,119,276)**	**(32,672,238)**	**(36,500,936)**	**(42,435,206)**	**(45,145,972)**	**(46,866,913)**	**(48,102,769)**	**(49,014,849)**
Non-operating expenses										
Interest expense	(27,717,084)	(34,798,750)	(37,776,890)	(41,151,521)	(48,795,255)	(53,529,051)	(54,345,047)	(57,143,097)	(54,281,857)	(57,085,975)
Bond issuance costs	(402,289)	(780,005)	(2,150,595)	(1,175,271)	(564,385)	(761,121)	(1,058,566)	(230,315)	(655,786)	(864,282)
Total non-operating expenses	**(28,119,373)**	**(35,578,755)**	**(39,927,485)**	**(42,326,792)**	**(49,359,640)**	**(54,290,172)**	**(55,403,613)**	**(57,373,412)**	**(54,937,643)**	**(57,950,257)**
Total Expenses	**(51,484,411)**	**(62,861,052)**	**(71,046,761)**	**(74,999,030)**	**(85,860,576)**	**(96,725,378)**	**(100,549,585)**	**(104,240,325)**	**(103,040,412)**	**(106,965,106)**
Increase (decrease) in net position	**$ 6,009,835**	**$ (911,600)**	**$ 3,638,785**	**$ (6,421,758)**	**$ 449,812**	**$ (4,860,337)**	**$ 1,311,264**	**$ (7,058,117)**	**$ (2,012,467)**	**$ 1,551,227**

See Independent Auditor's Report on page 3.

Massachusetts State College Building Authority
(A Component Unit of the Commonwealth of Massachusetts)

Supplementary Information

Statistical Information (Unaudited)

Schedule of Revenue

Institution	2010 (as restated)	2011 (as restated)	2012	2013	2014 (as restated)	2015	2016	2017 (as restated)	2018	2019
Bridgewater	$ 10,167,907	$ 12,019,967	$ 12,980,504	$ 12,987,262	$ 16,281,766	$ 16,506,948	$ 16,415,422	$ 17,500,999	$ 17,534,811	$ 18,571,706
Fitchburg	4,318,236	4,705,990	4,902,735	5,127,026	5,376,040	5,641,136	5,152,007	6,096,926	6,780,228	7,403,353
Framingham	4,440,318	4,923,218	6,695,874	7,103,882	7,959,801	7,907,969	7,378,039	11,225,027	11,629,333	11,363,950
Mass. College of Art and Design	2,166,434	2,203,147	2,170,707	5,906,206	6,087,404	6,158,757	6,220,894	6,643,132	6,787,364	7,021,673
Mass. College of Liberal Arts	2,225,289	2,397,236	2,742,973	2,609,247	2,592,005	2,664,203	2,290,169	2,870,065	2,911,331	3,109,439
Mass. Maritime Academy	3,376,425	3,545,353	3,710,356	4,110,844	4,194,537	6,929,788	6,851,698	7,189,492	7,483,471	7,675,601
Salem	4,972,018	9,128,481	9,407,195	8,451,618	9,542,570	9,657,655	12,912,427	13,949,924	14,365,831	14,675,955
Westfield	6,264,556	6,649,381	6,943,818	7,402,580	9,996,056	10,382,798	10,207,246	11,465,584	11,419,260	11,770,370
Worcester	4,522,307	5,776,251	5,819,191	5,382,987	5,795,467	8,365,300	8,544,166	8,814,572	8,843,592	9,021,478
Mount Wachusett	-	-	-	-	-	-	215,295	223,575	-	-
Total	$ 42,453,490	$ 51,349,024	$ 55,373,353	$ 59,081,652	$ 67,825,646	$ 74,214,554	$ 76,187,363	$ 85,979,296	$ 87,755,221	$ 90,613,525

See Independent Auditor's Report on page 3.

Supplementary Information

Statistical Information (Unaudited)

Room Rates of Residence Facilities

Institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bridgewater	$5,640-6,962	$5,800-7,100	$6,100-7,310	$6,300-7,460	$6,540-7,740	$6,740-7,840	$6,940-8,080	$7,220-8,400	$7,510-8,862	$7,698-9,128
Fitchburg	$4,642-5,345	$4,782-6,000	$4,930-6,204	$5,100-6,420	$5,230-6,580	$5,330-6,710	$5,440-6,840	$5,770-7,900	$6,044-8,273	$6,331-8,666
Framingham	$4,755-5,755	$5,105-6,105	$5,495-8,250	$5,885-8,630	$6,085-8,830	$6,380-9,060	$6,680-9,280	$6,980-9,580	$7,280-9,880	$7,560-10,160
Mass. College of Art and Design	$6,777-9,676	$7,350-10,280	$7,610-10,640	$7,876-11,000	$8,030-11,220	$8,190-11,440	$8,350-11,670	$8,560-12,807	$8,820-13,190	$9,261-13,378
Mass. College of Liberal Arts	$4,175-4,575	$4,375-4,875	$4,530-5,050	$4,740-5,140	$4,860-5,260	$5,210-5,510	$5,500-5,700	$5,750-5,950	$6,050-6,250	$5,000-6,550
Mass. Maritime Academy	$4,978	$5,125	$5,300	$5,470	$5,910	$6,440	$6,790	$7,130	$7,340	$7,560
Salem	$5,071-8,204	$5,730-9,110	$6,150-9,350	$6,570-9,320	$6,700-9,500	$6,980-9,900	$7,280-10,320	$7,570-10,730	$7,870-11,160	$8,110-11,490
Westfield	$4,303-6,516	$4,650-6,800	$4,800-7,100	$4,950-7,350	$5,250-7,500	$5,510-8,350	$5,730-8,680	$5,940-9,000	$6,110-9,260	$4,380-9,540
Worcester	$5,272-7,165	$6,150-7,487	$6,580-7,800	$6,750-7,800	$6,920-7,980	$7,090-8,180	$7,270-8,370	$7,485-8,585	$7,646-8,746	$7,778-8,878

See Independent Auditor's Report on page 3.

Massachusetts State College Building Authority
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Supplementary Information

Statistical Information (Unaudited)

Occupancy as a Percentage of Design Capacity at Residence Facilities

Institution	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bridgewater	101%	100%	100%	99%	95%	99%	97%	96%	95%	95%
Fitchburg	105%	104%	100%	101%	100%	103%	101%	96%	92%	85%
Framingham	101%	104%	100%	100%	100%	98%	98%	94%	93%	90%
Mass. College of Art and Design	100%	99%	100%	99%	99%	99%	98%	99%	99%	96%
Mass. College of Liberal Arts	94%	99%	94%	91%	86%	86%	79%	77%	74%	71%
Mass. Maritime Academy	100%	103%	106%	108%	111%	93%	101%	105%	102%	102%
Salem	106%	94%	102%	107%	106%	107%	100%	96%	96%	90%
Westfield	105%	104%	106%	101%	98%	98%	102%	99%	94%	86%
Worcester	102%	100%	103%	102%	101%	87%	94%	92%	96%	96%
State University Average	**102%**	**101%**	**101%**	**101%**	**99%**	**98%**	**98%**	**96%**	**94%**	**91%**

See Independent Auditor's Report on page 3.

Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board
Massachusetts State College Building Authority

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Massachusetts State College Building Authority (a component unit of the Commonwealth of Massachusetts) (the "Authority") as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated October 10, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

CohnReznick

Purpose of this Report

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

CohnReznick LLP

Boston, Massachusetts
October 10, 2019

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BOOK-ENTRY ONLY SYSTEM

DTC will act as securities depository for the Series 2020A Bonds. The Series 2020A Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 2020A Bond certificate will be issued for each maturity of the Series 2020A Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation, and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a rating of AA+ from S&P. The DTC rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com and www.dtc.org.

Purchases of Series 2020A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2020A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2020A Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2020A Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 2020A Bonds, except in the event that use of the book-entry system for the Series 2020A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2020A Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2020A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2020A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2020A Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Series 2020A Bonds may wish to take certain steps to augment transmission to them of significant events with respect to the Series 2020A Bonds, such as redemptions, tenders, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of the Series 2020A Bonds may wish to ascertain that the nominee holding the Series 2020A Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 2020A Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Series 2020A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, redemption premium, if any, and interest payments on the Series 2020A Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC nor its nominee, the Trustee, or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Paying Agent or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 2020A Bonds at any time by giving reasonable notice to Authority or the Paying Agent. Under such circumstances, in the event that a successor depository is not obtained, Series 2020A Bond certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Series 2020A Bond certificates will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but neither the Authority nor the underwriters take responsibility for the accuracy thereof.

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SUMMARY OF LEGAL DOCUMENTS

The following is a summary of certain provisions of the Trust Agreement and the Contract, including certain terms used in the Trust Agreement and Contract not used elsewhere in this Official Statement. This summary does not purport to be complete and reference is made to the Trust Agreement and Contract for full and complete statements of such and all provisions.

DEFINITIONS OF CERTAIN TERMS

"Account or Accounts" means each account or all of the accounts established by the Trust Agreement.

"Accreted Value" means with respect to any Capital Appreciation Bond (i) as of any Valuation Date, the amount set forth in the applicable Supplemental Trust Agreement and (ii) as of any date other than a Valuation Date, the sum of (a) the Accreted Value on the preceding Valuation Date and (b) the product of (1) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date and (2) the difference between the Accreted Values for such Valuation Dates. For purposes of this definition, the number of days having elapsed from the preceding Valuation Date and the number of days from the preceding Valuation Date to the next succeeding Valuation Date shall be calculated on the basis of a 360-day year of twelve 30-day months.

"Agency Obligations" means obligations issued or guaranteed by the Federal National Mortgage Association, Government National Mortgage Association, Federal Financing Bank, Federal Intermediate Credit Banks, Federal Farm Credit Bank, Banks for Cooperatives, Federal Land Banks, Federal Farm Credit Banks Funding Corporation, Farm Credit System Financial Assistance Corporation, Federal Home Loan Banks, Farmers Home Administration, Export-Import Bank of the United States, Resolution Funding Corporation, Student Loan Marketing Association, United States Postal Service, Tennessee Valley Authority, Federal Home Loan Mortgage Corporation or any other agency or corporation which has been or may hereafter be created pursuant to an act of Congress as an agency or instrumentality of the United States of America.

"Amortized Value," when used with respect to Investment Obligations purchased at a premium above or a discount below par, means the value as of any given time obtained by dividing the total premium or discount at which such Investment Obligation was purchased by the number of days remaining to maturity on such Investment Obligation at the date of such purchase and by multiplying the amount thus calculated by the number of days having passed since such purchase, and (1) in the case of an Investment Obligation purchased at a premium by deducting the product thus obtained from the purchase price, and (2) in the case of an Investment Obligation purchased at a discount by adding the product thus obtained to the purchased price.

"Appreciated Value" means with respect to any Deferred Income Bond (i) as of any Valuation Date, the amount set forth for such date in the Supplemental Trust Agreement authorizing such Deferred Income Bond, (ii) as of any date prior to the Interest Commencement Date, other than a Valuation Date, the sum of (a) the Appreciated Value on the preceding Valuation Date and (b) the product of (1) a fraction, the numerator of which is the number of days having elapsed from the preceding Valuation Date and the denominator of which is the number of days from such preceding Valuation Date to the next succeeding Valuation Date and (2) the difference between the Appreciated Values for such Valuation Dates, and (iii) as of any date on and after the Interest Commencement Date, the Appreciated Value on the Interest Commencement Date. For purposes of this definition, the number of days having elapsed from the preceding Valuation Date shall be calculated on the basis of a 360-day year of twelve 30-day months.

"Appropriations" means amounts made available for expenditure on behalf of a State University pursuant to an appropriation or other spending authorization by the General Court of the Commonwealth and amounts otherwise available for expenditure by the BHE on behalf of such State University, including without limitation retained tuition payments, if any.

"Authorized Newspaper" means *The Bond Buyer* or a newspaper customarily published at least once a day for at least five days (other than legal holidays) in each week, printed in the English language and of general circulation in New York, New York.

"Authorized Officer" means the Chairman, Vice Chairman, Secretary-Treasurer, Assistant Secretary-Treasurer or Executive Director of the Authority, and when used with reference to an act or document of the Authority also means any other person authorized by resolution of the Authority to perform the act or sign the document in question.

"Bond Counsel" means any lawyer or firm of lawyers nationally recognized in the field of municipal finance and satisfactory to the Authority.

"Bondowner" or "Owner" or "Owner of Bonds" or any similar term means any person who shall be the registered owner of any Outstanding Bond or Bonds.

"Bond" means any bond authenticated and delivered under the Trust Agreement.

"Business Day" means any day that is not a Saturday, Sunday or legal holiday in the Commonwealth or a day on which banks in Boston, Massachusetts, are authorized or required by law or executive order to close.

"Campus Project" means any Project financed with Bonds issued after 1998.

"Campus Project Capital Improvement Reserve Accounts" means, collectively, the Bridgewater State University Capital Improvement Reserve Account, the Framingham State University Capital Improvement Reserve Account, the Fitchburg State University Capital Improvement Reserve Account, the Massachusetts College of Art and Design Capital Improvement Reserve Account, the Salem State University Capital Improvement Reserve Account, the Westfield State University Capital Improvement Reserve Account and the Worcester State University Capital Improvement Reserve Account of such names established by the Trust Agreement and any additional Capital Improvement Reserve Account established by the Authority pursuant to the Trust Agreement with respect to a State University in connection with the financing of a Campus Project.

"Campus Residence Hall Project" means a Campus Project that is a residence hall.

"Capital Appreciation Bond" means any Bond as to which interest is payable only at the maturity or prior redemption of such Bond. For the purposes of (i) receiving payment of the Redemption Price if a Capital Appreciation Bond is redeemed prior to maturity or (ii) computing the principal amount of Bonds held by the registered owner of a Capital Appreciation Bond in giving to the Authority or the Trustee any notice, consent, request, or demand pursuant to the Trust Agreement for any purpose whatsoever, unless otherwise provided in the Supplemental Trust Agreement authorizing Bonds which are Capital Appreciation Bonds, the principal amount of a Capital Appreciation Bond shall be deemed to be its Accreted Value.

"Capital Improvements" means improvements, enlargements, betterments, alterations, extensions, renewals and replacements of one or more Projects, including land, equipment and other real or personal property, which are properly chargeable (whether or not so charged by the Authority), under generally accepted accounting principles, as additions to capital accounts.

"Capital Improvements Budget" means a budget (i) showing all projected disbursements from the Project Fund and Capital Improvement Reserve Fund and, to the extent provided by the Authority, any other fund or account under or outside the Trust Agreement, as well as the sources of moneys projected to be available to meet the same and (ii) identifying the Capital Improvements to be undertaken, the nature of the work, the estimated cost thereof and the estimated completion date of each Capital Improvement.

"Commissioner" means the Commissioner of Higher Education of the Commonwealth.

"Commonwealth-owned Project" means a Project with respect to which the Authority has neither legal title nor a leasehold interest.

"Comptroller" means Comptroller of the Commonwealth.

"Contract" shall mean the Contract for Financial Assistance, Management and Services dated as of February 1, 2003 between the Commonwealth, acting by and through the BHE, and the Authority, together with all amendments thereto.

"Counsel's Opinion" or "Opinion of Counsel" means an opinion signed by Bond Counsel or an attorney or firm of attorneys of recognized standing (who may be counsel to the Authority) selected by the Authority.

"Credit Facility" means an irrevocable letter of credit, surety bond, loan agreement or other agreement, facility or insurance or guaranty arrangement issued or extended by a Qualified Institution, pursuant to which the Authority is entitled to obtain moneys to pay the principal, purchase price or Redemption Price of Bonds due in accordance with their terms or tendered for purchase or redemption, plus accrued interest thereon to the date of payment, purchase or redemption thereof, in accordance with the Trust Agreement, whether or not the Authority is in default under the Trust Agreement.

