

In the opinion of Bond Counsel interest on the Series AZ Bonds (as defined herein) is not excludable from gross income for federal income tax purposes. Bond Counsel is also of the opinion that under current Pennsylvania law, interest on the Series AZ Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax. See "TAX MATTERS" herein.

\$142,710,000
PENNSYLVANIA HIGHER EDUCATIONAL
FACILITIES AUTHORITY
(Commonwealth of Pennsylvania)
STATE SYSTEM OF HIGHER EDUCATION,
REVENUE BONDS,
SERIES AZ
(Federally Taxable)

Dated: Date of Delivery**Due: June 15, as shown on the inside front cover**

The Series AZ Bonds (as defined herein) are issuable only as fully registered bonds without coupons, and when issued, will be registered in the name of Cede & Co., as registered Bondowner and nominee for The Depository Trust Company ("DTC"), New York, New York. DTC will act as securities depository for the Series AZ Bonds. Purchase of the Series AZ Bonds will be made in book-entry only form, in the denomination of \$5,000 or any integral multiple thereof. Purchasers will not receive certificates representing their interest in the Series AZ Bonds. So long as the Series AZ Bonds are registered in the name of Cede & Co. as nominee of DTC, references herein to the registered Bondowners shall mean Cede & Co., and shall not mean the Beneficial Owners of the Series AZ Bonds. See "The Series AZ Bonds - Book-Entry Only System" herein.

Principal of and interest on the Series AZ Bonds will be paid by The Bank of New York Mellon Trust Company, N.A., Philadelphia, Pennsylvania, as trustee (the "Trustee"). So long as DTC or its nominee, Cede & Co., is the registered Bondowner of the Series AZ Bonds, such payments will be made directly to it as registered Bondowner. Disbursement of such payments to the DTC Participants is the responsibility of DTC and disbursement of such payments to the Beneficial Owners is the responsibility of the DTC Participants and the Indirect Participants, as more fully described herein. Interest will be payable on June 15 and December 15, commencing December 15, 2021, to the registered Bondowners record as of the pertinent record dates herein described.

The Series AZ Bonds are subject to redemption prior to maturity as described herein.

The Series AZ Bonds are limited obligations of the Authority and are secured under the provisions of the PHEFA Indenture and the Loan Agreement, as each is defined herein, and are payable solely from payments to be received under the Loan Agreement by the Authority from the State System of Higher Education (the "System") and from certain funds held under the PHEFA Indenture.

Neither the general credit of the Authority nor the credit or taxing power of the Commonwealth of Pennsylvania or of any political subdivision thereof is pledged for the payment of the principal of or the interest on the Series AZ Bonds described above, nor shall such Series AZ Bonds be deemed to be general obligations of the Authority or obligations of the Commonwealth of Pennsylvania or any political subdivision thereof, nor shall the Commonwealth of Pennsylvania or any political subdivision thereof be liable for the payment of the principal of or interest on the Series AZ Bonds described above. The Authority has no taxing power.

The scheduled payment of principal of and interest on the Series AZ Bonds when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Series AZ Bonds by ASSURED GUARANTY MUNICIPAL CORP.



The Series AZ Bonds are offered when, as and if issued by the Authority and received by the Underwriters subject to receipt of the approving legal opinion of Ahmad Zaffarese, LLC, Philadelphia, Pennsylvania, Bond Counsel. Certain legal matters will be passed upon for the Authority by its counsel, Barley Snyder LLP, Lancaster, Pennsylvania, and for the System by its Chief Legal Counsel. It is expected that the Series AZ Bonds in definitive form will be available for delivery in New York, New York on or about June 24, 2021.

This cover page contains certain information for quick reference only. It is not a summary of the issue. Prospective purchasers of the Series AZ Bonds must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

\$142,710,000
PENNSYLVANIA HIGHER EDUCATIONAL
FACILITIES AUTHORITY
(Commonwealth of Pennsylvania)
STATE SYSTEM OF HIGHER EDUCATION,
REVENUE BONDS,
SERIES AZ
(Federally Taxable)

Maturity (June 15)	<u>Amount</u>	<u>Interest</u>	<u>Yield</u>	<u>Price</u>	<u>CUSIP*</u>
2022	\$ 4,190,000	3.000%	0.250%	102.676	70917TCZ2
2023	4,190,000	3.000%	0.350%	105.211	70917TDA6
2024	4,310,000	3.000%	0.500%	107.373	70917TDB4
2025	4,435,000	3.000%	0.750%	108.795	70917TDC2
2026	4,560,000	3.000%	1.050%	109.427	70917TDD0
2027	4,685,000	3.000%	1.250%	110.044	70917TDE8
2028	4,830,000	3.000%	1.500%	109.898	70917TDF5
2029	4,975,000	3.000%	1.700%	109.656	70917TDG3
2030	5,115,000	3.000%	1.900%	109.036	70917TDH1
2031	5,260,000	3.000%	2.000%	109.002	70917TDJ7
2032	5,415,000	2.100%	2.100%	100.000	70917TDK4
2033	5,530,000	2.200%	2.200%	100.000	70917TDL2
2034	5,640,000	2.300%	2.300%	100.000	70917TDM0
2035	5,765,000	2.400%	2.400%	100.000	70917TDN8
2036	5,900,000	2.500%	2.500%	100.000	70917TDP3
2037	6,035,000	2.550%	2.550%	100.000	70917TDQ1
2038	6,180,000	2.600%	2.600%	100.000	70917TDR9
2039	6,340,000	2.650%	2.650%	100.000	70917TDS7
2040	6,505,000	2.700%	2.700%	100.000	70917TDT5
2041	6,670,000	2.750%	2.750%	100.000	70917TDU2
2042	6,845,000	2.800%	2.800%	100.000	70917TDV0

\$29,335,000 Term Bond maturing June 15, 2047; Interest Rate 3.000%; Price 100.000;
CUSIP No.*: 70917TDW8

* Copyright 2021, American Bankers Association. CUSIP data herein are provided by Standard & Poor's, CUSIP Service Bureau, a division of the McGraw-Hill Companies, Inc. CUSIP numbers are included solely for the convenience of the Bondowners of the Series AZ Bonds and neither the Authority nor the System are responsible for the selection, uses or correctness (as listed above) of, or subsequent changes to, CUSIP numbers assigned to the Series AZ Bonds.

PENNSYLVANIA HIGHER EDUCATIONAL FACILITIES AUTHORITY
(Commonwealth of Pennsylvania)
1035 Mumma Road
Wormleysburg, Pennsylvania 17043

BOARD MEMBERS OF THE AUTHORITY

Honorable Thomas W. Wolf
Governor of the Commonwealth of Pennsylvania..... President

Honorable Scott Martin
Designated by the President Pro Tempore of the Senate..... Vice President

Honorable Curtis G. Sonney
Designated by the Speaker of the House of Representatives..... Vice President

Honorable Lindsey M. Williams
Designated by the Minority Leader of the Senate Vice President

Honorable Stacy Garrity
State Treasurer Treasurer

Honorable Curtis M. Topper
Secretary of General Services..... Secretary

Honorable Napoleon J. Nelson
Designated by the Minority Leader of the House of Representatives Board Member

Honorable Timothy L. DeFoor
Auditor General Board Member

Honorable Noe Ortega
Acting Secretary of Education..... Board Member

EXECUTIVE DIRECTOR

Eric Gutshall

AUTHORITY COUNSEL

(Appointed by the Office of General Counsel)

Barley Snyder LLP
Lancaster, Pennsylvania

TRUSTEE

The Bank of New York Mellon Trust Company, N.A.
Philadelphia, Pennsylvania

BOND COUNSEL

(Appointed by the Office of General Counsel)

Ahmad Zaffarese LLC
Philadelphia, Pennsylvania

FINANCIAL ADVISOR

to the State System of Higher Education

RBC Capital Markets, LLC
Lancaster, Pennsylvania

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES AZ BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

No dealer, broker, salesman, or other person has been authorized by the Pennsylvania Higher Educational Facilities Authority, the State System of Higher Education or the Underwriters to give any information or to make any representations, other than those contained in this Official Statement, and if given or made, such other information or representations 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 AZ Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been obtained from the State System of Higher Education, and other sources which are believed to be reliable but it is not guaranteed as to accuracy or completeness, and is not to be construed as a representation by the Underwriters or, as to information from other sources, by the Pennsylvania Higher Educational Facilities Authority or the State System of Higher Education. 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 any of the information set forth herein since the date hereof or the date as of which particular information is given, if earlier.

The Series AZ Bonds are not and will not be registered under the Securities Act of 1933, as amended, or under any state securities laws, and the PHEFA Indenture has not been and will not be qualified under the Trust Indenture Act of 1939, as amended, in reliance on exemptions contained in such laws. Neither the Securities and Exchange Commission nor any federal, state, municipal or other governmental agency will pass upon the accuracy, adequacy or completeness of this Official Statement.

Assured Guaranty Municipal Corp. (“AGM”) makes no representation regarding the Series AZ Bonds or the advisability of investing in the Series AZ Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading “BOND INSURANCE” and “**APPENDIX V** - Specimen Municipal Bond Insurance Policy.”

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OFFICIAL STATEMENT

\$142,710,000
PENNSYLVANIA HIGHER EDUCATIONAL
FACILITIES AUTHORITY
(COMMONWEALTH OF PENNSYLVANIA),
STATE SYSTEM OF HIGHER EDUCATION
REVENUE BONDS,
SERIES AZ
(Federally Taxable)

INTRODUCTION

This Introduction is qualified in all respects by the more detailed information appearing elsewhere in this Official Statement and in the Appendices hereto.

General

This Official Statement, including the cover page and the Appendices hereto, sets forth certain information concerning the issuance by the Pennsylvania Higher Educational Facilities Authority (the “Authority,” the offices of which are located at 1035 Mumma Road, Wormleysburg, Pennsylvania 17043), of the Authority’s State System of Higher Education, Revenue Bonds, Series AZ (Federally Taxable) in the aggregate principal amount of \$142,710,000 (the “Series AZ Bonds”). The Authority is a body corporate and politic constituting a public corporation and a public instrumentality of the Commonwealth of Pennsylvania (the Commonwealth”), created by The Pennsylvania Higher Educational Facilities Authority Act of December 6, 1967, P.L. 678, No. 318, as amended (the “Act”). See **“The Authority”** herein for additional information about the Authority.

The Series AZ Bonds are being issued on behalf of the State System of Higher Education (the “System” or “SSHE”), a body corporate and politic constituting a public corporation and a governmental instrumentality of the Commonwealth of Pennsylvania, created by the State System of Higher Education Act of November 12, 1982, P.L. 660, No. 188, as amended (“Act 188”). See **APPENDIX I: “CERTAIN INFORMATION CONCERNING PENNSYLVANIA’S STATE SYSTEM OF HIGHER EDUCATION”** for certain information concerning the System.