"Debt Service" for any period means, as of any date of calculation and with respect to the Outstanding Bonds of any Series, an amount equal to the sum of (i) interest accruing during such period on Outstanding Bonds of such Series and (ii) that portion of each Principal Installment for such Series which would accrue during such period if such Principal Installment were deemed to accrue daily in equal amounts from the next preceding Principal Installment due date for such Series or, if (a) there shall be no such preceding Principal Installment due date or (b) such preceding Principal Installment due date is more than one year prior to the due date of such Principal Installment, then, from a date one year preceding the due date of such Principal Installment or from the date of issuance of the Bonds of such Series, whichever date is later. Such interest and Principal Installments for such Series shall be calculated on the assumption that no Bonds of such Series Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment of each Principal Installment on the due date thereof. For purposes of this definition, the principal and interest portions of the Accreted Value of a Capital Appreciation Bond and the Appreciated Value of a Deferred Income Bond becoming due at maturity or by virtue of a Sinking Fund Installment shall be included in the calculations of accrued and unpaid and accruing interest or Principal Installments only during the year such amounts become due for payment unless otherwise provided in the applicable Supplemental Trust Agreement. Debt Service shall include costs of Credit Facilities and reimbursement to Providers of Credit Facilities, in each case if and to the extent payable from the applicable Debt Service Fund. Debt Service on Bond Anticipation Notes shall not include any Principal Installments thereon.

"Debt Service Reserve Fund Requirement" means zero. See "SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Debt Service Reserve Fund Requirement."

"Defeasance Obligations" means and includes any of the following securities, to the extent investment in such securities by the Authority is authorized under applicable law:

(i) direct obligations of the United States of America;

(ii) interest-only strips of the Resolution Funding Corporation;

(iii) pre-refunded municipal bonds rated Aaa by Moody's Investors Service and AAA by Standard & Poor's Ratings Service; or

(iv) obligations issued by the following agencies that are backed by the full faith and credit of the United States of America: Export-Import Bank (direct obligations or fully guaranteed certificates of beneficial ownership), Farmers Home Administration, Federal Financing Bank, General Services Administration (participation certificates), Maritime Administration (guaranteed Title XI financing), Department of Housing and Urban Development (project notes, local authority bonds and new communities debentures).

"Deferred Income Bond" means any Bond (i) as to which interest accruing thereon prior to the Interest Commencement Date of such Bond is (a) compounded on each Valuation Date for such Deferred Income Bond and (b) payable only at the maturity or prior redemption of such Bonds and (ii) as to which interest accruing after the Interest Commencement Date is payable on the first interest payment date immediately succeeding the Interest Commencement Date and periodically thereafter on the dates set forth in the Supplemental Trust Agreement authorizing such Deferred

Income Bond. For the purposes of (i) receiving payment of the Redemption Price if a Deferred Income Bond is redeemed prior to maturity or (ii) computing the principal amount of Bonds held by the registered owner of a Deferred Income Bond in giving to the Authority or the Trustee any notice, consent, request, or demand pursuant to the Trust Agreement for any purposes whatsoever, unless otherwise provided in the Supplemental Trust Agreement authorizing such Deferred Income Bond, the principal amount of a Deferred Income Bond shall be deemed to be its Appreciated Value.

"Fiduciary" or "Fiduciaries" means the Trustee, any Paying Agent, or any or all of them, as may be appropriate.

"Fiscal Year" means that period beginning on the first day of July of any year and ending on the last day of June of the subsequent year or, at the option of the Authority, any other period of twelve consecutive calendar months selected by the Authority in a written instrument delivered to the Trustee as the Fiscal Year of the Authority.

"Framingham Contract" means the Contract for Financial Assistance, Management and Services, Framingham State College Parking Lot, dated as of August 1, 1999 between the Authority and Commonwealth, acting by and through the BHE.

"Fund" or "Funds" means each fund or all of the funds established by the Trust Agreement.

"Indebtedness" means Bonds or Bond Anticipation Notes.

"Interest Commencement Date" means, with respect to any particular Deferred Income Bond, the date prior to the maturity date thereof specified in the Supplemental Trust Agreement authorizing such Deferred Income Bond after which interest accruing on such Bond shall be payable on the first interest payment date immediately succeeding such Interest Commencement Date and periodically thereafter on the dates specified in the Supplemental Trust Agreement authorizing such Deferred Income Bond.

"Interest Subsidy Payment" means the credit payment received by the Authority pursuant to section 6431(b) of the Code.

"Investment Obligation" shall mean and include any of the following securities, to the extent investment in such securities by the Authority is authorized under applicable law:

(i) Defeasance Obligations;

(ii) Agency Obligations;

(iii) Obligations the timely payment of principal of and interest on which are unconditionally guaranteed by the United States of America;

(iv) Certificates or receipts representing direct ownership of future interest or principal payments on direct general obligations of the United States of America or any obligations of agencies or instrumentalities of the United States of America which are backed by the full faith and credit of the United States of America, which obligations are held by a custodian in safekeeping on behalf of the registered owners of such receipts;

(v) Interest-bearing time or demand deposits, certificates of deposit, or other similar banking arrangements with any government securities dealer, bank, trust company, savings and loan association, national banking association or other savings institution (including the Trustee or any affiliate of the Trustee), provided that such deposits, certificates, and other arrangements are fully insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation or interest-bearing time or demand deposits or certificates of deposit with any bank, trust company, national banking association or other savings institution (including the Trustee or any affiliate of the Trustee), provided such deposits and certificates are in or with a bank, trust company, national banking association or other savings institution whose long-term unsecured debt is rated in one of the two highest long-term rating categories by each Rating Agency;

(vi) Repurchase agreements collateralized by securities described in subparagraphs (i), (ii), (iii) or (iv) above with any registered broker-dealer or with any commercial bank;

(vii) Forward purchase agreements providing for delivery of securities described in subparagraphs (i), (ii), (iii) or (iv) above or subparagraph (ix) below with banks or other financial institutions (including the Trustee or any affiliate of the Trustee) whose long-term unsecured debt or claims-paying ability is rated in one of the two highest rating categories by each Rating Agency, provided that any such agreement must be accompanied by an opinion of counsel to the effect that the securities delivered will not be considered a part of the estate of such bank or other financial institution in the event of a declaration of bankruptcy or insolvency by such bank or institution;

(viii) Money market funds rated in the highest rating category by each Rating Agency, including, without limitation, any mutual fund rated in the highest rating category by each Rating Agency, for which the Trustee or an affiliate of the Trustee serves as investment manager, administrator, shareholder servicing agent, and/or custodian or subcustodian, notwithstanding that (A) the Trustee or an affiliate of the Trustee receives fees from such funds for services rendered, (B) the Trustee charges and collects fees for services rendered pursuant to this Trust Agreement, which fees are separate from the fees received from such funds, and (C) services performed for such funds and pursuant to this Trust Agreement may at times duplicate those provided to such funds by the Trustee or its affiliates;

(ix) Commercial paper rated in the highest rating category by each Rating Agency;

(x) Short-term or long-term obligations, whether tax exempt or taxable, of any state or local government or authority or instrumentality thereof or any other entity that has the ability to issue obligations the interest on which is excludable from gross income for federal income tax purposes, provided that any such obligations are rated at the time of purchase in one of the two highest rating categories by each Rating Agency;

(xi) Investment contracts with banks or other financial institutions (including the Trustee or any affiliate of the Trustee) whose long-term unsecured debt or claims-paying ability is rated in one of the two highest rating categories by each Rating Agency;

(xii) Participation units in a combined investment fund created under Section 38A of Chapter 29 of the Massachusetts General Laws; and

(xiii) Any other investment in which moneys of the Authority may be legally invested, provided that the Authority receives a letter (or other evidence satisfactory to the Trustee) from a Rating Agency to the effect that it will not, solely as a result of such investment, lower, suspend or otherwise adversely affect any underlying rating (without regard to any Credit Facility) then maintained on any Outstanding Bonds.

"MassArt Dining Hall Contract" means the Contract for Financial Assistance, Management and Services, Massachusetts College of Art and Design Dining Hall, dated as of August 1, 1999 between the Authority and the Commonwealth, acting by and through the BHE.

"MassArt Residence Hall Contract" means the Contract for Financial Assistance, Management and Services, Massachusetts College of Art and Design Residence Hall, dated as of August 1, 1999 between the Authority and the Commonwealth, acting by and through the BHE.

"Maturity Value" means the Accreted Value of a Capital Appreciation Bond at its stated maturity.

"1994 Contract" means the Contract for Financial Assistance, Management and Services, 1994 Projects, Existing Projects and Refunding, dated as of October 1, 1994, as amended as of August 1, 1999 between the Authority and the Commonwealth, acting by and through the BHE.

"1999 Bridgewater Contract" means the Contract for Financial Assistance, Management and Services, Bridgewater State College Dining Hall, dated as of August 1, 1999 between the Authority and the Commonwealth, acting by and through the BHE.

"Operating Expenses" means any expenses incurred by or for the account of the Authority or reimbursable by or to the Authority for operation, maintenance, renewal and repair of the Projects including, without limiting the generality of the foregoing, administrative expenses, financial, legal and auditing expenses, insurance premiums, payments on claims against the Authority, payments of rates, assessments or other charges to the Authority with respect to the Projects, legal and engineering expenses relating to operation and maintenance, payments and reserves for pension, retirement, health, hospitalization and sick leave benefits for Authority employees allocable to the Projects and any other similar expenses required to be paid by the Authority, all to the extent properly and directly attributable to the Projects, and the expenses, liabilities and compensation of the Fiduciaries required to be paid under the Trust Agreement, but does not include any cost of any Capital Improvement or any provision for interest, depreciation, amortization or similar charges on any indebtedness. The term shall also include any payments required to be made by the Authority to the Commonwealth pursuant to Section 20 of the Act.

"Outstanding," when used with reference to Bonds of a Series, means, as of any date, Bonds or Bonds of such Series, theretofore or thereupon being authenticated and delivered, issued under the Trust Agreement except:

(i) any Bonds cancelled by any Fiduciary at or prior to such date,

(ii) Bonds (or portions of Bonds) for the payment or redemption of which moneys, equal to the principal amount or Redemption Price thereof, as the case may be, with interest to the date of maturity or redemption date, shall be held in trust under the Trust Agreement and set aside for such payment or redemption (whether at or prior to the maturity or redemption date), provided that if such Bonds (or portions of Bonds) are to be redeemed, notice of such redemption shall have been given or provision satisfactory to the Trustee shall have been made for the giving of such notice as provided in the Trust Agreement;

(iii) Bonds in lieu of or in substitution for which other Bonds shall have been authenticated and delivered pursuant to applicable provisions of the Trust Agreement unless proof satisfactory to the Trustee is presented that any such Bonds are held by a bona fide purchaser in due course; and

(iv) Bonds deemed to have been paid as provided under the heading "Defeasance."

"Paying Agent" means any paying agent for the Bonds of any Series, and its successor or successors and any other corporation which may at any time be substituted in its place pursuant to the Trust Agreement.

"Principal Installment" means, as of any date of calculation and with respect to the Bonds of any Series, so long as any Bonds thereof are Outstanding, (i) the principal amount of Bonds of such Series due on a future date for which no Sinking Fund Installments have been established, or (ii) the unsatisfied balance (determined as provided under the heading "Satisfaction of Sinking Fund Installment") of any Sinking Fund Installments due on a future date for Bonds of such Series, plus the amount of the premium, if any, which would be applicable upon redemption of such Bonds on such future date in a principal amount equal to said unsatisfied balance of such Sinking Fund Installments, or (iii) if such future dates coincide as to different Bonds of such Series, the sum of such principal amount of Bonds and of such unsatisfied balance of Sinking Fund Installments due on such future date, plus such applicable redemption premium, if any.

"Prior Contracts" means (i) the 1994 Contract, (ii) the 1999 Bridgewater Contract, (iii) the MassArt Residence Hall Contract, (iv) the MassArt Dining Hall Contract, (v) the Framingham Contract and (vi) the 2000 Bridgewater Contract.

"Project" shall mean the construction of new buildings or structures and the acquisition, addition to, alteration, enlargement, reconstruction, rehabilitation, remodeling and other work, including, but not limited to, the alteration or modification of existing facilities or the construction of additional or new facilities required or made desirable by changes in or enactments of new law or regulation or changes in or new circumstances such as, by way of example and not by way of limitation, provision for access or use by handicapped persons, provision for conservation of energy, provision for safety and security of persons and property, provision for other compliance with changed or new law, regulation or circumstance, in or upon or respecting existing buildings or structures, the provision and installation therein or in respect thereof of furnishings, furniture, machinery, equipment, facilities, approaches, driveways, walkways, parking areas, planting and landscaping, the acquisition of land, other property, rights, easements and interests acquired for or in respect to any thereof, the demolition or removal of any buildings or structures on land so acquired or interests in which are so acquired and site preparation, with respect to the financing or refinancing of which Bonds shall have been issued (or, as required by the context, with respect to which such financing or refinancing may be or shall have been proposed) under the Trust Agreement. The word shall also mean, whenever appropriate, such land, buildings or structures and such appurtenances.

"Project Cost" means and includes the cost, whenever incurred, of carrying out a Project and placing it in operation, including, but not limited to, the cost of construction of new buildings or structures and the cost of acquiring, adding to, altering, enlarging, leasing, reconstructing, remodeling and doing other work in or upon or respecting existing buildings and structures, if any, included in such Project, the cost of providing and installing in or in respect of any such building or structure, furniture, furnishings, machinery, equipment, facilities, approaches, driveways, walkways, parking areas, planting and landscaping, the cost of leasing or otherwise acquiring land, other property, rights, easements and interests acquired for or in respect to any of the foregoing, the cost of demolishing or removing any buildings or structures on land so acquired or interests in which are so acquired and the cost of site preparation; the cost of architectural and engineering services, plans, specifications, survey, estimates of costs and of revenues, other expenses necessary or incident to determining the feasibility or practicability of such Project; administrative expenses, legal expense and such other expenses, including, but not limited to, the fees and expenses (including reasonable attorneys' fees and expenses) of the Trustee payable initially or prior to the receipt by the Authority of Revenues from such Project, fees and expenses of financial advisers and other experts, printing and advertising costs and the like, taxes and other governmental charges lawfully levied or assessed prior to such receipt of Revenues, the cost of preliminary architectural and engineering services, plans, specifications, surveys, estimates of costs and revenues, other expenses necessary or incident to determine the feasibility or practicability of other projects for which written requests shall have been made by authority of the BHE and premiums for policies of insurance, fidelity bonds and the like covering property and risks of and related to such Project and payable prior to such receipt of such Revenues, as may be necessary or incident to the aforesaid, to the financing or refinancing thereof and to the issuance therefore of notes or Bonds or both and interest for such period as the Authority may deem advisable.

"Provider" means any person or entity providing a Credit Facility with respect to any one or more Series of Bonds, pursuant to agreement with or upon the request of the Authority.

"Qualified Institution" means (i) a bank, a trust company, a national banking association, a federal branch pursuant to the International Banking Act of 1978 or any successor provisions of law, a domestic branch or agency of a foreign bank which branch or agency is duly licensed or authorized to do business under the laws of any state or territory of the United States of America, a savings bank, a savings and loan association, or an insurance company or association chartered or organized under the laws of any state of the United States of America, a corporation, a trust, a partnership, an unincorporated organization, or a government or an agency, instrumentality, program, account, fund, political subdivision or corporation thereof, in each case the unsecured or uncollateralized long-term debt obligations of which, or obligations secured or supported by a letter of credit, contract, agreement or surety bond issued by any such organization, at the time an investment agreement, or Credit Facility is entered into by the Authority are rated in a category equal to or higher than its unenhanced, published rating on Outstanding Bonds by each Rating Agency which rates such obligations or (ii) the Government National Mortgage Association or any successor thereto, the Federal National Mortgage Association or any successor thereto, or any other federal agency or instrumentality.

"Rating Agency" means each nationally recognized rating service that maintains a published rating on any Outstanding Bonds at the request of the Authority.

"Redemption Price" means, with respect to any Bond, the principal amount thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the Trust Agreement, but excluding accrued interest.

"Refunding Bonds" means all Bonds authenticated and delivered on original issuance pursuant to the Trust Agreement for the purpose of refunding Outstanding Bonds.

"Revenues" means (i) all moneys received by the Authority in payment of fees, rents, rates and other charges for the use and occupancy of, and for the services and facilities provided by, a Project, including, without limitation, the moneys which the BHE is required to remit to the Authority under the Contract, and all other income derived by the Authority from the operation, ownership or control thereof and (ii) any other amounts designated as Revenues in the Contract.