Certain capitalized terms used and not otherwise defined herein shall have the meaning assigned to them in **APPENDIX III: “SUMMARY OF LEGAL DOCUMENTS – Definitions of Certain Terms.”**

The Series AZ Bonds

The Series AZ Bonds are being issued by the Authority in the aggregate principal amount of \$142,710,000. They will be dated their date of delivery, and will bear interest from such date, payable June 15 and December 15, commencing December 15, 2021, at the rates set forth on the inside of the front cover page hereof and shall be subject to redemption prior to maturity as described herein. See **“The Series AZ Bonds – Redemption Provisions”** herein.

The Series AZ Bonds will be issued pursuant to the Act and an Indenture of Trust dated as of June 1, 1985 (the “Original Indenture”), as previously supplemented and as further supplemented by a Forty-Eighth Supplemental Indenture of Trust dated as of June 1, 2021 (collectively, the “PHEFA Indenture”), between the Authority and The Bank of New York Mellon Trust Company, N.A., Philadelphia, Pennsylvania, as trustee (the “Trustee”). The Series AZ Bonds will be equally and ratably secured (as and to the extent described below) with (a) the Outstanding bonds of fifty-one prior series issued under the PHEFA Indenture (all of such prior bonds are sometimes referred to, collectively hereinafter, as the “PHEFA Prior Bonds”), and (b) the \$827,580,000 original principal amount of Federally Taxable Revenue

Bonds (State System of Higher Education Act 105 Project), Series 2021 (the “PEDFA Prior Bonds”) issued by the Pennsylvania Economic Development Financing Authority (“PEDFA”) pursuant to a Trust Indenture dated as of April 1, 2021, between PEDFA and The Bank of New York Mellon Trust Company, N.A., Philadelphia, Pennsylvania, as amended (the “PEDFA Indenture”). The PHEFA Prior Bonds, together with the PEDFA Prior Bonds, are referred to hereinafter as the “Prior Bonds.” The PHEFA Prior Bonds, the Series AZ Bonds, and any Additional PHEFA Bonds which may be Outstanding from time to time under the PHEFA Indenture are referred to collectively herein as “PHEFA Bonds.” The PEDFA Prior Bonds and any Additional PEDFA Bonds which may be outstanding from time to time under the PEDFA Indenture are referred to collectively herein as “PEDFA Bonds.”

As of June 1, 2021, there was a total of \$1,946,935,000 (\$1,119,355,000 under PHEFA Indenture and \$827,580,000 under PEDFA Indenture) aggregate principal amount of Prior Bonds outstanding. See **“Sources of and Security for Payment of the Series AZ Bonds”** herein.

The Series AZ Bonds are issuable only as fully registered bonds without coupons and, when issued, will be registered in the name of Cede & Co., as registered Bondowner and nominee for The Depository Trust Company (“DTC”), New York, New York. See **“The Series AZ Bonds – Book-Entry Only System”** herein.

Use of Proceeds

Pursuant to a Loan and Security Agreement dated as of June 1, 1985, between the Authority and the System, as supplemented including by, in particular, a Forty-Eighth Supplemental Loan and Security Agreement dated as of June 1, 2021 (collectively, the “Loan Agreement”), the Authority will lend the proceeds of the Series AZ Bonds to the System, which will use such proceeds as described herein under **“Sources and Uses of Funds”** and **“Plan of Finance.”**

Security for the Series AZ Bonds

The Series AZ Bonds are being issued on a parity (except as to certain specified funds held under the PHEFA Indenture) with the Prior PHEFA Bonds and any Additional PHEFA Bonds with respect to the amounts payable by the System and secured under the Loan Agreement and by, inter alia, an assignment to the Trustee of all the right, title, and interest of the Authority in and to the Loan Agreement (except for the Authority’s right to payment of certain fees and expenses and to indemnification), including such amounts payable thereunder. The Series AZ Bonds are payable on a parity with the PEDFA Bonds and any Additional PEDFA Bonds (except as to certain specified funds held under the PHEFA Indenture). **The Loan Agreement is an unsecured general obligation of the System and the full faith and credit of the System is pledged to the payment of all sums due thereunder. See “Sources of and Security for Payment of the Series AZ Bonds” and APPENDIX III: “SUMMARY OF LEGAL DOCUMENTS”** herein.

NEITHER THE GENERAL CREDIT OF THE AUTHORITY NOR THE CREDIT OR TAXING POWER OF THE COMMONWEALTH OF PENNSYLVANIA OR OF ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED FOR THE PAYMENT OF THE PRINCIPAL OF OR THE INTEREST ON THE SERIES AZ BONDS, NOR SHALL THE SERIES AZ BONDS BE DEEMED TO BE GENERAL OBLIGATIONS OF THE AUTHORITY OR OBLIGATIONS OF THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF, NOR SHALL THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF BE LIABLE FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES AZ BONDS. THE AUTHORITY HAS NO TAXING POWER.

Availability of Documents

The general descriptions of various legal documents set forth in this Official Statement do not purport to be comprehensive or definitive and reference should be made to each document for the complete terms and provisions thereof. Copies of all documents referred to herein about any document are available for inspection during normal business hours at the designated corporate trust office of the Trustee in Philadelphia, Pennsylvania. All statements herein are qualified in all respects by reference to such document in its entirety.

THE SERIES AZ PROJECT

The Series AZ Bonds are being issued to provide funds to the System to finance: (i) the acquisition of certain student housing known as the Villages, comprised of three facilities on the campus of Millersville University of Pennsylvania (the “University”) from Student Services, Inc. (the “Acquisition Project” or the “SSI Student Housing”); and (ii) contingencies and payment of costs and expenses incident to the issuance of the Series AZ Bonds (collectively, with subpart (i), the “Series AZ Project”). The portion of the proceeds of the Series AZ Bonds used to acquire the SSI Student Housing are intended to be used by the East Hempfield Township Industrial Development Authority to advance refund all of its outstanding revenue bonds issued to finance the costs of constructing the SSI Student Housing. The terms of the Acquisition Project will require the System and the University to preserve the tax-exemption of such revenue bonds prior to their redemption.

ESTIMATED SOURCES AND USES OF FUNDS

The following table sets forth estimated sources and uses of funds for the Series AZ Project:

Sources:

Series AZ Bond Proceeds	\$142,710,000.00
Net Premium	3,832,888.45
Total Sources	\$146,542,888.45

Uses:

Acquisition Project	\$ 143,616,698.28
Issuance Costs ⁽¹⁾	281,732.48
Underwriters' Discount ⁽²⁾	2,644,457.69
Total Uses:	\$146,542,888.45

⁽¹⁾ Includes fees and expenses of Bond Counsel, the Financial Advisor, the Authority, the Trustee, rating agency fees, printing fees and miscellaneous fees and expenses.

⁽²⁾ Includes \$266,605.00 due to the Bond Insurer consisting of \$203,425.00 premium and \$63,180.00 reimbursement for S&P (as hereinafter defined) rating fee.

THE AUTHORITY

The Authority is a body corporate and politic, constituting a public corporation and a public instrumentality of the Commonwealth of Pennsylvania (the “Commonwealth” or “State”), created by the Pennsylvania Higher Educational Facilities Authority Act of 1967 (Act No. 318 of the General Assembly of the Commonwealth of Pennsylvania, approved December 6, 1967, as amended) (the “Act”).

The Authority is authorized under the Act, among other things, to acquire, construct, finance, improve, maintain, operate, hold and use any educational facility (as therein defined) and, with respect to a college, to finance projects by making loans, to lease as lessor or lessee, to transfer or sell any educational facility or property, to charge and collect amounts for the payment of expenses of the Authority and for payment of the principal of and interest on its obligations, to issue bonds and other obligations for the purpose of paying the cost of projects, to issue refunding bonds and to pledge all or any of the revenues of the Authority for all or any of such obligations, and to enter into trust indentures providing for the issuance of such obligations and for their payment and security.

Under the Act, the Board of the Authority (the “Board”) consists of the Governor of the Commonwealth, the State Treasurer, the Auditor General, the Secretary of the Department of Education, the Secretary of the Department of General Services, the President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the House of Representatives and the Minority Leader of the Senate. Pursuant to the Act, the President Pro Tempore of the Senate, the Speaker of the House of Representatives, the Minority Leader of the Senate and the Minority Leader of the House of Representatives may designate a member of their respective legislative bodies to act as a member of the Authority in their stead. The members of the Board serve without compensation but are entitled to reimbursement for all necessary expenses incurred in connection with the performance of their duties as members. The powers of the Authority are exercised by the Board.

The Authority has issued from time to time other series of revenue bonds and notes for the purpose of financing projects for higher educational institutions in the Commonwealth. None of the revenues of the Authority with respect to any of such revenue bonds and notes are pledged as security for the Series AZ Bonds and, conversely, such revenue bonds and notes above are not payable from or secured by the revenues of the Authority or other moneys securing the Series AZ Bonds.

The Authority may in the future issue other series of bonds for the purpose of financing projects for educational institutions in the Commonwealth. Each such series of bonds will be secured by instruments separate and apart from the PHEFA Indenture securing the Series AZ Bonds, except for any Additional PHEFA Bonds issued thereunder.

On May 1, 1991, the Authority was unable to make payments to Bondowners with respect to a series of revenue bonds issued by the Authority on behalf of a college because of defaults on payment obligations related to such series of revenue bonds by such college. The Florida Department of Banking and Finance, Division of Securities and Investor Protection, generally requires disclosure by any issuer of securities sold in Florida of defaults on any other obligations of such issuer. These defaulted bonds were special obligations payable only from revenues received from the particular college or from other limited sources, but not from revenues pledged to pay any series of bonds, and the full faith and credit of the Authority was not pledged to secure the payment of such bonds. Such default is not material with respect to the offering and sale of the Series AZ Bonds, and additional details with respect thereto in this are not being provided in this Official Statement.

The Series AZ Bonds are being issued under the Act pursuant to a resolution of the Authority adopted on May 19, 2021, and pursuant to the PHEFA Indenture.

Except for the Prior Bonds, any Additional Bonds and any Additional PHEFA Bonds, none of the revenues of the Authority with respect to any of the revenue bonds and notes referred to above are pledged as security for any of the Series AZ Bonds and, conversely, the revenue bonds and notes referred to above are not payable from or secured by the revenues of the Authority or other moneys securing the Series AZ Bonds. See **“Sources of and Security for Payment of the Series AZ Bonds.”**

The following are key staff members of the Authority who are involved in the administration of the financing and projects:

Eric Gutshall, Executive Director. Mr. Gutshall was appointed by Governor Wolf as Executive Director of the Authority and the State Public School Building Authority (“SPSBA,” and collectively with the Authority, the “Authorities”) on December 9, 2019. He previously served as Governor Wolf’s Secretary of Intergovernmental Affairs and as Director of Constituent Services. He obtained his Bachelor of Science degree in Business Administration from Central Pennsylvania College and his Master of Public Administration from the University of Pennsylvania.