"Series" means all of the Bonds authenticated and delivered on original issuance and designated as such by the Authority in a simultaneous transaction pursuant to the provisions regarding authorization and issuance of bonds under the Trust Agreement and any Bonds thereafter authenticated and delivered in lieu of or in substitution therefore, regardless of variations in maturity, interest rate, sinking fund, or other provisions.

"Sinking Fund Installment" means, as of any date of calculation and with respect to any Bonds of a Series, so long as any Bonds thereof are Outstanding, the amount of money required by the applicable Supplemental Trust Agreement, to be paid on a single future date for the retirement of any Outstanding Bonds of said Series which mature after said date, but does not include any amount payable by the Authority by reason only of the maturity of a Bond.

"Supplemental Trust Agreement" means any trust agreement supplemental to or amendatory of the Trust Agreement, adopted by the Authority in accordance with the Trust Agreement.

"System Projects" means Projects financed by Bonds issued before 1998.

"System Projects Capital Improvement Reserve Account" means the Account by that name established by the Trust Agreement.

"Trust Agreement" means the Trust Agreement dated as of November 1, 1994 between the Authority and the Trustee, as amended by the First Supplemental Agreement dated as of January 1, 1996, the Second Supplemental Agreement dated as of August 1, 1999 and the Third Supplemental Agreement dated as of April 1, 2000, each between the Authority and the Trustee, and as further amended and restated by the Fourth Supplemental Trust Agreement dated as of February 1, 2003, as further supplemented by the Fifth Supplemental Trust Agreement dated as of February 1, 2003, providing for the issuance of the Authority's Project Revenue Bonds, Series 2003A, and Refunding Revenue Bonds, Series 2003B, as further amended by the Sixth Supplemental Trust Agreement dated as of November 1, 2003, as further supplemented by the Seventh Supplemental Trust Agreement dated as of January 1, 2004, providing for the issuance of the Authority's Project Revenue Bonds, Series 2004A, as further supplemented by the Eighth Supplemental Trust Agreement dated as of February 1, 2004, providing for the issuance of the Series 2004B Bonds, as further supplemented by the Ninth Supplemental Trust Agreement dated as of March 1, 2005, providing for the issuance of the Authority's Project Revenue Bonds, Series 2005A, as further supplemented by the Tenth Supplemental Agreement dated as of March 1, 2006 and the Eleventh Supplemental Agreement dated as of April 1, 2006, providing for the issuance of the Authority's Project Revenue Bonds, Series 2006A, as further supplemented and amended by the Twelfth Supplemental Agreement dated as of March 1, 2008, providing for the issuance of the Series 2008A Bonds, as further supplemented and amended by the Thirteenth Supplemental Trust Agreement dated as of January 1, 2009, as further supplemented by the Fourteenth Supplemental Trust Agreement dated as of January 1, 2009, providing for the issuance of the Series 2009A Bonds, as further amended and restated by the Fifteenth Supplemental Trust Agreement dated as of December 1, 2009, as further supplemented by the Sixteenth Supplemental Trust Agreement dated as of December 1, 2009, providing for the issuance of the Series 2009B Bonds, as further supplemented by the Seventeenth Supplemental Trust Agreement dated as of December 1, 2009, providing for the issuance of the Series 2009C Bonds, as further amended by the Eighteenth Supplemental Trust Agreement dated as of December 1, 2010, as further supplemented by the Nineteenth Supplemental Trust Agreement dated as of December 1, 2010, providing for the issuance of the Series 2010A Bonds, as further supplemented by the Twentieth Supplemental Trust Agreement dated as of December 1, 2010, providing for the issuance of the Series 2010B Bonds, as further supplemented by the Twenty-first Supplemental Trust Agreement dated as of June 1, 2011, providing for the issuance of the Series 2011A Bonds, as further amended by the Twenty-second Supplemental Trust Agreement dated as of January 1, 2012, as further supplemented by the Twenty-third Supplemental Trust Agreement dated as of January 1, 2012, providing for the issuance of the Series 2012A Bonds, as further supplemented by the Twenty-fourth Supplemental Trust Agreement dated as of March 1, 2012, providing for the issuance of the Series 2012B Bonds, as further supplemented by the Twenty-fifth Supplemental Trust Agreement dated as of December 1, 2012, providing for the issuance of the Series 2012C Bonds, as further supplemented by the Twenty-sixth Supplemental Trust Agreement dated as of

January 1, 2014 providing for the issuance of the Series 2014A Bonds, as further supplemented and amended by the Twenty-seventh Supplemental Trust Agreement dated as of December 1, 2014 providing for the issuance of the Series 2014B Bonds, the Series 2014C Bonds and the Series 2014D Bonds, as further supplemented by the Twenty-eighth Supplemental Trust Agreement dated as of December 1, 2015 providing for the issuance of the Series 2015A Bonds, as further supplemented by the Twenty-ninth Supplemental Trust Agreement dated as of February 1, 2016 providing for the issuance of the Series 2016A Bonds, as further amended and restated by the Thirtieth Supplemental Trust Agreement dated as of January 1, 2017, as further supplemented by the Thirty-first Supplemental Trust Agreement dated as of January 1, 2017 providing for the issuance of the Series 2017A Bonds, as further supplemented by the Thirty-second Supplemental Trust Agreement dated as of December 1, 2017 providing for the issuance of the Series 2017 B Bonds and the Series 2017D Bonds, and the Thirty-third Supplemental Trust Agreement dated as of December 1, 2017 providing for the issuance of the Series 2017C Bonds, as further supplemented by the Thirty-fourth Supplemental Trust Agreement dated as of April 1, 2018, as further supplemented by the Thirty-fifth Supplemental Trust Agreement dated as of January 1, 2019 providing for the issuance of the Series 2019A Bonds, as further supplemented by the Thirty-sixth Supplemental Trust Agreement dated as of January 1, 2019 providing for the issuance of the Series 2019B Bonds, as amended by the Thirty-seventh Supplemental Trust Agreement dated as of June 1, 2019, as further supplemented by the Thirty-eighth Supplemental Trust Agreement dated as of October 15, 2019 providing for the issuance of the Series 2020A Bonds, as further amended and restated by the Thirty-ninth Supplemental Trust Agreement dated as of January 1, 2020, as further supplemented by the Fortieth Supplemental Trust Agreement dated as of July 1, 2020 providing for the issuance of the Series 2020A Bonds.

"2000 Bridgewater Contract" means the Contract for Financial Assistance, Management and Services, Bridgewater State College Residence Hall, dated as of May 1, 2000 between the Authority and the Commonwealth, acting by and through the BHE.

"Valuation Date" means (i) with respect to any Capital Appreciation Bond the date or dates set forth in the applicable Supplemental Trust Agreement on which specific Accreted Values are assigned to the Capital Appreciation Bond and (ii) with respect to any Deferred Income Bond, the date or dates on or prior to the Interest Commencement Date set forth in the Supplemental Trust Agreement authorizing such Bond on which specific Appreciated Values are assigned to the Deferred Income Bond.

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SUMMARY OF THE TRUST AGREEMENT

Trust Agreement to Constitute Contract. The Trust Agreement constitutes a contract between the Authority and the Owners from time to time of the Bonds, and the pledge made in the Trust Agreement and the covenants and agreements therein set forth to be performed on behalf of the Authority shall be for the equal benefit, protection and security of the Owners of any and all of the Bonds, all of which, regardless of the time or times of their authentication and delivery or maturity, shall be of equal rank without preference, priority or distinction of any of the Bonds over any other thereof except as expressly provided in or permitted by the Trust Agreement or any Supplemental Trust Agreement.

Additional Bonds. Additional Bonds may be issued at any time to pay or provide for the payment of other Authority bonds, notes or other obligations incurred under the Act, to refund Outstanding Bonds, to make deposits to the Project Fund, the Debt Service Fund or the Debt Service Reserve Fund, or any combination thereof, and to pay or provide for the payment of the costs incurred in connection with the issuance of Bonds. The consent of the Bond Insurer is required to issue refunding Bonds that do not produce debt service savings.

Bond Anticipation Notes. Whenever the Authority shall authorize the issuance of Bonds, the Authority may by resolution authorize the issuance of notes (and renewals thereof) in anticipation of the sale of such Bonds. The principal of and interest on such notes and renewals thereof shall be payable from the proceeds of such notes, from the proceeds of the sale of the Bonds in anticipation of which such Notes are issued or from funds of the Authority. The proceeds of such Bonds may be pledged for the payment of the principal of and interest on such notes, and any such pledge shall have a priority over any other pledge of such proceeds created by the Trust Agreement. The Authority may secure the payment of the interest on such notes by a pledge that is on a parity with the pledge under the Trust Agreement securing all Bonds, in which event such interest shall be payable from the Debt Service Fund. The Authority may also pledge the Revenues and other Authority funds to the payment of the principal of such notes, but such pledge shall be subordinate to the pledge securing the payment of the Bonds.

Additional Obligations. The Authority reserves the right to issue bonds, notes or other obligations or otherwise incur indebtedness pursuant to other and separate resolutions or agreements of the Authority, so long as such bonds, notes or other obligations are not, or such other indebtedness is not, except as provided in the Trust Agreement, entitled to a charge or lien or right with respect to the Revenues or the Funds and Accounts created thereby or pursuant thereto. Notwithstanding the foregoing, the Authority may by Supplemental Trust Agreement issue bonds, notes or any other obligations entitled to a charge or lien or right with respect to the Revenue or the Funds and Accounts created under the Trust Agreement, so long as amounts payable on such obligations or under such agreement shall be payable after the deposits set forth under the heading "Revenue Fund."

The Pledge Effected by the Trust Agreement. There are pledged for the payment of the Principal Installments and Redemption Price of and interest on the Bonds, subject to the provisions of the Trust Agreement permitting the application thereof for the purposes and on the terms and conditions set forth in the Trust Agreement, all Revenues, all moneys and securities on deposit in all funds and accounts created under the Trust Agreement (except for the Operating Fund and the Rebate Fund), all Pledged Funds and all rights of the Authority under the Contract to receive Revenues and Pledged Funds payable to the Authority thereunder.

Establishment of Funds and Accounts. The following Funds and Accounts, which shall be held and administered by the Trustee (except the Operating Fund, the Capital Improvement Reserve Fund and the Multipurpose Reserve Fund, which shall be held by the Authority), subject to the provisions of the Trust Agreement, shall be established:

(1) Project Fund;

(2) Revenue Fund;

(3) Operating Fund;

(4) Debt Service Fund;

(5) Debt Service Reserve Fund;

(6) Rebate Fund;

(7) Capital Improvement Reserve Fund (and within said Fund (i) a System Projects Capital Improvement Reserve Account, (ii) a Bridgewater State University Capital Improvement Reserve Account, (iii) a Framingham State University Capital Improvement Reserve Account, (iv) a Massachusetts College of Art and Design Capital Improvement Reserve Account, (v) a Massachusetts Maritime Academy Capital Improvement Reserve Account (vi) a Salem State University Capital Improvement Reserve Account, (vii) a Worcester State University Capital Improvement Reserve Account; (viii) a Westfield State University Capital Improvement Reserve Account and (ix) a Fitchburg State University Capital Improvement Reserve Account); and

(8) Multipurpose Reserve Fund.

Project Fund. There shall be deposited in the Project Fund (i) the amount provided in the applicable Supplemental Trust Agreement to be deposited therein to pay Project Costs to be financed by such Series and (ii) any other amounts (not required by the Trust Agreement to be otherwise deposited) as determined by the Authority.

The Authority may establish in the Supplemental Trust Agreement for any Series of Bonds a separate Cost of Issuance Account within the Project Fund and shall deposit in the Cost of Issuance Account for such Series any proceeds of such Series as directed by such Supplemental Trust Agreement and any other moneys not otherwise directed to be applied by the Trust Agreement.

Revenue Fund. All Revenues, except earnings on investment of the Funds and Accounts to the extent provided under the heading "Investment of Funds; Valuation," shall be collected by or for the account of the Authority and deposited by or on behalf of the Authority as promptly as practicable in the Revenue Fund. On the last Business Day of each February and on each October 10 (or the next preceding Business Day, if October 10 is not a Business Day), the Trustee shall apply amounts available in the Revenue Fund to the following purposes and in the following order:

(i) to the Debt Service Fund, an amount which, when added to other amounts on deposit in such Fund and available for such purpose, including amounts in any capitalized interest account that may have been established by the applicable Supplemental Trust Agreement, will equal the interest to become due and payable on Outstanding Bonds on the next interest payment date and any Principal Installment to become due and payable on Outstanding Bonds on or before the next date (within the next twelve months) on which such Principal Installment is payable (and if the amount on deposit in the Debt Service Fund shall be less than such required amount, the Trustee shall notify the Authority and the BHE in writing of the amount of the deficiency and request payment of such amount pursuant to the Contract);

(ii) to the Debt Service Reserve Fund, an amount which, together with the amounts on deposit therein, will equal the Debt Service Reserve Fund Requirement;

(iii) to the Authority for deposit in the Operating Fund, the amount directed in writing to be deposited therein by an Authorized Officer;

(iv) to the Authority for deposit in the System Projects Capital Improvement Reserve Account or one or more Campus Project Capital Improvement Reserve Accounts in the Capital Improvement Reserve Fund, the amount, if any, directed in writing to be deposited therein by an Authorized Officer pursuant to the Trust Agreement; and

(v) to the Authority for deposit in the Multipurpose Reserve Fund, the amount, if any, directed in writing to be deposited therein by an Authorized Officer pursuant to the Trust Agreement.

Any balance remaining in the Revenue Fund following the above payments shall be retained in the Revenue Fund to be available for payments therefrom in the succeeding months.

Operating Fund. Amounts in the Operating Fund shall be applied by the Authority from time to time to Operating Expenses. Amounts in the Operating Fund which the Authority at any time determines in writing to be in excess of the requirements of such Fund shall be withdrawn and deposited in the Revenue Fund.

Debt Service Fund. The Trustee shall pay out of the Debt Service Fund to the respective Paying Agents (i) on or before each interest payment date for any of the Bonds the amount required for the interest and Principal Installments payable on such date and (ii) on or before each redemption date for such Bonds, the amount required for the payment of the Redemption Price of and interest on such Bonds then to be redeemed. A Supplemental Trust Agreement that establishes a capitalized interest account in the Debt Service Fund may provide for residual amounts in said account to be transferred to the Project Fund.

Debt Service Reserve Fund. If at any time the amounts on deposit and available therefor in the Debt Service Fund are insufficient to pay the Principal Installments and Redemption Price of and interest on the Bonds then due, the Trustee shall withdraw from the Debt Service Reserve Fund and deposit in the Debt Service Fund the amount necessary to meet any such deficiency. Whenever moneys on deposit in the Debt Service Reserve Fund exceed the Debt Service Reserve Fund Requirement, such excess may be, in the discretion of the Authority, transferred by the Trustee to the Debt Service Fund or, if approved by an Opinion of Bond Counsel, to any Fund or Account specified by the Authority.

Rebate Fund. If any Series of Bonds is issued, or becomes, subject to the rebate requirement of section 148(f) of the Code the Authority may, by a Supplemental Trust Agreement, activate the Rebate Fund established under the Trust Agreement, and the Trustee shall then establish a separate Rebate Account within the Rebate Fund for such Series of Bonds. Funds on deposit in any Rebate Account shall be applied as set forth in the applicable Supplemental Trust Agreement.

Capital Improvement Reserve Fund. Amounts shall be deposited into the System Projects Capital Improvement Reserve Account or one or more Campus Project Capital Improvement Reserve Accounts in the Capital Improvement Reserve Fund from the Revenue Fund as provided in the Trust Agreement to the extent provided in any Supplemental Trust Agreement or as directed in a certificate of an Authorized Officer of the Authority. Amounts not subject to the lien of the Trust Agreement may be deposited by the Authority in any Account in the Capital Improvement Reserve Fund at any time. The Authority may apply amounts in the System Projects Capital Improvement Reserve Account to Project Costs of any System Project and may apply amounts in a Campus Project Capital Improvement Reserve Account to Project Costs of any Campus Project located at the State University to which said Account relates. In connection with the financing of a Campus Project at a State University with respect to which a Campus Project Capital Improvement Account has not yet been established, the applicable Supplemental Trust Agreement shall establish a Campus Project Capital Improvement Reserve Account for such State University.