Beverly M. Nawa, Director of Operations. Ms. Nawa serves as the Director of Operations of both the Authority and SPSBA. She has been employed by the Authorities since 2004. She served as Acting Executive Director from October 2018 to December 2019. Ms. Nawa is a graduate of Alvernia University with a bachelor’s degree in business administration

David Player, Comptroller & Director of Financial Management. Mr. Player serves as the Comptroller & Director of Financial Management of both the Authority and SPSBA. He has been employed by the Authorities since 1999. Mr. Player is a graduate of Penn State with a bachelor’s degree in accounting and is a certified public accountant.

THE SERIES AZ BONDS

Description of the Series AZ Bonds

The Series AZ Bonds shall be dated their date of delivery, will mature on the dates and in the amounts and shall be payable as to interest, on June 15 and December 15 of each year commencing December 15, 2021, at the rates set forth on the inside of the cover page hereof. The Series AZ Bonds shall be subject to redemption prior to maturity as described below.

The Series AZ Bonds will be issued in fully registered form and, when issued, will be registered in the name of Cede & Co., as registered Bondowner and nominee of DTC. Purchases of the Series AZ Bonds will be made in book-entry only form, in denominations of \$5,000 and any integral multiple thereof. Beneficial Owners will not receive certificates representing their interests in the Series AZ Bonds purchased. So long as Cede & Co. is the registered Bondowner, as nominee of DTC, references herein to the registered Bondowners mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Series AZ Bonds. See “**Book-Entry Only System**” below.

Principal of and interest on the Series AZ Bonds will be paid by The Bank of New York Mellon Trust Company, N.A., Philadelphia, Pennsylvania, as Trustee. So long as DTC or its nominee, Cede & Co., is the registered Bondowner of the Series AZ Bonds, such payments will be made directly to it as registered Bondowner. Disbursement of such payments to the DTC Participants is the responsibility of DTC and disbursement of such payments to the Beneficial Owners is the responsibility of the DTC Participants and the Indirect Participants, as more fully described herein.

Book-Entry-Only System

THE INFORMATION IN THIS SECTION CONCERNING DTC AND DTC’S BOOK-ENTRY SYSTEM HAS BEEN OBTAINED FROM DTC, AND THE SYSTEM, THE AUTHORITY AND THE TRUSTEE TAKE NO RESPONSIBILITY FOR THE ACCURACY THEREOF.

Purchasers of Series AZ Bonds (the “Beneficial Owners”) will not receive certificates representing their interest in the Series AZ Bonds. Purchases of beneficial interests in the Series AZ Bonds will be made in book-entry only form in Authorized Denominations by credit to participating broker-dealers and other institutions on the books of DTC as described herein. Payments of principal of and interest on the Series AZ Bonds will be made by the Trustee directly to DTC as the registered Bondowner thereof. Disbursement of such payments to the Direct Participants (as hereinafter defined) is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of the Direct Participants

and the Indirect Participants (as hereinafter defined), as more fully described herein. Any purchaser of beneficial interests in the Series AZ Bonds must maintain an account with a broker or dealer who is, or acts through, a Direct Participant to receive payment of the principal of and interest on such Series AZ Bonds.

The Depository Trust Company, New York, New York (“DTC”) will act as securities depository for the Series AZ Bonds (the “Bond Depository”). The Series AZ 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 bond certificate will be issued for each maturity of the Series AZ Bonds, each in the aggregate principal amount of the Series AZ Bonds 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 Standard & Poor’s highest rating: AAA. 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 AZ Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series AZ Bonds on DTC’s records. The ownership interest of each 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 AZ 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 the Series AZ Bonds, except in the event that use of the book-entry system for the Series AZ Bonds is discontinued.

To facilitate subsequent transfers, all Series AZ 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 the Series AZ 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 AZ Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series AZ 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 AZ Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series AZ Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Bond Documents. For example, Beneficial Owners of the Series AZ Bonds may wish to ascertain that the nominee holding the Series AZ 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 notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series AZ Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series AZ 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 the Series AZ Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series AZ 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 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 redemption proceeds, distributions, and dividend payments 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 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 AZ Bonds at any time by giving reasonable notice to the Authority or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, 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, bond certificates will be printed and delivered.

SO LONG AS CEDE & CO., AS THE NOMINEE FOR DTC, IS THE REGISTERED BONDOWNER OF THE SERIES AZ BONDS, THE AUTHORITY AND THE TRUSTEE WILL TREAT CEDE & CO. AS THE ONLY REGISTERED BONDOWNER OF THE SERIES AZ BONDS FOR ALL PURPOSES UNDER THE PHEFA INDENTURE, INCLUDING RECEIPT OF ALL PRINCIPAL OF AND INTEREST ON THE SERIES AZ BONDS, RECEIPT OF NOTICES, AND VOTING.

The Trustee will pay principal of and interest on the Series AZ Bonds to or upon the order of the respective Bondowners, as shown on the Bond Register, or upon their respective attorneys duly authorized in writing, as provided in the PHEFA Indenture, and all such payments will be valid and effective to fully

satisfy the Authority's obligations with respect to the payment of principal and interest on the Series AZ Bonds to the extent of the sum or sums so paid. Upon delivery by the nominee of DTC to the Trustee of written notice to the effect that DTC has determined to substitute a new nominee in place of the existing nominee, and subject to the provisions of the PHEFA Indenture with respect to record dates, the word "Cede & Co." in the PHEFA Indenture will refer to such new nominee of DTC.

In the event the Authority or the Trustee receives written notice from DTC to the effect that DTC is unable or unwilling to discharge its responsibilities, and the Authority is unable to find a substitute depository, in the opinion of the Authority, willing and able to undertake the functions of the Bond Depository upon reasonable and customary terms, then the Series AZ Bonds will no longer be restricted to being registered in the Bond Register in the name of the nominee of DTC or DTC, but may be registered in whatever name or names the Beneficial Owners (as certified by DTC) transferring or exchanging the Series AZ Bonds will designate, in accordance with the provisions of the PHEFA Indenture.

In the event the Authority determines that it is in the best interests of the Beneficial Owners of the Series AZ Bonds that they be able to obtain bond certificates, the Authority may notify DTC and the Trustee, whereupon DTC will notify the Direct Participants and Indirect Participants of the availability through the nominee or DTC of bond certificates. In such event, the Trustee will issue, transfer, and exchange Series AZ Bond certificates as requested by DTC and any other Bondowners in appropriate amounts, and whenever the Bond Depository requests the Authority and the Trustee to do so, the Authority and the Trustee will cooperate with DTC by taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing the Series AZ Bonds to any nominee or Direct Participant having Series AZ Bonds credited to its account or (ii) to arrange for another securities depository to maintain custody of certificates evidencing the Series AZ Bonds.

Notwithstanding any other provision described herein or contained in the PHEFA Indenture to the contrary, so long as any Series AZ Bond is registered in the name of the nominee of DTC, all payments with respect to the principal of and interest on such Series AZ Bond will be made and given, respectively, to the nominee or DTC in the manner provided in the Blanket Letter of Representation entered into between DTC and the Authority.

In connection with any notice or communication to be provided to Series AZ Bondowners pursuant to the PHEFA Indenture by the Authority or the Trustee with respect to any consent or other action to be taken by Bondowners, the Authority, or the Trustee, as the case may be, will establish a record date for such consent or other action and give the nominee or DTC notice of such record date not less than fifteen (15) calendar days in advance of such record date to the extent possible.

THE SYSTEM, THE AUTHORITY AND THE TRUSTEE HAVE NO RESPONSIBILITY OR OBLIGATIONS TO THE DIRECT OR INDIRECT PARTICIPANTS OR THE BENEFICIAL OWNERS WITH RESPECT TO (A) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT; (B) THE PAYMENT BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OF ANY AMOUNT DUE TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL OF AND INTEREST ON THE SERIES AZ BONDS; (C) THE DELIVERY OR TIMELINESS OF DELIVERY BY DTC OR ANY DIRECT OR INDIRECT PARTICIPANT OF ANY NOTICE TO ANY BENEFICIAL OWNER THAT IS REQUIRED OR PERMITTED UNDER THE TERMS OF THE PHEFA INDENTURE TO BE GIVEN TO BONDOWNERS; (D) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENTS IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES AZ BONDS; OR (E) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC, OR ITS NOMINEE, CEDE & CO., AS REGISTERED BONDOWNER.

Redemption Provisions

The Series AZ Bonds are subject to redemption as follows:

Optional Redemption: The Series AZ Bonds maturing on and after June 15, 2032 are subject to optional redemption prior to maturity by the Authority at the written direction of the System in whole at any time or in part from time to time, on and after June 15, 2031 at a redemption price equal to one hundred percent (100%) of the principal amount thereof, plus accrued interest thereon to the date of redemption. Any partial redemption may be in any order of maturity and in any principal amount within a maturity as designated by the System by lot within a maturity. The Series AZ Bonds to be redeemed within any maturity will be selected by the Trustee by lot.

Extraordinary Optional Redemption: The Series AZ Bonds will be subject to redemption prior to maturity at the option of the Authority, at the direction of the System, in whole at any time, or in part from time to time, with respect to the Series AZ Bonds in any order of maturity selected by the System, and within any maturity by lot, upon payment of a redemption price equal to one hundred percent (100%) of the principal amount thereof, plus accrued interest to the date of redemption, but only in the event that all or a portion of the Series AZ Projects financed or refinanced with the proceeds of the Series AZ Bonds are damaged, destroyed or condemned, or sold under threat of condemnation, and it is determined that repair or reconstruction is not desirable, practical or financially feasible, from and to the extent of insurance proceeds, condemnation awards or proceeds of sale in lieu of condemnation received by the Trustee as a result of such damage, destruction, condemnation or sale under threat of condemnation.

Mandatory Sinking Fund Redemption: The Series AZ Bonds maturing on June 15, 2047 shall be subject to mandatory sinking fund redemption in part at a redemption price of one hundred percent (100%) of the principal amount thereof, plus accrued interest to the date of redemption, from moneys deposited in the Sinking Fund Account within the Revenue Fund established under the PHEFA Indenture, in accordance with the sinking fund redemption schedule set forth below:

Series AZ Bonds Maturing on June 15, 2047

<u>June 15 of the Year</u>	<u>Principal Amount</u>
2043	\$ 7,025,000
2044	7,220,000
2045	7,440,000
2046	5,005,000
2047*	2,645,000

* Final Maturity

The principal amount of the Series AZ Bonds otherwise required to be redeemed pursuant to mandatory sinking fund redemption may be reduced by the principal amount of Series AZ Bonds previously called for optional or extraordinary optional redemption or theretofore delivered to the Trustee by the System in lieu of cash payments under the Loan Agreement or purchased by the Trustee out of moneys in the Revenue Fund established under the PHEFA Indenture and which have not theretofore been applied as a credit against any Sinking Fund Payment.