Investment of Funds; Valuation. Except as otherwise provided under the heading "Defeasance," money held for the credit of any fund or account held by the Trustee under the Trust Agreement shall, to the fullest extent practicable, be invested, either alone or jointly with moneys in any other fund or account, by the Trustee at the written direction of an Authorized Officer of the Authority in Investment Obligations, provided that if moneys in two or more funds or accounts are commingled for purposes of investment, the Trustee shall maintain appropriate records of the Investment Obligations or portions thereof held for the credit of such fund or account. Unless otherwise directed by a Supplemental Trust Agreement, Investment Obligations purchased as an investment of moneys in any fund or account shall be deemed at all times to be a part of such fund or account and all income thereon shall accrue to and be deposited in such fund or account and all losses from investment shall be charged against such fund or account, provided that, except as may be otherwise provided in a Supplemental Trust Agreement, all income earned on investment of the Debt Service Reserve Fund shall be credited to and deposited in the Debt Service Fund. Notwithstanding any provision in the Trust Agreement or in a Supplemental Trust Agreement to the contrary, the Trustee shall not be liable for any losses from investment in accordance with the applicable provisions under this heading. The Authority may by Supplemental Trust Agreement direct that all or any portion of income earned on investment of moneys allocable to any Series of Bonds in any fund or account established under the Trust Agreement shall be transferred to the Rebate Account established for such Series of Bonds in the Rebate Fund. In computing the amount in any fund or account under the Trust Agreement for any purpose, Investment Obligations shall be valued at par, or if purchased at other than par, shall be valued at Amortized Value. Accrued interest received upon the sale of any Investment Obligation shall be treated as income from such Investment Obligation. Investment Obligations in any fund or account under the Trust Agreement shall be valued at least once in each Fiscal Year on the last day thereof. Notwithstanding the foregoing, Investment Obligations in the Debt Service Reserve Fund shall be valued at par or Amortized Value, whichever is lower, as aforesaid, unless and until a withdrawal from either such fund shall be required, in which event such investments shall thereafter be valued at par, Amortized Value or market, whichever is lowest, until the balance in such Fund, on the basis of such valuation, shall equal the Debt Service Reserve Fund Requirement.

Satisfaction of Sinking Fund Installments. Any amount accumulated in the Debt Service Fund up to the unsatisfied balance of each respective Sinking Fund Installment may be applied (together with amounts accumulated in such Debt Service Fund with respect to interest on the Bonds for which such Sinking Fund Installment was established) by the Trustee at the direction of the Authority prior to the 45th day preceding the due date of such Sinking Fund Installment (i) to the purchase of Bonds of the maturity for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the principal amount of such Bonds plus unpaid interest accrued to the date of purchase, such purchases to be made in such manner as the Authority shall determine or (ii) to the redemption of such Bonds if then redeemable by their terms at the price referred to in clause (i). All Bonds so purchased or redeemed shall be delivered to the Trustee for cancellation prior to the 45th day preceding the due date of such Sinking Fund Installment. The principal amount of any Bonds so purchased or redeemed shall be deemed to constitute part of the Debt Service Fund until such Sinking Fund Installment date for the purpose of calculating the amount of such Fund.

Upon the purchase or redemption of any Bond pursuant to the Trust Agreement, an amount equal to the principal amount of the Bonds so purchased or redeemed shall be credited toward the next Sinking Fund Installment thereafter to become due with respect to the Bonds of such maturity and the amount of any excess of the amounts so credited over the amount of such Sinking Fund Installment shall be credited by the Trustee against future Sinking Fund Installments as specified in the applicable Supplemental Trust Agreement.

Upon the purchase or redemption of any Bonds for which Sinking Fund Installments shall have been established, an amount equal to the principal amount of the Bonds so purchased or redeemed shall be credited toward future Sinking Fund Installments in such order as the Authority shall determine.

Pledged Funds. Pledged Funds shall be deposited upon receipt by the Trustee in any of the Funds or Accounts established under the Trust Agreement, as directed by the Authority in a certificate of an Authorized Officer. If there are insufficient moneys in the Revenue Fund to make the deposits required by clauses (i) and (ii) under the section "Revenue Fund" above on any date on which such deposits are required, the Trustee shall notify the Authority, the BHE and the Comptroller of the amount of any such insufficiency and that a deposit of Pledged Funds may be required to cure such insufficiency, such notice to be provided no later than 10 days after the date on which such deposits were required and substantially in the form as provided for by the Trust Agreement.

Debt Service Payments. The Authority covenants that it will promptly pay the principal of and the interest on every Bond at the place, on the dates and in the manner provided in the Trust Agreement and in said Bond, and any premium required for the retirement of said Bond by purchase or redemption, according to the true intent and meaning thereof. Except as otherwise provided in the Trust Agreement, such principal, interest and premium are payable solely from Revenues pledged therefore under the Trust Agreement and moneys in the funds and accounts pledged therefore under the Trust Agreement. The Authority covenants that it will perform and observe each and every agreement, condition, covenant and obligation on its part to be performed and observed under the Contract, to the end that the Pledged Funds therein provided and the pledge thereof shall remain in full force and effect and binding upon the Commonwealth as authorized by the Act and provided by the Contract.

Completion of Projects. The Authority covenants that it will with reasonable expedition complete each Project in conformity with law and all requirements of all governmental authorities having jurisdiction thereover. The Authority further covenants and agrees that upon completion or occupancy of each Project financed by a Series of Bonds it will deliver to the BHE and to the Trustee a certificate stating the date upon which such completion occurred, as provided in the Trust Agreement and, if and to the extent that there is no obligation of the BHE under the Contract to undertake such operation and maintenance, will thereafter operate and maintain, or otherwise provide for the operation and maintenance of, such Project.

Land Covenant. The Authority covenants that each Project constructed or acquired by it is or will be located on lands (a) that are leased by the Authority for the purpose by a good and valid lease or leases continuing or renewable at the option of the Authority for a term not shorter than the last maturity of any Bond issued under the Trust Agreement of the Series pertaining to such Project or (b) as to which good and marketable title is held by the Authority in fee simple or the right to use and occupy which is vested in the Authority by valid leases, franchises, licenses, easements or rights of way expiring not earlier than the last maturity of any such Bond, provided that the foregoing covenant shall not apply to a Project consisting of alteration, enlargement, reconstruction, rehabilitation, remodeling and other work on any building, structure or other facility (including without limitation parking lots) not owned or leased by the Authority and not involving the acquisition of such building, structure or facility by the Authority.

Use and Operation of Projects. The Authority covenants that all payments under contracts entered into by it, all compensation and conditions of employment, and all salaries, fees and wages paid by it, in connection with the maintenance, repair and operation of each Project will be reasonable. The Authority covenants that it will perform and observe each and every agreement, condition, covenant and obligation on its part to be performed and observed under the Contract and will use its best efforts to enforce like performance and observance on the part of the Commonwealth, to the end that the obligation of the Commonwealth thereunder, among other things, to remit to the Authority or to the Trustee Revenues, to operate and maintain Projects and to make necessary repairs to and restoration and reconstruction of the same shall continue in full force and effect.

Payment of Lawful Charges. The Authority covenants that it will not create or suffer to be created any lien or charge upon any Project or any part thereof or upon the Revenues therefrom except the lien and charge upon such Revenues under the Trust Agreement or as permitted as to Pledged Funds by the Contract or other document by which Trust Funds or Appropriations are pledged, and that, from the same or other available funds, it will pay or cause to be discharged, or will make adequate provision to satisfy and discharge, as promptly as possible after the same shall accrue, all lawful claims and demands for labor, materials, supplies or other objects, which, if unpaid, might by law become a lien upon any Project or any part thereof or the Revenues therefrom, provided, however, that nothing under this heading shall require the Authority to pay or cause to be discharged, or make provision for, any such lien or charge so long as the validity thereof shall be contested in good faith.

Use of Other Funds for Projects; Sale of Projects. Notwithstanding any other provision of the Trust Agreement, the Authority may permit the Commonwealth or any of its agencies, departments or political subdivisions, to pay the cost of maintaining, repairing and operating any Project out of funds other than Revenues on account of such Project whether pursuant to the Contract or otherwise. The Authority may also, if and to the extent now or hereafter permitted by law, sell any Project or any portion thereof owned by the Authority, and any other owner of a Project may, if and to the extent now or hereafter permitted by law, sell any Project or any portion thereof owned by such owner, provided that if such sale by the Authority or other owner is of an entire Project, the proceeds therefrom shall be in an amount sufficient, with all other moneys then held by the Trustee under the Trust Agreement and available for the purpose, to cause to be deemed to be paid as provided in under the heading "Defeasance" the principal or Redemption Price of and interest on the principal amount of Bonds then Outstanding allocable to such Project (which principal amount shall be evidenced to the Trustee by a certificate of an Authorized Officer) and to pay all necessary and proper expenses payable in connection therewith and provided, further, that if such sale is of a portion of a Project, the proceeds therefrom shall be an amount sufficient, with any other moneys then held by the Trustee under the Trust Agreement and available for the purpose, to cause to be deemed to be paid as provided under the heading "Defeasance" the principal or Redemption Price of and interest on a portion of the principal amount of Bonds then Outstanding allocable to such Project which bears the same proportion to the principal amount of Bonds then Outstanding allocable to such Project which the Project Costs of the portion of such Project to be sold bears to the Project Costs of the Project as a whole and to pay all necessary and proper expenses payable in connection therewith; provided however, notwithstanding the foregoing, the Authority or other owner may use such proceeds to fund another Project ("Replacement Project") in lieu of redemption or defeasance of applicable Bonds if: (1) the Authority delivers a certificate to the Trustee demonstrating that following such sale anticipated Revenues in the current and each subsequent Fiscal Year will not be less than the amount of Revenues anticipated to be received as if such sale had not occurred, (2) if necessary, an amendment to the Contract including Replacement Project for the Project being sold, (3) if the Authority is not the owner of the Project, a certificate of the owner acknowledging the amount of the sale proceeds and the Replacement Project to which such sale proceeds will be applied, (4) if the Replacement Project was not previously approved by the Board, a copy, certified by an authorized officer of the Board, of the written request by the Board to the Authority that it initiate such Replacement Project, together with copies of any approvals of such request required by the Act to be given by an official of the Commonwealth, and (5) an Opinion of Bond Counsel that such sale and application of proceeds is permitted by this Trust Agreement and will not adversely affect the exclusion of interest on the Bonds from gross income for federal income tax purposes.

The Authority or other owner shall not complete any such sale except after delivery to the Trustee of a copy of the purchase and sale agreement between the purchaser and the Authority or other owner, as applicable, regarding the project or portion thereof to be sold by an Authorized Officer of the Authority to be a true copy, and, if the proposed sale is of a portion of the Project and proceeds are to be applied to defease or redeem Bonds, (i) an Opinion of Bond Counsel as to the basis upon which moneys then held by the Trustee hereunder and available for the payments respecting the Bonds to be made as above provided are to be determined and (ii) a certificate of independent certified public accountants, who may be the accountants employed by the Authority for the purpose of Section 616, of the Project Costs of the portion of the Projects to be sold, of the Project Costs of the Project as a whole and of the amount of the moneys then held by the Trustee hereunder which is computed on the basis of said Opinion of Bond Counsel to be available for said payments. If the proceeds are to be applied to defease or redeem Bonds, the proceeds of any such sale shall be deposited by the Authority with the Trustee pursuant to an escrow agreement or other arrangement such that the applicable requirements under the heading "Defeasance" will be met with respect to the principal and Redemption Price of Bonds and interest thereon required by this Section to be deemed paid. If the proceeds are to be applied to defease or redeem Bonds, the principal amount of such Bonds may be paid at the applicable stated maturity date or dates or upon any one or more dates upon which such Bonds are subject to redemption at the option of the Authority (or a combination thereof).

Tax Covenant. The Authority shall take, or cause to be taken, such action as may from time to time be required to assure the continued exclusion from the federal gross income of holders of any Bonds the interest on which is not includable in the gross income of the holder thereof for federal income tax purposes. Without limiting the generality of the foregoing, the Authority shall not permit the investment or application of the proceeds of any Bonds the interest on which is not includable in the gross income of the holder thereof for federal income tax purposes, including any funds considered proceeds within the meaning of section 148 of the Code, to be used to acquire any investment property the acquisition of which would cause such Bonds to be "arbitrage bonds." within the meaning of said Section 148.

Insurance on Projects. The Authority covenants that during the construction, alteration, enlargement, reconstruction, rehabilitation or remodeling of or other work upon each Project it will carry such insurance, if any, as it may deem reasonable therefore, that from and after the time when the contractors or any of them engaged in constructing any part of each Project shal1 cease to be responsible, pursuant to the provisions of the respective contracts for the construction of such part, for loss or damage to such part occurring from any cause, it will insure and at all times keep such part insured with a responsible insurance company or companies, qualified to assume the risk thereof, against physical loss or damage however caused, with such exemptions as are ordinarily required by insurers of buildings, structures or facilities of similar type, in such amount as it shall determine to be reasonable and in any event at least sufficient to comply with any legal or contractual requirement which, if breached, would result in assumption by the Authority of a portion of any loss or damage as a co-insurer, provided, however, that if at any time the Authority shall be unable to obtain such insurance to the extent above required, either as to the amount of such insurance or as to the risks covered thereby, it shall not constitute an event of default under the Trust Agreement if the Authority shall maintain such insurance to the extent reasonably obtainable and provided, further, that such insurance may be provided by a policy or policies covering all insurable portions of such Project as a whole together with other insurable property of the Authority.

All such policies shall be for the benefit of the Trustee and the Authority as their interests may appear, shall be made payable to the Trustee (by means of the standard mortgagee clause without contribution, if obtainable) and shall be deposited with the Trustee. The proceeds of any such insurance shall be deposited with the Trustee, and the

Trustee shall have the sole right to receive the proceeds of such insurance and to collect claims thereunder and receipt therefore.

The Authority covenants that, immediately after any damage to or destruction of any part of any Project the estimated cost to repair, restore or reconstruct which exceeds $1,000,000, it will, if necessary, prepare, or cause an architect or engineer for the Project to prepare, plans and specifications for repairing, restoring or reconstructing the damaged or destroyed property and will proceed with reasonable promptness accomplish such repair, restoration or reconstruction in accordance with the original design or to do such other work as may be advised in writing by the BHE.

The proceeds of all insurance referred to under this heading shall be available for, and shall to the extent necessary be applied to, the repair, restoration or reconstruction of the damaged or destroyed property, or the doing of other work with respect thereto as the Authority may determine by resolution adopted upon advice in writing from the BHE, and shall be disbursed by the Trustee upon receipt of copies, certified by an Authorized Officer of the Authority, of the resolution adopted by the Authority authorizing such repair, restoration and reconstruction and of such written advice and otherwise in the manner and upon the showings as provided under the heading "Project Fund" for payments from the Project Fund. If such proceeds shall be insufficient for such purpose, the deficiency shall be supplied by the Trustee upon requisition of the Authority from any other moneys available for the purpose.

Use, Occupancy and Other Insurance. The Authority covenants that it will at all times carry, with one or more responsible insurance companies qualified to assume the risk thereof, (i) use and occupancy insurance covering loss of Revenues by reason of necessary interruption, total or partial, in the use of the applicable Project resulting from damage or destruction of any part thereof, however caused, with such exceptions as are ordinarily required by insurers providing similar insurance, in such amount as the Authority shall estimate will be sufficient to provide a full equivalent of Revenues for the Fiscal Year respecting which such insurance is carried, provided that, if at any time the Authority shall be unable to obtain such insurance to the extent above required, either as to the amount of such insurance or as to the risks covered thereby, it will not constitute an event of default under the provisions of the Trust Agreement if the Authority shall carry such insurance to the extent reasonably obtainable, and (ii) such workers' compensation or employers' liability insurance as may be required by law and such public liability and property damage insurance as the Authority shall deem reasonable. All such policies providing use and occupancy insurance shall be made payable to and deposited with the Trustee, and the Trustee shall have the sole right to receive any proceeds of such policies and to collect claims thereunder and receipt therefore. Any proceeds of use and occupancy insurance paid to the Trustee (other than proceeds of such insurance or of business interruption insurance maintained by the Authority with respect to any Project in excess of the foregoing requirements) shall be deposited to the credit of the Revenue Fund.

Notwithstanding the foregoing, the proceeds of any use and occupancy insurance paid to the Trustee may be paid by the Trustee to the Authority if all amounts on account of the applicable Project required to be paid to the Trustee with respect to all interest payment dates preceding the collection of such proceeds and the two interest payment dates next following the collection of such proceeds have been paid to or are on deposit with the Trustee and if the Authority delivers to the Trustee a certificate of an Authorized Officer directing such payment and stating that the amount of proceeds so paid will be applied to supplement income from the applicable Project not constituting Revenues.

No Inconsistent Action by Authority. The Authority covenants and agrees that none of the Revenues of any Project will be used for any purpose other than as provided in the Trust Agreement and that no contract or contracts will be entered into or any action taken which shall be inconsistent with the provisions of the Trust Agreement.

Further Instruments and Actions. The Authority covenants that it will, from time to time, execute and deliver such further instruments and take such further action as may be required to carry out the purposes of the Trust Agreement.

Records, Reports and Audits. The Authority covenants that it will keep an accurate record of the total Project Costs of each Project and of the Revenues collected or derived from such Project.

Covenant against Sale or Encumbrance. The Authority covenants that, except for the rental, leasing or licensing as landlord of rooms and other accommodations in each Project, and except as permitted by under the heading "Use of Other Funds for Projects; Sale of Projects" or by the Contract, it will not sell, lease or otherwise dispose of or encumber any Project or any part thereof and will not create or permit to be created any charge or lien on the Revenues derived therefrom except as provided in the Trust Agreement or the Contract. The Authority may, however, from time to time, (i) release to the Commonwealth any land leased by the Commonwealth to the Authority, if permitted by a lease entered into between the Commonwealth and the Authority and if such release will not adversely affect Revenues, and (ii) sell any machinery, fixtures, apparatus, tools, instruments or other movable property acquired by it from the proceeds of Bonds issued under the Trust Agreement or from the Revenues of a Project, if the Authority shall determine that such articles are no longer useful in connection with the construction or operation and maintenance of such Project, and the proceeds thereof shall be applied to the replacement of the properties so sold or disposed of or shall be deposited to the credit of the appropriate account within the Project Fund as the Authority by resolution may determine.

Notice of Default; Financial Statements. The Authority covenants that (i) forthwith upon any officer of the Authority's obtaining knowledge of any condition or event which constitutes or, after notice or lapse of time or both, would constitute an Event of Default, it will file with the Trustee a certificate signed by an Authorized Officer specifying the nature and period of existence thereof, and what action the Authority has taken, is taking or proposes to take with respect thereto and (ii) it will cause an examination of its financial statements as of the end of and for each Fiscal Year during which Bonds shall be Outstanding under the Trust Agreement to be made by independent certified public accountants and within 120 days after the end of each Fiscal Year will file with the Trustee a copy of such financial statements together with the signed opinion of such independent certified public accountants with respect thereto.

Capital Improvements Budget. Not later than one day prior to the beginning of each Fiscal Year and at such other time as may be required by a Supplemental Trust Agreement, the Authority shall adopt and file with the Trustee a Capital Improvements Budget for the Capital Improvements or parts thereof to be undertaken by the Authority in such Fiscal Year. The Authority may from time to time amend or supplement the Capital Improvements Budget for the Fiscal Year then in progress by filing with the Trustee a certificate of an Authorized Officer setting forth the amendment or supplement. The Authority covenants that it will cause its architects and engineers to make regular inspections of the Authority's Projects, periodically to assess the state of repair of the Projects and to make recommendations to the Authority as to any substantial repairs that may be warranted or required. The Authority covenants that, if its architects and engineers find that any of the Projects has not been maintained in good repair, it will, to the extent consistent with sound business judgment, restore such Project to good repair as expeditiously as practicable and will make adequate provision therefore in its Capital Improvements Budget. Without limiting the generality of the foregoing, the Authority covenants that it will maintain, and will cause the BHE and the State Universities pursuant to the Contract to maintain, sufficient balances in the Capital Improvement Reserve Fund to achieve compliance with the provisions under this heading.

Enforcement of Contract. The Authority covenants that it will maintain the Contract and diligently enforce its rights thereunder and that it will not voluntarily consent to or permit any rescission of or consent to any amendment to or otherwise take any action under or in connection with the Contract which will have a material adverse effect upon the rights of the Bondowners. Without limiting the generality of the foregoing, the Authority covenants that it will, pursuant to the Act and the Contract, give notice to the BHE and to the Comptroller of any anticipated insufficiency in Revenues to pay Debt Service on the Bonds as soon as it has knowledge of any such insufficiency and, in any event, no later than the date in September or January, as the case may be, when the Authority next files its semiannual report on sufficiency of funds as required by the Act.

Supplemental Trust Agreements Not Requiring Consent of Bondowners. The parties to the Trust Agreement may without the consent of, or notice to, any of the Owners of the Bonds enter into agreements supplemental to the Trust Agreement for any one or more of the following purposes and at any time or from time to time:

(i) to close the Trust Agreement against, or provide limitations and restrictions in addition to the limitations and restrictions contained in the Trust Agreement on, the authentication and delivery of the Bonds;

(ii) to add to the covenants and agreements of the Authority in the Trust Agreement, other covenants and agreements to be observed by the Authority for the purpose of further securing the Bonds;

(iii) to surrender any right, power or privilege reserved to or conferred upon the Authority by the Trust Agreement;

(iv) to authorize Bonds of a Series or subordinated obligations and, in connection therewith, specify and determine any matters and things relative to such Bonds or obligations not contrary to or inconsistent with the Trust Agreement;

(v) to confirm, as further assurance, any pledge under and the subjection to any lien or pledge created or to be created by the Trust Agreement of the Revenues or of any other moneys, securities or funds;

(vi) to cure any ambiguity or to cure, correct or supplement any defect or inconsistent provisions contained in the Trust Agreement; and

(vii) to modify the provisions of the Trust Agreement in regard to matters or questions arising thereunder as may be necessary or desirable and not contrary to or inconsistent with the Trust Agreement or to make any other changes that are not materially adverse to the Owners of Bonds.

Supplemental Trust Agreements Effective with Consent of Bondowners. At any time or from time to time, a Supplemental Trust Agreement may be adopted subject to consent by Bondowners in accordance with and subject to the provisions of the Trust Agreement, which Supplemental Trust Agreement, upon the filing with the Trustee of a copy thereof certified by an Authorized Officer of the Authority and upon compliance with the provisions of the Trust Agreement, shall become fully effective in accordance with its terms as provided in the Trust Agreement.

Powers of Amendment. Any modification or amendment of the Trust Agreement and of the rights and obligations of the Authority and of the Owners of the Bonds and coupons thereunder may be made by a Supplemental Trust Agreement, with the written consent (except as provided under the heading "Supplemental Trust Agreements Not Requiring Consent of Bondowners") given as provided under the heading "Consent of Bondowners," of the Owners of at least a majority in principal amount of all other Bonds Outstanding at the time such consent is given, provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds remain Outstanding, the consent of the Owners of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under this heading. No such modification or amendment, and no amendment pursuant to the provisions under the heading "Supplemental Trust Agreements Not Requiring Consent of Bondowners," shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount, Accreted Value or the Redemption Price thereof or in the rate of interest thereon without the consent of the Owner of such Bond, or shall reduce the percentages or otherwise affect the classes of Bonds the consent of the Owners of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of any Fiduciary without its written assent thereto. For the purposes of this paragraph, a Series shall be deemed to be affected by a modification or amendment of the Trust Agreement if the same adversely affects or diminishes the rights of the Owners of Bonds of such Series. The Trustee may in its discretion determine whether or not in accordance with the foregoing powers of amendment, Bonds of any particular Series or maturity would be affected by any modification or amendment of the Trust Agreement. Any such determination may be based upon the written advice of Bond Counsel, if so requested by the Trustee, and shall be binding and conclusive on the Authority and all Owners of Bonds. For purposes of this paragraph, the Owners of the Bonds may include the initial holders thereof, regardless of whether such Bonds are being held for immediate resale.

Consent of Bondowners. The parties to the Trust Agreement may at any time enter into a Supplemental Trust Agreement making a modification or amendment permitted under the heading "Powers of Amendment" to take effect when and as provided in this paragraph. A copy of such Supplemental Trust Agreement (or brief summary thereof or reference thereto in form approved by the Trustee) together with a request to Bondowners for their consent thereto in form satisfactory to the Trustee, shall be mailed by the Authority to Bondowners and, if at the time any of the Bonds is in coupon form payable to the bearer, shall be published in the Authorized Newspaper at least once a week for two consecutive weeks (but failure to mail such copy and request shall not affect the validity of the Supplemental Trust Agreement when consented to as provided in this paragraph). Such Supplemental Trust Agreement shall not be effective unless and until (i) there shall have been filed with the Trustee (a) the written consents of Owners of the percentages of Outstanding Bonds specified under the heading "Powers of Amendment" and (b) an Opinion of Bond Counsel stating that such Supplemental Trust Agreement has been duly and lawfully executed and delivered by the Authority and filed in accordance with the provisions of the Trust Agreement, is valid and binding upon the Authority, and (ii) a notice shall have been published as provided in the Trust Agreement. The Authority may fix a record date for purposes of determining Bondowners entitled to consent to a proposed Supplemental Trust Agreement. Any such consent shall be binding upon the Owner of the Bonds giving such consent and, anything under the heading "Defeasance" to the contrary notwithstanding, upon any subsequent Owner of such Bonds and of any Bonds issued in exchange therefor (whether or not such subsequent Owner thereof has notice thereof). At any time after the Owners of the required percentages of Bonds shall have filed their consents to the Supplemental Trust Agreement, the Trustee shall make and file with the Authority and the Trustee a written statement that the Owners of such required percentages of Bonds have filed such consents. Such written statement shall be conclusive evidence that such consents have been so filed. At any time thereafter notice, stating in substance that the Supplemental Trust Agreement (which may be referred to as a Supplemental Trust Agreement entered into on or as of a stated date, a copy of which is on file with the Trustee) has been consented to by the Owners of the required percentages of Bonds and will be effective as provided in this paragraph, may be given to Bondowners by the Authority by mailing such notice to such Bondowners and, if at the time any of such Bonds is in coupon form payable to bearer, by publishing the same in the Authorized Newspaper at least once not more than 90 days after holders of the required percentages of Bonds shall have filed their consents to the Trust Agreement and the written statement of the Trustee provided for in the Trust Agreement is filed. The Authority shall file with the Trustee proof of the giving of such notice. A record, consisting of the papers required or permitted by this paragraph of the Trust Agreement to be filed with the Trustee, shall be proof of the matters therein stated. Such Supplemental Trust Agreement making such amendment or modification shall be deemed conclusively binding upon the Authority, the Fiduciaries and the Owners of all Bonds upon the filing with the Trustee of the proof of the giving of such last mentioned notice.

Modifications by Unanimous Consent. Notwithstanding anything contained in provisions regarding Supplemental Trust Agreements and Amendments in the Trust Agreement, the terms and provisions of the Trust Agreement and the rights and obligations of the Authority and of the Owners of the Bonds thereunder may be modified or amended in any respect upon the adoption and filing by the Authority of a Supplemental Trust Agreement and the consent of the Owners of all of the Bonds then Outstanding, such consent to be given as provided in the Trust Agreement, except that no notice to Bondowners either by mailing or publication shall be required, but no such modification or amendment shall change or modify any of the rights or obligations of any Fiduciary without the filing with the Trustee of the written assent thereto of such Fiduciary in addition to the consent of the Bondowners.

Exclusion of Bonds. Bonds owned or held by or for the account of the Authority shall not be deemed Outstanding for the purpose of consent or other action or any calculation of Outstanding Bonds provided for in the Trust Agreement, and the Authority shall not be entitled with respect to such Bonds to give any consent or take any other action provided for in the provisions regarding amendments and consent in the Trust Agreement.

Notation on Bonds. Bonds authenticated and delivered after the effective date of any action taken pursuant to the provisions of the Trust Agreement regarding Supplemental Trust Agreements, amendments and consent may, and, if the Trustee so determines, shall, bear a notation by endorsement or otherwise in form approved by the Authority and the Trustee as to such action, and in that case upon demand of the Owner of any Bond Outstanding at such effective date and presentation of his Bond for the purpose at the principal office of the Trustee suitable notation shall be made on such Bond by the Trustee as to any such action. If the Authority or the Trustee shall so determine, new Bonds so modified as in the opinion of the Trustee and the Authority to conform to such action shall be prepared, authenticated and delivered, and upon demand of the Owner of any Bond then Outstanding shall be exchanged, without cost to such Bondowner, for Bonds of the same Series and maturity then Outstanding, upon surrender of such Bonds.

Events of Default. The occurrence of any one or more of the following events shall constitute an Event of Default under the Trust Agreement:

(i) the Authority shall fail to make payment of any Principal Installment when the same shall become due and payable;

(ii) the Authority shall fail to make payment of any installment of interest on any Bonds when the same shall become due and payable;

(iii) the Authority shall default in the observance or performance of any other covenants or agreements on the part of the Authority contained in the Trust Agreement, and such default shall continue for 30 days after written notice specifying such default and requiring the same to be remedied shall have been given to the Authority by the Trustee, which may give such notice in its discretion and shall give such notice at the written request of the Owners of not less than 25% in aggregate principal amount of the Bonds then Outstanding, provided that if such default cannot be remedied within such 30-day period, it shall not constitute an Event of Default if corrective action is instituted by the Authority within such period and diligently pursued until the default is remedied;

(iv) if an order, judgment or decree is entered by a court of competent jurisdiction (a) appointing a receiver, trustee, or liquidator for the Authority, (b) granting relief in involuntary proceedings with respect to the Authority under the federal bankruptcy act or (c) assuming custody or control of the Authority under the provision of any law for the relief of debtors, and the order, judgment or decree is not set aside or stayed within 60 days from the date of entry of the order, judgment or decree; or

(v) if the Authority (a) admits in writing its inability to pay its debts generally as they become due, (b) commences voluntary proceedings in bankruptcy or seeking a composition of indebtedness, (c) makes an assignment for the benefit of its creditors, (d) consents to the appointment of a receiver or (e) consents to the assumption by any court of competent jurisdiction under any law for the relief of debtors of custody or control of the Authority.

Remedies. Upon the occurrence and during the continuation of any Event of Default specified in the Trust Agreement, then and in every such case the Trustee may proceed, and upon the written request of the Owners of not less than 25% in aggregate principal amount of all Outstanding Bonds, shall proceed to protect and enforce its rights and the rights of the Bondowners under the laws of the Commonwealth or under the Trust Agreement by such suits, actions or special proceedings in equity or at law, or by proceedings in the office of any board of officer having jurisdiction, either for the specific performance of any covenant or agreement contained therein or in aid or execution of any power therein granted or for the enforcement of any proper legal or equitable remedy, as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights. The Trustee shall not be required to take any remedial action (other than the giving of notice) unless indemnity satisfactory to the Trustee is furnished for any liability to be incurred thereby. In the enforcement of any remedy under the Trust Agreement the Trustee shall be entitled to sue for, enforce payment of and receive any and all amounts then, or during any default becoming, and at any time remaining, due from the Authority for principal, interest or otherwise under any of the provisions of the Trust Agreement on the Bonds and unpaid, with interest on overdue payments of principal at the rate or rates of interest specified in such Bonds, together with any and all costs and expenses of collection and of all proceedings under the Trust Agreement and under such Bonds, without prejudice to any other right or remedy of the Trustee or of the Bondowners, and to recover and enforce judgment or decree against the Authority, but solely as provided therein and in such Bonds, for any portion of such amount remaining unpaid, and interest, costs and expenses as above provided, and to collect (but solely from moneys in the Funds and Accounts available for such purpose) in any manner provided by law, the moneys adjudged or decreed to be payable. No remedy available under the provisions of the Trust Agreement shall be permitted to modify, alter, amend or rescind in any particular priority provided by the Trust Agreement for any Series of Bonds over any other Series of Bonds. The Bondowners and the Trustee acting for the Bondowners shall be entitled to all of the rights and remedies provided in the Act and to all of the rights and remedies otherwise provided or permitted by law. No default under any resolution, agreement, or other instrument other than the Trust Agreement, shall constitute or give rise to a default under the Trust Agreement. Upon the happening and continuance of any Event of Default, neither the Trustee nor the Bondowners shall have the right to declare the principal of any Bonds then Outstanding, or the interest accrued thereon, to be due and payable prior to its stated maturity.