Notice of Redemption: Notice of any redemption, identifying the Series AZ Bonds or portions thereof to be redeemed, will be given not more than 45 nor less than 30 days prior to the redemption date, by first-class mail, postage prepaid, to the registered Bondowners the Series AZ Bonds to be redeemed. Any defect in the notice or the mailing thereof with respect to any Series AZ Bond will not affect the

validity of the redemption as to any other Series AZ Bonds. No further interest will accrue on the principal of any Series AZ Bonds called for redemption after the date fixed for redemption if payment of the redemption price thereof has been duly provided for, and the registered Bondowners such Series AZ Bonds will have no rights under the PHEFA Indenture except to receive payment of the redemption price thereof and unpaid interest accrued to the date fixed for redemption. If the notice so specifies, a call for redemption may be conditioned on the deposit of funds for redemption by the redemption date, in the absence of which deposit the call for redemption would be of no effect. The Trustee will not be responsible for mailing notices of redemption to anyone other than DTC or its nominee as long as DTC acts as securities depository for the Series AZ Bonds.

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DEBT SERVICE REQUIREMENTS ON THE SERIES AZ BONDS AND THE PRIOR BONDS

The following tables set forth, for each of the periods indicated, the amounts required in such periods to be made available for the captioned purposes:

Fiscal Year Ended <u>June 30</u>	Series AZ Bonds			Prior Bonds Total Debt <u>Service</u>	Total Debt <u>Service</u>
	<u>Principal</u>	<u>Interest</u>	<u>Total</u>		
2021				\$110,049,573.50	\$110,049,573.50
2022	\$4,190,000	\$3,861,787.31	\$8,051,787.31	170,456,278.36	178,508,065.67
2023	4,190,000	3,835,107.50	8,025,107.50	168,269,995.62	176,295,103.12
2024	4,310,000	3,709,407.50	8,019,407.50	170,551,338.18	178,570,745.68
2025	4,435,000	3,580,107.50	8,015,107.50	143,822,312.74	151,837,420.24
2026	4,560,000	3,447,057.50	8,007,057.50	140,893,270.66	148,900,328.16
2027	4,685,000	3,310,257.50	7,995,257.50	143,296,445.14	151,291,702.64
2028	4,830,000	3,169,707.50	7,999,707.50	141,018,438.18	149,018,145.68
2029	4,975,000	3,024,807.50	7,999,807.50	136,764,457.30	144,764,264.80
2030	5,115,000	2,875,557.50	7,990,557.50	132,059,968.80	140,050,526.30
2031	5,260,000	2,722,107.50	7,982,107.50	128,864,220.54	136,846,328.04
2032	5,415,000	2,564,307.50	7,979,307.50	113,487,077.48	121,466,384.98
2033	5,530,000	2,450,592.50	7,980,592.50	112,862,647.42	120,843,239.92
2034	5,640,000	2,328,932.50	7,968,932.50	107,380,149.14	115,349,081.64
2035	5,765,000	2,199,212.50	7,964,212.50	105,701,652.34	113,665,864.84
2036	5,900,000	2,060,852.50	7,960,852.50	105,637,377.52	113,598,230.02
2037	6,035,000	1,913,352.50	7,948,352.50	99,177,821.06	107,126,173.56
2038	6,180,000	1,759,460.00	7,939,460.00	77,566,733.82	85,506,193.82
2039	6,340,000	1,598,780.00	7,938,780.00	75,315,964.86	83,254,744.86
2040	6,505,000	1,430,770.00	7,935,770.00	75,016,761.46	82,952,531.46
2041	6,670,000	1,255,135.00	7,925,135.00	68,513,563.20	76,438,698.20
2042	6,845,000	1,071,710.00	7,916,710.00	33,358,123.80	41,274,833.80
2043	7,025,000	880,050.00	7,905,050.00	20,588,350.00	28,493,400.00
2044	7,220,000	669,300.00	7,889,300.00	14,683,550.00	22,572,850.00
2045	7,440,000	452,700.00	7,892,700.00	6,806,570.00	14,699,270.00
2046	5,005,000	229,500.00	5,234,500.00	871,000.00	6,105,500.00
2047	2,645,000	79,350.00	2,724,350.00	873,750.00	3,598,100.00
2048				875,000.00	875,000.00
2049				874,750.00	874,750.00
2050				873,000.00	873,000.00
2051				874,750.00	874,750.00
2052				874,750.00	874,750.00
2053				873,000.00	873,000.00
2054				874,500.00	874,500.00
2055				504,000.00	504,000.00
TOTALS	\$142,710,000.00	\$56,479,909.81	\$199,189,909.81	\$2,610,511,141.12	\$2,809,701,050.93

SOURCES OF AND SECURITY FOR PAYMENT OF THE SERIES AZ BONDS

Limited Obligations

The Series AZ Bonds are limited obligations of the Authority, payable solely from (i) payments received from the System under the Loan Agreement, and (ii) moneys held by the Trustee in funds established under the PHEFA Indenture excepting, however, sinking or PHEFA Indenture funds pledged to a specific series of Bonds other than the Series AZ Bonds.

Loan Agreement

Under the Loan Agreement, the System pledges its full faith and credit to the timely payment of the amounts payable and to the performance of the acts required of it thereunder. The Loan Agreement

constitutes an unsecured general obligation of the System and does not limit the ability of the System to incur additional indebtedness.

Additional PHEFA Bonds and Indebtedness

The Authority may issue Additional PHEFA Bonds under the PHEFA Indenture on parity with the Series AZ Bonds and the System may incur certain additional indebtedness, on a parity with or subordinate to, the Series AZ Bonds (other than with respect to certain funds under and as prescribed in the PHEFA Indenture). In order for such bonds to be issued or such other indebtedness to be incurred, the System must satisfy certain conditions set forth in the PHEFA Indenture, the Loan Agreement, the PEDFA Indenture, and the loan agreement, as amended, executed in connection therewith.