Application of Revenues and Other Moneys After Default. The Authority covenants that if an Event of Default shall happen and shall not have been remedied, the Authority, upon demand of the Trustee, shall pay over or cause to be paid over to the Trustee (i) forthwith, any moneys, securities and funds then held by the Authority or a Fiduciary in any fund or account under the Trust Agreement (excluding the Rebate Fund) and (ii) as promptly as practicable after receipt thereof, the Revenues. During the continuation of an Event of Default, all Revenues and any other funds then held or thereafter received by the Trustee under any of the provisions of the Trust Agreement shall be applied by the Trustee as follows and in the following order:

(a) to the payment of any expenses necessary in the opinion of the Trustee to protect the interests of the registered Owners of the Bonds (including without limitation deposits to the Rebate Fund sufficient to fund any unfunded anticipated liability of the Authority under section 148 of the Code relating to the Bonds) and payment of reasonable fees and charges and expenses of the Trustee (including without limitation reasonable fees and disbursements of its counsel) incurred in and in connection with the performance of its powers and duties under the Trust Agreement;

(b) to the payment of the principal of and interest then due on the Bonds upon presentation of the Bonds to be paid (and stamping thereon of the payment if only partially paid, or surrender thereof if fully paid) subject to the provisions of the Trust Agreement, as follows:

First: To the payment to the persons entitled thereto of all installments of interest then due on Bonds in the order of the maturity of such installments, ratably, according to the amounts of interest due thereon, to the persons entitled thereto, without any discrimination or preference; and

Second: To the payment to the persons entitled thereto of the unpaid principal of any Bonds which shall have become due, whether at maturity or by call for redemption, with interest on the overdue principal at the rate borne by the respective Bonds, and, if the amount available shall not be sufficient to pay in full all such Bonds, together with such interest, ratably, according to the amounts of principal due on such date to the persons entitled thereto, without any discrimination or preference.

Defeasance. If the Authority pays the Principal Amount and interest and Redemption Price, if any, to become due on all Outstanding Bonds, then the pledge of any Revenues or other moneys, securities, Reserve Deposits and Additional Security, if any, pledged by the Trust Agreement and all other rights granted by the Trust Agreement shall be discharged and satisfied. All Outstanding Bonds shall be deemed to have been paid within the meaning of the foregoing sentence if, among other things, there shall have been deposited with the Trustee either moneys in an amount which shall be sufficient, or Defeasance Obligations the principal of and interest on which when due will provide moneys which, together with the moneys, if any, deposited with the Trustee at the time of deposit of such Defeasance Obligations, shall be sufficient to pay when due the Principal Amount or Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the redemption date or maturity date thereof, as the case may be.

The Authority agrees that it will take no action in connection with any of the transactions referred to under the heading “Defeasance” which will cause any Bonds to be “arbitrage bonds” within the meaning of section 148(a) of the Code and the regulations thereunder in effect on the date of the transaction and applicable to the transaction.

Anything in the Trust Agreement to the contrary notwithstanding, any moneys held by a Fiduciary in trust for the payment and discharge of any of the Bonds which remain unclaimed for three years (or such other period as may from time to time be prescribed by the laws of the Commonwealth, provided that if no period is so prescribed, such period shall be three years) after the date when such Bonds have become due and payable, either at their stated maturity dates or by call for earlier redemption, if such moneys were held by the Fiduciary at such date, or for three years after the date of deposit of such moneys if deposited with the Fiduciary after the said date when such Bonds became due and payable, shall automatically revert from the Fiduciary to the Commonwealth once the Fiduciary has complied with the publication and reporting requirements as prescribed in accordance with the laws of the Commonwealth, provided, however, if no provision of Commonwealth law shall require that such funds be paid to the Commonwealth, such moneys shall, at the written request of the Authority, be repaid by the Fiduciary to the Authority, as its absolute property and free from trust, and the Fiduciary shall thereupon be released and discharged with respect thereto and the Bondowners shall look only to the Commonwealth, if paid to the Commonwealth, or the Authority, if paid to the Authority, for the payment of such Bonds.

SUMMARY OF CONTRACT FOR FINANCIAL ASSISTANCE, MANAGEMENT AND SERVICES

Issuance of Bonds; System Projects and Campus Projects. The Authority shall use its best efforts to issue Bonds from time to time to achieve its corporate purposes in undertaking Projects on the campuses of the various State Universities and financing and refinancing Project Costs and related expenses. The Authority shall not initiate any Project except upon written request made by authority of the BHE and upon written approval from the Secretary of the Executive Office for Administration and Finance of the Commonwealth and the Commissioner. The Authority shall not issue notes or Bonds for the purpose of refunding Bonds theretofore issued and then outstanding under the Act except with the prior written approval of the BHE of such refunding issue, which approval need not be of the interest rate, the maturity or any of the other terms thereof.

Proposed Campus Operating Budgets. On or before each September 15, the Authority shall notify each State University on which a Campus Project is located of the Authority's projected costs related to Campus Residence Hall Projects at such State University for the ensuing Fiscal Year. On or before each November 1, each State University shall submit to the Authority the proposed operating budget for the ensuing Fiscal Year for such State University with respect to the System Projects on its campus and with respect to each Campus Residence Hall Project on its campus. If such proposed budget includes a requested increase in Authority fees, rates, rents and charges, such submission shall specify how such increase is proposed to be allocated to projected costs.

Operating Reserves. For each Campus Residence Hall Project, the applicable State University shall maintain within its Campus Project Trust Fund, a minimum balance as an operating reserve. Pursuant to the Authority's annual operating budget, and at such time or times in each Fiscal Year as may be specified in such budget, commencing with the second full Fiscal Year after completion of a Campus Residence Hall Project, the applicable State University shall add to the balance in its Campus Project Trust Fund held as an operating reserve the amount, if any, necessary to cause such reserve amount to equal the following percentages of the operating expenses for the Project for the Fiscal Year prior to the year in which the deposit is to be made: (i) in the second full Fiscal Year after completion of the Project, 1%, (ii) in the third year, 2%, (iii) in the fourth year, 3%, (iv) in the fifth year, 4%, and (v) in the sixth year and thereafter, 5%. Moneys held in such operating reserve may be expended by the State University for the payment of extraordinary and unexpected operating, maintenance and repair costs or to meet budgetary shortfalls with respect to the applicable Project resulting from an unexpected decline in use of the Project, damage to or destruction of a portion of the Project or any other unexpected occurrence with respect to the Project. Moneys withdrawn from such operating reserve must be replenished by the State University by the end of the next Fiscal Year after such withdrawal, in addition to the annual deposits described above.

Capital Improvement Reserve Accounts. The Authority shall maintain within the Capital Improvement Reserve Fund a System Projects Capital Improvement Reserve Account to be used to make Capital Improvements to System Projects. Pursuant to the Authority's annual operating budget, and at such time or times in each Fiscal Year as may be specified in such budget, the BHE shall pay over, or cause the State Universities to pay over, to the Trustee, for deposit in the System Projects Capital Improvement Reserve Account, from amounts collected as fees, rents, rates and other charges of the Authority, the greater of (i) the amount specified in the Authority's annual operating budget as being required by the Trust Agreement to be so deposited or (ii) an amount equal to 7.5% of the total fees, rents, rates and other charges collected with respect to the System Projects during such Fiscal Year. The Authority shall maintain within the Capital Improvement Reserve Fund a separate Campus Project Capital Improvement Reserve Account for each State University at which a Campus Residence Hall Project is located, to be used to make Capital Improvements to the Campus Residence Hall Projects at such State University. Pursuant to the Authority's annual operating budget, and at such time or times in each Fiscal Year as may be specified in such budget, commencing with the second full Fiscal Year after completion of a Campus Residence Hall Project, the applicable State University shall pay over to the Trustee, for deposit in the applicable Campus Project Capital Improvement Reserve Account, the greater of (i) the amount specified in the Authority's annual operating budget as being required by the Trust Agreement to be so deposited or (ii) an amount equal to the following percentages of the fees, rents, rates and other charges collected with respect to such Campus Residence Hall Project during the prior Fiscal Year: (i) in the second Fiscal Year after completion of the Project, and in each of the next seven Fiscal Years, 2.5%, (ii) in each of the next five Fiscal Years, 5%, and (iii) in each Fiscal Year thereafter, 7.5%. The Authority expects this provision of the Contract to be amended in connection with the issuance of the Series 2020A Bonds to calculate the required deposit to the Campus Project Capital Improvement Reserve Account as provided in the preceding sentence, except the calculation will be based on the Revenues collected with respect to each Campus

Project during the same fiscal year instead of the calculation being based on the Revenues collected during the prior fiscal year.

Operation, Maintenance and Repair of Projects. Each State University shall operate and maintain the Projects located on its campus and keep them in good order and repair, including, without limitation, billing and collecting fees, rents, rates and other charges in accordance with the Authority's annual operating budget, procuring all necessary equipment, materials and supplies and making repairs and capital improvements that are necessary to maintain the Project for its expected useful life and that are within the capacity of the State University to undertake. The State University may use its own employees or contract with third parties to provide such services, as such State University deems appropriate, provided that any such contract with a third party shall be submitted to the Authority for prior review and written approval as to compliance with applicable management contract guidelines under federal income tax law pertaining to bond-financed property. Notwithstanding the foregoing, the Authority may, in its sole discretion, elect to contract directly with a third party for the provision of any or all such services with respect to a particular Project other than a Commonwealth-owned Project. The Authority shall have no obligation to operate or maintain any Commonwealth-owned Project. Each State University shall submit to the Authority a copy of its annual financial statements for each Fiscal Year as soon as practicable after the issuance thereof. Each such financial statement shall be prepared in accordance with generally accepted accounting principles, shall be audited by an independent certified public accountant or accounting firm and shall contain such detail as to Projects as the Authority shall reasonably request. Each State University shall also provide the Authority such other information as the Authority may from time to time reasonably request. The BHE shall provide to the Authority such information as the Authority may from time to time reasonably request about the BHE, the system of public higher education in the Commonwealth, the State Universities and the Projects, including without limitation all information appropriate to enable the Authority to comply with the provisions of Rule 15c2-12 of the federal Securities and Exchange Commission (continuing disclosure requirements applicable to municipal securities).

Pledge of Trust Funds. The BHE, in the name and on behalf of the Commonwealth, pledges to the making of payments required under the heading "Payments From Pledged Funds" the Trust Funds, provided, however, that the aggregate amount of Trust Funds of each State University so pledged shall be limited to 25% of the Authority's average annual aggregate debt service costs allocable to such State University's Projects, as determined by the Authority and provided, further, that the pledge of Trust Funds on account of System Projects on the campus of Fitchburg State University shall not include moneys attributable to the fee charged to students to finance a physical education facility. Each State University shall cause its Trust Funds to contain on each December 1 and June 1 an amount available for transfer to make payments as provided under the heading "Payments From Pledged Funds" equal to the amount of the State University's Pledged Trust Funds, less the amount of any Pledged Trust Funds previously transferred to make said payments (or, in the case of Westfield State University and the Massachusetts Maritime Academy, to make payments to Bank of America pursuant to the prior liens on certain funds granted to Bank of America in connection with loans obtained from the Massachusetts Health and Educational Facilities Authority financed by said Authority's Variable Rate Demand Revenue Bonds, Capital Asset Program Issue, Series M-2 (Pool 2)), and shall certify in writing to the Authority that it has complied with the foregoing requirement. If all of a State University's Pledged Trust Funds have been expended to make payments as provided under the heading "Payments From Pledged Funds" or to Bank of America as aforesaid, the foregoing provisions shall not be applicable to such State University.

Pledge of Appropriations. The BHE, in the name and on behalf of the Commonwealth, pledges to the making of payments required under the heading "Payment from Pledged Funds" any part or all of any funds made available for expenditure on behalf of any State University pursuant to an appropriation made by the General Court or otherwise available for expenditure by the BHE, including without limitation retained tuition payments, if any.

Pledged Funds. Except as provided under the heading "Pledge of Trust Funds," the Pledged Funds are and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto prior to the pledge created under the Contract and by the Prior Contracts, and the BHE shall take all actions necessary to protect and effectuate such pledge, provided, however, that nothing in this section shall be deemed to limit the right of the BHE or any State University, to the extent permitted by law, to create a pledge, lien or other charge on any or all such Pledged Funds junior and subordinate to the pledge created under the Contract and provided, further, that the BHE or a State University may, to the extent permitted by law, create a pledge, lien or other charge on any or all such Pledged Funds in respect of a particular State University of equal rank with the pledge created under the Contract if, and only if, the

BHE or the State University, as the case may be, shall have certified in writing to the Authority that the total revenues available for expenditure by such State University during each of the three most recently completed Fiscal Years (including the Pledged Funds, but excluding any Project Revenues, in respect of such State University) were not less than 200% of the maximum annual debt service requirements on all outstanding debt obligations allocable to such State University and the debt obligations then being issued. In computing principal and interest requirements for the purposes of this section on debt obligations as to which interest is deferred and compounded rather than being paid currently during any period of calculation, such calculation shall be made as if interest thereon accrued and was deemed paid at a rate determined on the date of such calculation by a nationally known investment banking firm selected by the BHE or State University, as the case may be, to be the rate which, if earnings at such rate were compounded on the initial public sale price in the manner required by the terms of such debt obligations through the maturity date or earlier date on which such compounding is scheduled to cease, would produce the amount of such debt obligations scheduled to mature on such maturity date or the accreted value of such debt obligations scheduled to exist on such earlier date, as the case may be.

Payments from Pledged Funds. The BHE shall make payments from Pledged Funds if and to the extent that Project Revenues related to a particular State University and other moneys received by the Authority or otherwise available pursuant to the Trust Agreement in connection with the Projects of such State University are insufficient to pay debt service on the Bonds allocable to such Projects and the Authority's expenses in connection with such Bonds or such Projects. Upon receipt from the Authority or the Trustee of notice of any such insufficiency relating to a particular State University, the BHE shall, as promptly as practicable, pay to the Trustee, or cause such State University to pay to the Trustee, from the Pledged Funds of such State University the amount of such insufficiency, provided that any such payment shall be made, first, from Pledged Trust Funds, until exhausted, and, second, from Pledged Appropriations. In the case of Westfield State University and the Massachusetts Maritime Academy, the Pledged Trust Funds shall be deemed to be exhausted if and to the extent that they have been paid to Bank of America pursuant to the prior liens described above under the heading "Pledge of Trust Funds" or are otherwise unavailable to the Authority or the Trustee pursuant to applicable intercreditor agreements between the Authority and Bank of America as such intercreditor agreements may be amended from time to time. The Pledged Trust Funds of one State University may not be used to make payments under this section on behalf of any other State University. However, if the Pledged Trust Funds of the applicable State University have been exhausted and the Pledged Appropriations of such State University are insufficient to cover the insufficiency, the Board shall pay to the Trustee, or cause the Trustee to be paid, the amount of the remaining insufficiency from the Pledged Appropriations of all of the State Universities, ratably, according to the percentage of outstanding Bonds then allocable to each particular State University. In order to comply with the provisions of this paragraph or to effectuate the pledge described under the headings "Pledged Funds" and "Payment from Pledged Funds," the BHE shall take all actions necessary or desirable to effectuate transfers from funds made available for expenditure on behalf of an applicable State University pursuant to an appropriation or other spending authorization in the Commonwealth's annual operating budget, including supplemental and deficiency budgets and including, without limitation, any tuition retention authorization. Such actions shall include, without limitation, submitting or causing to be submitted to the Comptroller of the Commonwealth such directions or instructions as may be required or requested by the Comptroller to effectuate such transfers. The Authority agrees to give notice to the Secretary of the Executive Office for Administration and Finance of the Commonwealth whenever it gives notice to the BHE of an insufficiency as aforesaid, or whenever it has become aware that the Trustee has given such notice to the BHE.

The Authority shall keep an accurate account of the sufficiency of available funds to pay debt service on its outstanding indebtedness, including without limitation Pledged Funds, and shall twice each year, in the months of September and January, make a report thereof to the BHE and to the Comptroller. If the report described in the preceding sentence is not received by the Comptroller during the month of September or January, as the case may be, the Comptroller shall prevent any amounts from being expended from the appropriation account of any State University until such time as the Comptroller has determined whether there is an insufficiency of available funds to pay debt service. If such report indicates that there is an insufficiency of funds available to pay debt service, or if, in the absence of a report, the Comptroller ascertains that there is such as insufficiency, the Comptroller shall, within five days, but not later than the last business day in February (in the case of a May 1 debt service payment) or October 10 (in the case of a November 1 debt service payment), transfer amounts, without further allotment, from the appropriation account of one or more State Universities, as appropriate, to cure such insufficiency in accordance with the provisions of this section.

Termination of Prior Contracts. The parties to the Trust Agreement agree that upon execution and delivery of the Contract, the Prior Contracts shall terminate and the parties shall be released from all duties, obligations and liabilities thereunder except insofar as any such duties, obligations and liabilities shall have been incorporated into the Contract.

Cooperation of BHE and State Universities. The BHE shall cause each State University to cooperate with the Authority to effectuate the provisions in the Contract. Such cooperation shall include, without limitation, the execution and submission to the Comptroller of any requests for expenditure or payment vouchers and any transfers among allocation subaccounts by the State University necessary or desirable to effectuate transfers for payments due under the Contract from appropriation allocation accounts or subaccounts or nonappropriated funds held by the State Comptroller for such State University. Neither the BHE nor any State University shall take any action, including without limitation entering into a management contract with respect to, or otherwise permitting private use of, a facility financed by the Authority that would jeopardize the exclusion from gross income for federal income tax purposes of the interest on the Bonds; the BHE and each State University shall be entitled to rely on the opinion of bond counsel to the Authority that a given action would not have such effect. Each State University shall notify the Authority in advance of any proposed change in use at a facility financed by the Authority that would involve private use. In the event the Act or other applicable laws are subsequently changed to eliminate the role of the BHE as agent of the Commonwealth under the Contract, the State Universities shall execute such amendments to the provisions of the Contract as may be necessary to effectuate the covenants and agreements of the Commonwealth under the Contract, including without limitation the pledge of Trust Funds and Appropriations. In the event legislation shall be proposed to alter in any material way the nature of the relationship among the Authority, the BHE and the State Universities or the ability of the Authority to obtain access to the revenues and funds contemplated by the Contract to provide for payment of the Bonds, the BHE and the State Universities agree to use their best efforts to influence such legislation so as to maintain the financial security of the Authority and the security for the Bonds, and, upon enactment of any such legislation, the BHE and the State Universities agree, to the fullest extent permitted by law, to execute such amendments to the provisions of the Contract and to execute such other agreements and take such other actions as may be necessary to achieve the purposes of the Contract and to maintain the financial security of the Authority and the security for the Bonds.

Default by BHE or State University. Upon the failure of the BHE to make any payment required under the heading “Payment From Pledged Funds” or by the BHE or any State University to observe any other covenant or requirement imposed by the Contract, the BHE or the State University, as the case may be, shall be deemed in default under the Contract. Thereupon, the Authority or the Trustee may institute legal proceedings to enforce such covenant or requirement or to enforce the pledge and lien granted under the headings “Pledge of Appropriations” and “Pledged Funds” and may take such other actions or exercise such other remedies as may be available at law or in equity to enforce the provisions of the Contract. Without limiting the generality of the foregoing, the Authority may undertake direct responsibility for the operation of one or more Projects, including without limitation Commonwealth-owned Projects, or take such other action as may be necessary or desirable to generate Project Revenues in accordance with the requirements of the Contract. No action by the Authority under the Contract, and no default or breach by the BHE or any State University, shall in any way affect the obligations of the BHE or any State University under the Contract. Whenever a breach of the Contract, whether substantial or otherwise, and whether before or after notice of the breach has been given to the BHE or any State University, has been corrected, the obligations and rights under the Contract shall be reinstated and performance of the Contract shall continue as if such breach had never occurred.

Insurance. The Authority shall purchase and maintain in effect with respect to each of its Projects policies of insurance and fidelity bonds against such risks and losses and in such amounts as it shall deem to be reasonable. In addition, the Authority agrees to purchase and maintain in effect with respect to each Commonwealth-owned Project, upon the written request of the Commissioner of the Division of Capital Asset Management and Maintenance of the Commonwealth, such insurance policies as may be available to it and to name the Commonwealth as an additional insured on any policy related solely to one or more Commonwealth-owned Projects, provided that the Commonwealth shall be obligated to make payments under the Contract from Pledged Funds irrespective of the existence of any such insurance. Subject to any contrary requirements in the Trust Agreement, the Authority shall use the proceeds of any use and occupancy insurance to replace revenues lost by reason of interruption of the use of the applicable Project and shall apply insurance proceeds received in respect of damage or destruction to a Project to the replacement, restoration or reconstruction of such Project.

Annual Report. As required by Section 6 of the Act, the Authority shall keep an accurate account of all its activities and of all its receipts and expenditures and shall annually in the month of January make a report thereof to the BHE, to the Governor of the Commonwealth and to the Auditor of the Commonwealth, such reports to be in a form prescribed by the BHE, with the written approval of said Auditor. Unless otherwise directed by the BHE, the Authority may use its audited annual financial statements for the preceding Fiscal Year to comply with the provisions of this paragraph.

Liability. No member, officer or employee of the BHE or any State University shall be individually liable on any obligation assumed by the Commonwealth or the BHE under the Contract. No member, officer or employee of the Authority shall be individually liable on any obligation assumed by the Authority under the Contract, and neither the carrying out of a Project nor the ownership of a Project by the Authority shall impose any liability on any such member, officer or employee.

With respect to a Commonwealth-owned Project, the Authority shall not be liable for latent defects in construction not performed by the Authority or its contractors or agents or for any action or inaction of any party not acting as an agent, employee or contractor of the Authority.

Term. The Contract shall continue in full force and effect until all amounts payable to the Authority with respect to the Bonds and the Projects shall have been paid in full. Upon such payment, the Contract shall cease and determine without further liability on the part of either party to the Contract to the other.

Non-Assignability. The Contract is not assignable except that if by act of the General Court the powers, functions, duties and property of the BHE or the Authority are transferred to another political subdivision, agency, board, commission, department, authority or institution of the Commonwealth, the rights and obligations of the Contract shall be deemed to have been assigned thereby to such transferee, and provided further that the Authority's rights to receive moneys under the Contract and to enforce the provisions of the Contract may be assigned to the Trustee.

Amendments and Addenda. The Contract may be amended only by the execution of an Amendment in writing by the BHE and the Authority or their successors. It is anticipated that certain of the provisions of the Contract may be waived or modified with respect to particular Campus Projects by the execution of a written Addendum to the Contract by the BHE and the Authority, to be attached to the Contract.

Credit of the Commonwealth. The faith and credit of the Commonwealth are not and shall not be pledged to the payments required under the heading "Payments from Pledged Funds" or in respect of any other obligation assumed by the Commonwealth under the Contract. The financial assistance provided as described under the heading "Payments from Pledged Funds" shall be provided solely from the sources identified therein. No provision of the Contract shall create or be deemed to create any obligation by the Commonwealth to appropriate funds for any purposes under the Contract.

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PROPOSED FORM OF OPINION OF BOND COUNSEL

Upon the delivery of the Series 2020A Bonds, Bond Counsel proposes to deliver its opinion in substantially the following form:

[Date of Delivery]

Massachusetts State College Building Authority
Boston, Massachusetts

Re: Massachusetts State College Building Authority (the "Authority")
Refunding Revenue Bonds, Series 2020A (Federally Taxable) (the "Series 2020A Bonds")

We have acted as bond counsel to the Authority in connection with the issuance by the Authority of the Series 2020A Bonds pursuant to (i) Chapter 703 of the Acts of 1963, as amended (the "Act"), and (ii) the Trust Agreement dated as of November 1, 1994 between the Authority and U. S. Bank National Association, as successor trustee (the "Trustee"), as amended and restated by the Thirty-ninth Supplemental Trust Agreement dated as of January 1, 2020, and supplemented through the Fortieth Supplemental Trust Agreement dated as of July 1, 2020 (the "Trust Agreement"). In such capacity, we have examined the law and such certified proceedings and other documents as we have deemed necessary to render this opinion, including without limitation the Contract for Financial Assistance, Management and Services dated as of February 1, 2003, as amended (the "Contract"), between the Authority and The Commonwealth of Massachusetts (the "Commonwealth"), acting by and through the Board of Higher Education (the "Board").

Capitalized terms used herein shall, unless otherwise specified, have the meanings set forth in the Trust Agreement.

Under the Trust Agreement, the Authority has pledged certain revenues (the "Revenues") for the payment of the principal of and interest on the Series 2020A Bonds when due.

With respect to questions of fact material to our opinion, we have relied upon representations and covenants of the Authority contained in the certified proceedings relating to the Series 2020A Bonds and other certifications of public officials furnished to us, without undertaking to verify the same by independent investigation.

Based on our examination, we are of the opinion, under existing law, as follows:

1. The Authority is validly existing as a body politic and corporate and public instrumentality of the Commonwealth with the power to enter into the Trust Agreement, perform the agreements on its part contained therein and issue the Series 2020A Bonds.

2. The Trust Agreement and the Contract have been duly authorized, executed and delivered by the Authority and constitute valid and binding obligations of the Authority enforceable upon the Authority.

3. The Contract has been duly authorized, executed and delivered by the Commonwealth and constitutes a valid and binding obligation of the Commonwealth enforceable upon the Commonwealth.

4. Pursuant to the Act, the Trust Agreement creates a valid lien on the Revenues and other funds pledged by the Trust Agreement for the security of the Series 2020A Bonds issued thereunder on a parity with other bonds issued under the Trust Agreement.

5. The Series 2020A Bonds have been duly authorized, executed and delivered by the Authority and are valid and binding limited obligations of the Authority, payable solely from the Revenues and other funds provided therefor in the Trust Agreement. Neither the Commonwealth nor any political subdivision or instrumentality thereof, including the Authority, is obligated to pay the principal of or redemption premium, if any, or interest on the Series 2020A Bonds except from the Revenues and other funds provided therefor as aforesaid in the Trust Agreement, and

neither the faith and credit nor the taxing power of the Commonwealth nor of any political subdivision or instrumentality thereof, including the Authority, is pledged to the payment of the principal of or redemption premium, if any, or interest on the Series 2020A Bonds.

6. Interest on the Series 2020A Bonds is included in the gross income of the owners of the Series 2020A Bonds for federal income tax purposes. We express no opinion regarding any other federal tax consequences arising with respect to the Series 2020A Bonds.

7. Interest on the Series 2020A Bonds and any profit on the sale thereof are exempt from Massachusetts personal income taxes, and the Series 2020A Bonds are exempt from Massachusetts personal property taxes. We express no opinion as to any other Massachusetts tax consequences arising with respect to the Series 2020A Bonds or any tax consequences arising with respect to the Series 2020A Bonds under the laws of any state other than Massachusetts.

This opinion is expressed as of the date hereof, and we neither assume nor undertake any obligation to update, revise, supplement or restate this opinion to reflect any action taken or omitted, or any facts or circumstances or changes in law or in the interpretation thereof, that may hereafter arise or occur, or for any other reason.

The rights of the holders of the Series 2020A Bonds and the enforceability of the Series 2020A Bonds may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted to the extent constitutionally applicable, and their enforcement may also be subject to the exercise of judicial discretion in appropriate cases.

/S/ HINCKLEY, ALLEN & SNYDER LLP

SUMMARY OF CONTINUING DISCLOSURE UNDERTAKING

Massachusetts State College Building Authority
Refunding Revenue Bonds, Series 2020A (Federally Taxable)
(the "Series 2020A Bonds")

Authority Disclosure Agreement

Prior to the issuance of the Series 2020A Bonds, the Authority and the Board of Higher Education (the "BHE") will enter into a continuing disclosure agreement (the "Authority Disclosure Agreement") setting forth the undertakings of the Authority and the BHE regarding continuing disclosure with respect to the Series 2020A Bonds. The Authority will undertake for the benefit of the registered owners and Beneficial Owners (the "owners") of the Series 2020A Bonds to provide the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access system ("EMMA") pursuant to the requirements of Rule 15c2-12 of the Securities and Exchange Commission (the "Rule"), no later than 270 days after the end of each fiscal year of the Authority, (i) the annual financial information described below relating to such fiscal year, together with audited financial statements of the Authority and each State University for such fiscal year if audited financial statements are then available, provided, however, that if audited financial statements of the Authority are not then available, such audited financial statements shall be delivered to the MSRB when they become available (but in no event later than 350 days after the end of such fiscal year) or (ii) notice of the Authority's failure, if any, to provide any such information. The BHE will undertake for the benefit of the owners of the Series 2020A Bonds to provide to the MSRB through EMMA, no later than 270 days after the end of each fiscal year of the Authority, (i) the annual financial information described below relating to such fiscal year or (ii) notice of the BHE's failure, if any, to provide any such information.

The annual financial information to be provided by the Authority and the BHE as aforesaid shall include financial information and operating data, in each case updated through the last day of such fiscal year unless otherwise noted, relating to the following information contained in this Official Statement relating to the Series 2020A Bonds, in each case substantially in the same level of detail as is found in the referenced section of the Official Statement, provided that in the case of the BHE only the information described in items 3, 8, 9, 10, 11 and 12 shall be provided.

Financial Information and Operating Data Category	Reference to Official Statement for Level of Detail
1. Summary presentation on a five-fiscal-year basis of the receipts and disbursements related to Authority Projects.	"THE AUTHORITY – Management's Discussion and Analysis – Authority Project Receipts and Disbursements"
2. Summary presentation on a five-fiscal-year basis of the annual amounts paid by each of the State Universities to the Authority with respect to rents and fees for System Projects and Campus Projects.	"THE STATE UNIVERSITIES – Amounts Paid by State Universities to the Authority"
3. Summary presentation on an eleven-fiscal-year comparative basis of the total system of public higher education appropriations.	"SECURITY FOR AND SOURCE OF PAYMENT OF THE BONDS – Total Budgeted Appropriations for the System of Public Higher Education"
4. Summary presentation of the amount of Pledged Trust Funds for each State University.	"THE STATE UNIVERSITIES – Pledged Trust Funds "
5. Summary presentation on a five-academic-year basis of the occupancy rates of the Authority's residence facilities of the State Universities.	"APPENDIX A - Occupancy as a Percentage of Design Capacity at Residence Facilities of State Universities"
6. Summary presentation on a five-academic-year basis of the total number of residence hall spaces by each State University.	"APPENDIX A - Total Number of Residence Hall Spaces By State University"
7. Summary presentation on a five-academic-year basis of the annual rates charged for the Authority's facilities at each State University.	"APPENDIX A - Room Rates of Residence Facilities at State Universities"

Financial Information and Operating Data Category	Reference to Official Statement for Level of Detail
8. Summary presentation on a five-academic- year comparative basis of the full-time equivalent and headcount enrollment information for the system of public higher education.	"THE AUTHORITY - Enrollment"
9. Summary presentation on a five-academic-year comparative basis of tuition rates and fees for the system of public higher education.	"APPENDIX A - Tuition and Fees"
10. Summary presentation on a three-fiscal-year comparative basis of revenues for each of the State Universities.	"APPENDIX A - State University Revenue Sources"
11. Summary presentation on a three-academic-year comparative basis of the admissions data for the system of public higher education.	"APPENDIX A - State Higher Education Admissions Data"
12. Summary presentation on a five-academic-year comparative basis of the number of faculty members for each State University.	"APPENDIX A - State University Faculty Levels"

Any or all of the items listed above may be included by reference to other documents, including official statements pertaining to debt issued by the Authority, which have been submitted to the MSRB. If the document incorporated by reference is a Final Official Statement within the meaning of the Rule, it will also be available from the MSRB. The annual financial statements of the Authority and each State University for each fiscal year shall consist of the balance sheet and the related statements of revenue and cost of service and cash flows prepared in accordance with generally accepted accounting principles in effect from time to time. Such financial statements shall be audited by a firm of certified public accountants appointed by the Authority or the applicable State University.

In the Authority Disclosure Agreement, the Authority also will undertake for the benefit of the owners of the Series 2020A Bonds to provide in a timely manner, not in excess of ten business days after occurrence of the event, to EMMA notice of any of the following events with respect to the Series 2020A Bonds (numbered in accordance with the provisions of the Rule):

(i) principal and interest payment delinquencies;

(ii) non-payment related defaults, if material;

(iii) unscheduled draws on debt service reserves reflecting financial difficulties;

(iv) unscheduled draws on credit enhancements reflecting financial difficulties;

(v) substitution of credit or liquidity providers, or their failure to perform;

(vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2020A Bonds, or other material events affecting the tax status of the Series 2020A Bonds;

(vii) modifications to the rights of security holders, if material;

(viii) bond calls, if material, and tender offers;

(ix) defeasances;

(x) release, substitution or sale of property securing repayment of the Series 2020A Bonds, if material;

(xi) rating changes;

(xii) bankruptcy, insolvency, receivership or similar event of the Authority[*];

(xiii) the consummation of a merger, consolidation, or acquisition or the sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material;

(xv) incurrence of a financial obligation of the Authority, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the Authority, any of which affect the owners of the Series 2020A Bonds, if material; and[†]

(xvi) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the Authority, any of which reflect financial difficulties.[†]

Nothing in the Authority Disclosure Agreement shall preclude the Authority or the BHE from disseminating any information in addition to that required under the Authority Disclosure Agreement. If the Authority or the BHE disseminates any such additional information, nothing in the Authority Disclosure Agreement shall obligate the Authority or BHE, as the case may be, to update such information or include it in any future materials disseminated.

To the extent permitted by law, the provisions of the Authority Disclosure Agreement shall be enforceable against the Authority and the BHE in accordance with the terms thereof by any owner of a Series 2020A Bond, including any beneficial owner acting as a third-party beneficiary (upon proof of its status as a beneficial owner reasonably satisfactory to the Authority or the BHE, as the case may be). To the extent permitted by law, any such owner shall have the right, for the equal benefit and protection of all owners of the Series 2020A Bonds, by mandamus or other suit or proceeding at law or in equity, to enforce its rights against the Authority or the BHE, as applicable, and to compel the Authority or the BHE, and any of their respective officers, agents or employees, to perform and carry out their duties under the foregoing provisions as aforesaid, provided, however, that the sole remedy in connection with such undertakings shall be limited to an action to compel specific performance of the obligations of the Authority or the BHE in connection with such undertakings and shall not include any rights to monetary damages. The obligations of the Authority and the BHE in respect of the Authority Disclosure Agreement shall terminate if no Series 2020A Bonds remain outstanding (without regard to an economic defeasance) or if the provisions of the Rule concerning continuing disclosure are no longer effective, whichever occurs first. The provisions of the Authority Disclosure Agreement may be amended by the Authority and the BHE, without the consent of, or notice to, any owners of the Series 2020A Bonds, (a) to comply with or conform to the provisions of the Rule or any amendments thereto or authoritative interpretations thereof by the Securities and Exchange Commission or its staff (whether required or optional), (b) to add a dissemination agent for the information required to be provided by such undertakings and to make any necessary or desirable provisions with respect thereto, (c) to add to the covenants of the Authority or the BHE for the benefit of the owners of the Series 2020A Bonds, (d) to modify the contents, presentation and format of the annual financial information from time to time as a result of a change in circumstances that arises from a change in legal requirements or (e) to otherwise modify the undertakings in a manner consistent with the requirements of the Rule concerning continuing disclosure; provided, however, that in the case of any amendment pursuant to clause (d) or (e), (i) the undertaking, as amended, would have complied with the requirements of the Rule at the time of the offering of the Series 2020A Bonds, after taking into account any amendments or authoritative interpretations of the Rule, as well as any change in circumstances, and (ii) the amendment does not materially impair the interests of the owners of the Series 2020A Bonds, as determined either by a party unaffiliated with the Authority and the BHE (such as Authority bond counsel) or by the vote or consent of owners of a majority in outstanding principal amount of the Series 2020A Bonds affected thereby at or prior to the time of such amendment.

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[*] As noted in the Rule, this event is considered to occur when any of the following occur: (i) the appointment of a receiver, fiscal agent or similar officer for the Authority in a proceeding under the U.S. Bankruptcy Code or in any proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Authority, or if such jurisdiction has been assumed by leaving the existing governing body and officials in possession but subject to the supervision and orders of a court or governmental authority, or (ii) the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Authority.

[†] As noted in the Rule, the term "financial obligation" means a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term "financial obligation" excludes municipal securities for which a final official statement has been provided to the MSRB consistent with the Rule.

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The Series 2020A Bonds are being issued to refund and defease all of the Authority's outstanding Bonds or portions thereof described below (the "Refunded Bonds"). Any refunding is contingent upon the delivery of the Series 2020A Bonds.

TABLE OF REFUNDED BONDS

Project and Refunding Revenue Bonds, Series 2003B

CUSIP	Maturity Date	Par Amount	Interest Rate
575832JY7	5/1/2021	$1,920,000	5.375%
575832JZ4	5/1/2022	1,015,000	5.375
	Total	$2,935,000	

Project Revenue Bonds, Series 2009C (Federally Taxable – Build America Bonds – Direct Pay to Issuer)

CUSIP	Maturity Date	Par Amount	Interest Rate
575832TV2	5/1/2021*	$1,245,000	5.284%
575832TV2	5/1/2022*	655,000	5.284
	Total	$1,900,000	

*Sinking fund installment of term bond maturing May 1, 2025.

Project Revenue Bonds, Series 2010B (Federally Taxable – Build America Bonds – Direct Pay to Issuer)

CUSIP	Maturity Date	Par Amount	Interest Rate
575832UG3	5/1/2021*	$2,185,000	5.788%
575832UG3	5/1/2022*	1,135,000	5.788
	Total	$3,320,000	

*Sinking fund installment of term bond maturing May 1, 2025.

Refunding Revenue Bonds, Series 2011A

CUSIP	Maturity Date	Par Amount	Interest Rate
575831AK8	5/1/2021	$5,390,000	5.000%
575831AL6	5/1/2022	2,830,000	5.000
	Total	$8,220,000	

Project Revenue Bonds, Series 2012A

CUSIP	Maturity Date	Par Amount	Interest Rate
575832UV0	5/1/2021	$2,085,000	4.000%
575832M56	5/1/2022	1,085,000	5.000
	Total	$3,170,000	

Refunding Revenue Bonds, Series 2012B

CUSIP	Maturity Date	Par Amount	Interest Rate
575831AU6	5/1/2021	$2,000,000	3.000%
575831BJ0	5/1/2021	3,510,000	4.000
575831AV4	5/1/2022	2,855,000	5.000
	Total	$8,365,000	

Project Revenue Bonds, Series 2012C

CUSIP	Maturity Date	Par Amount	Interest Rate
575832VS6	5/1/2021	$5,495,000	5.000%
575832VT4	5/1/2022	2,885,000	4.000
	Total	$8,380,000	

Project Revenue Bonds, Series 2014A

CUSIP	Maturity Date	Par Amount	Interest Rate	Redemption Date	Redemption Price
575832WS5	5/1/2021	$4,145,000	5.000%		
575832WT3	5/1/2022	2,175,000	5.000		
575832WX4	5/1/2026	5,290,000	5.000	5/1/2023	100%
575832WY2	5/1/2027	5,555,000	5.000	5/1/2023	100
575832WZ9	5/1/2028	5,845,000	5.000	5/1/2023	100
575832XA3	5/1/2029	6,135,000	5.000	5/1/2023	100
575832XB1	5/1/2030	6,445,000	5.000	5/1/2023	100
575832XC9	5/1/2031	6,755,000	5.000	5/1/2023	100
575832XD7	5/1/2032	7,095,000	5.000	5/1/2023	100
575832XE5	5/1/2033	7,450,000	5.000	5/1/2023	100
575832XF2	5/1/2034	1,840,000	5.000	5/1/2023	100
575832XG0	5/1/2035*	1,930,000	5.000	5/1/2023	100
575832XG0	5/1/2036*	2,025,000	5.000	5/1/2023	100
575832XG0	5/1/2037*	2,125,000	5.000	5/1/2023	100
575832XG0	5/1/2038*	2,230,000	5.000	5/1/2023	100
575832XH8	5/1/2039**	2,340,000	5.000	5/1/2023	100
575832XH8	5/1/2040**	2,460,000	5.000	5/1/2023	100
575832XH8	5/1/2041**	2,580,000	5.000	5/1/2023	100
575832XH8	5/1/2042**	2,715,000	5.000	5/1/2023	100
575832XH8	5/1/2043**	2,845,000	5.000	5/1/2023	100
575832XJ4	5/1/2044***	2,990,000	4.500	5/1/2023	100
575832XJ4	5/1/2045***	3,125,000	4.500	5/1/2023	100
575832XJ4	5/1/2046***	3,265,000	4.500	5/1/2023	100
575832XJ4	5/1/2047***	3,410,000	4.500	5/1/2023	100
575832XJ4	5/1/2048***	3,565,000	4.500	5/1/2023	100
	Total	$96,335,000			

*Sinking fund installment of term bond maturing May 1, 2038.
**Sinking fund installment of term bond maturing May 1, 2043.
***Sinking fund installment of term bond maturing May 1, 2048.

Project Revenue Bonds, Series 2014B (Green Bonds)

CUSIP	Maturity Date	Par Amount	Interest Rate	Redemption Date	Redemption Price
575832XP0	5/1/2021	$2,250,000	5.000%		
575832XQ8	5/1/2022	1,185,000	5.000		
575832XX3	5/1/2029	3,325,000	5.000	5/1/2024	100%
575832XY1	5/1/2030	3,495,000	5.000	5/1/2024	100
575832XZ8	5/1/2031	3,665,000	5.000	5/1/2024	100
575832YA2	5/1/2032	3,850,000	5.000	5/1/2024	100
575832YB0	5/1/2033	4,040,000	5.000	5/1/2024	100
575832YC8	5/1/2034	4,245,000	5.000	5/1/2024	100
575832YD6	5/1/2035*	3,090,000	5.000	5/1/2024	100
575832YD6	5/1/2036*	3,245,000	5.000	5/1/2024	100
575832YD6	5/1/2037*	3,405,000	5.000	5/1/2024	100
575832YD6	5/1/2038*	3,575,000	5.000	5/1/2024	100
575832YD6	5/1/2039*	3,755,000	5.000	5/1/2024	100
575832YE4	5/1/2040**	3,945,000	5.000	5/1/2024	100
575832YE4	5/1/2041**	4,140,000	5.000	5/1/2024	100
575832YE4	5/1/2042**	4,345,000	5.000	5/1/2024	100
575832YE4	5/1/2043**	4,565,000	5.000	5/1/2024	100
575832YE4	5/1/2044**	4,790,000	5.000	5/1/2024	100
	Total	$64,910,000			

*Sinking fund installment of term bond maturing May 1, 2039.
**Sinking fund installment of term bond maturing May 1, 2044.

Project Revenue Bonds, Series 2014C

CUSIP	Maturity Date	Par Amount	Interest Rate
575832YM6	5/1/2021	$430,000	5.000%
575832YN4	5/1/2022	225,000	5.000
	Total	$655,000	

Refunding Revenue Bonds, Series 2014D

CUSIP	Maturity Date	Par Amount	Interest Rate	Redemption Date	Redemption Price
575831BT8	5/1/2032	$ 2,990,000	5.000%	5/1/2025	100%
575831BU5	5/1/2033	3,130,000	5.000	5/1/2025	100
575831BV3	5/1/2034	3,290,000	5.000	5/1/2025	100
575831BR2	5/1/2035*	3,455,000	5.000	5/1/2025	100
575831BR2	5/1/2036*	3,625,000	5.000	5/1/2025	100
575831BR2	5/1/2037*	1,905,000	5.000	5/1/2025	100
575831BR2	5/1/2038*	1,995,000	5.000	5/1/2025	100
575831BR2	5/1/2039*	2,095,000	5.000	5/1/2025	100
575831BS0	5/1/2040**	2,205,000	5.000	5/1/2025	100
575831BS0	5/1/2041**	2,310,000	5.000	5/1/2025	100
	Total	$27,000,000			

*Sinking fund installment of term bond maturing May 1, 2039.
**Sinking fund installment of term bond maturing May 1, 2041.

Project Revenue Bonds, Series 2015A

CUSIP	Maturity Date	Par Amount	Interest Rate
575832ZF0	5/1/2021	$505,000	3.000%
575832ZG8	5/1/2022	260,000	2.000
	Total	$765,000	

Refunding Revenue Bonds, Series 2016A

CUSIP	Maturity Date	Par Amount	Interest Rate	Redemption Date	Redemption Price
575831BY7	5/1/2021	$6,035,000	4.000%		
575831BZ4	5/1/2022	3,250,000	4.000		
575831CJ9	5/1/2031	6,695,000	5.000	5/1/2025	100%
575831CK6	5/1/2032	7,300,000	5.000	5/1/2025	100
575831CL4	5/1/2033	7,935,000	5.000	5/1/2025	100
575831CM2	5/1/2034	8,375,000	5.000	5/1/2025	100
575831CN0	5/1/2035	9,110,000	5.000	5/1/2025	100
575831CP5	5/1/2036	9,855,000	5.000	5/1/2025	100
575831CQ3	5/1/2037	10,655,000	5.000	5/1/2025	100
575831CR1	5/1/2038	11,450,000	5.000	5/1/2025	100
575831CT7	5/1/2039*	5,625,000	5.000	5/1/2025	100
575831CT7	5/1/2040*	1,140,000	5.000	5/1/2025	100
575831CT7	5/1/2041*	1,195,000	5.000	5/1/2025	100
575831CS9	5/1/2042**	1,255,000	5.000	5/1/2025	100
575831CS9	5/1/2043**	1,320,000	5.000	5/1/2025	100
575831CS9	5/1/2044**	1,390,000	5.000	5/1/2025	100
575831CS9	5/1/2045**	1,455,000	5.000	5/1/2025	100
575831CS9	5/1/2046**	1,530,000	5.000	5/1/2025	100
575831CS9	5/1/2047**	1,610,000	5.000	5/1/2025	100
575831CS9	5/1/2048**	1,685,000	5.000	5/1/2025	100
575831CS9	5/1/2049**	1,770,000	5.000	5/1/2025	100
	Total	$100,635,000			

*Sinking fund installment of term bond maturing May 1, 2041.
**Sinking fund installment of term bond maturing May 1, 2049.

Project Revenue Bonds, Series 2017A

CUSIP	Maturity Date	Par Amount	Interest Rate
575832A26	5/1/2021	$ 765,000	5.000%
575832A34	5/1/2022	405,000	5.000
	Total	$1,170,000	

Project Revenue Bonds, Series 2017B

CUSIP	Maturity Date	Par Amount	Interest Rate
575832C57	5/1/2021	$360,000	5.000%
575832C65	5/1/2022	190,000	5.000
	Total	$550,000	

Project Revenue Bonds, Series 2017C (Federally Taxable)

CUSIP	Maturity Date	Par Amount	Interest Rate
575832E97	5/1/2021	$300,000	2.490%
575832F21	5/1/2022	155,000	2.640
	Total	$455,000	

Refunding Revenue Bonds, Series 2017D

CUSIP	Maturity Date	Par Amount	Interest Rate
575831CX8	5/1/2021	$1,835,000	5.000%
575831CY6	5/1/2022	965,000	5.000
	Total	$2,800,000	

Project Revenue Bonds, Series 2019A

CUSIP	Maturity Date	Par Amount	Interest Rate
575832G79	5/1/2021	$280,000	5.000%
575832G87	5/1/2022	280,000	5.000
	Total	$560,000	

Refunding Revenue Bonds, Series 2019B (Federally Taxable)

CUSIP	Maturity Date	Par Amount	Interest Rate
575831DV1	5/1/2021	$1,505,000	4.000%
575831DW9	5/1/2022	815,000	4.000
	Total	$2,320,000	

Refunding Revenue Bonds, Series 2019C (Federally Taxable)

CUSIP	Maturity Date	Par Amount	Interest Rate
575831ET5	5/1/2021	$2,195,000	1.786%
575831EU2	5/1/2022	1,120,000	1.866
	Total	$3,315,000	