In accordance with the Loan Agreement and the Indenture, if the System pledges more than twenty percent (20%) of its Revenues (as defined in the PHEFA Indenture) to secure any indebtedness it may incur or any guaranties it may undertake, it must simultaneously grant an equal or superior lien on the Revenues to the Authority to be assigned to the Trustee to additionally secure the Series AZ Bonds and the other outstanding PHEFA Bonds, which equal or superior lien would simultaneously be granted to PEDFA in connection with the PEDFA Bonds. As of the date hereof, no such pledge has been made by the System.

In connection with the issuance of Additional PHEFA Bonds, additional funds may be established under the PHEFA Indenture for the benefit of the Bondowners of such additional series. Further, in connection with the issuance of other additional indebtedness of the system (including additional PEDFA Bonds), additional funds may be established under the PEDFA Indenture or under other instruments for the benefit of the owners of such additional indebtedness. In either such event, the owners of the Series AZ Bonds will have no claims or right to any such funds.

For a further description of the conditions under which such Additional PHEFA Bonds may be issued, see **APPENDIX III: SUMMARY OF LEGAL DOCUMENTS – “The PHEFA Indenture -- Additional PHEFA Bonds,”** and **“The PEDFA Indenture -- Additional Permitted Indebtedness.”**

BOND INSURANCE

Bond Insurance Policy

Concurrently with the issuance of the Series AZ Bonds, Assured Guaranty Municipal Corp. (“AGM”) will issue its Municipal Bond Insurance Policy for the Series AZ Bonds (the “Policy”). The Policy guarantees the scheduled payment of principal of and interest on the Series AZ Bonds when due as set forth in the form of the Policy included as Appendix V to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

Assured Guaranty Municipal Corp.

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. (“AGL”), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol “AGO”. AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and international public finance (including infrastructure) and structured finance markets and asset management services. Neither AGL nor any of its

shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM's financial strength is rated "AA" (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("S&P"), "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A2" (stable outlook) by Moody's Investors Service, Inc. ("Moody's"). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM's long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

Current Financial Strength Ratings

On October 29, 2020, KBRA announced it had affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On July 16, 2020, S&P announced it had affirmed AGM's financial strength rating of "AA" (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On August 13, 2019, Moody's announced it had affirmed AGM's insurance financial strength rating of "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

Capitalization of AGM

At March 31, 2021:

- The policyholders' surplus of AGM was approximately \$2,805 million.
- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("MAC") (as described below) were approximately \$959 million. Such amount includes 100% of AGM's contingency reserve and 60.7% of MAC's contingency reserve.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately \$2,121 million. Such amount includes (i) 100% of the net unearned premium reserve and deferred ceding commission income of

AGM, (ii) the net unearned premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiaries Assured Guaranty UK Limited ("AGUK") and Assured Guaranty (Europe) SA ("AGE"), and (iii) 60.7% of the net unearned premium reserve of MAC.

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and deferred ceding commission income of AGM and MAC were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGUK and AGE were determined in accordance with accounting principles generally accepted in the United States of America.

Merger of MAC into AGM

On April 1, 2021, MAC was merged into AGM, with AGM as the surviving company. Prior to that merger transaction, MAC was an indirect subsidiary of AGM (which indirectly owned 60.7% of MAC) and AGM's affiliate, Assured Guaranty Corp., a Maryland-domiciled insurance company ("AGC") (which indirectly owned 39.3% of MAC). In connection with the merger transaction, AGM and AGC each reassumed the remaining outstanding par they ceded to MAC in 2013, and AGC sold its indirect share of MAC to AGM. All of MAC's direct insured par exposures have become insured obligations of AGM.

Incorporation of Certain Documents by Reference

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the "SEC") that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

- (i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (filed by AGL with the SEC on February 26, 2021); and
- (ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021 (filed by AGL with the SEC on May 7, 2021).

All information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Series AZ Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at <http://www.sec.gov>, at AGL's website at <http://www.assuredguaranty.com>, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

Miscellaneous Matters

AGM makes no representation regarding the Series AZ Bonds or the advisability of investing in the Series AZ Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading “BOND INSURANCE”.

CERTAIN BONDOWNERS’ RISKS

Introduction

The Series AZ Bonds constitute limited obligations of the Authority, payable solely from the payments to be made by the System pursuant to the Loan Agreement. Future revenues and expenses of the System are subject to change. **NO REPRESENTATION OR ASSURANCE CAN BE GIVEN THAT THE SYSTEM WILL BE ABLE TO GENERATE SUFFICIENT REVENUES TO MEET ITS OBLIGATIONS, INCLUDING, ITS OBLIGATIONS UNDER THE LOAN AGREEMENT.**

The purchase of the Series AZ Bonds involves numerous investment risks, some of which are referred to in this Official Statement. No representation is made that the risks described or referred to in this Official Statement constitute all of the risks associated with investing in the Series AZ Bonds. Accordingly, prior to making a decision to invest in the Series AZ Bonds, each prospective purchaser thereof should make an independent evaluation of all of the information presented in this Official Statement, including the Appendices, and should review other pertinent information. **The Authority has made no independent investigation of the extent to which any such factors may have an adverse effect on the revenues of the System.**

General

There are a number of factors affecting institutions of higher education, including the System, that could have an adverse effect on the System’s financial position and its ability to make the payments required under the Loan Agreement, including the debt service payments on the Series AZ Bonds. These factors include, but are not limited to, competition with other educational institutions; an economic downturn in the regions served by the System; changing demographics in the regions served by the System; declining enrollment; increasing costs of technology; the failure to increase (or a decrease in) the funds obtained by the System from other sources, including appropriations from governmental bodies; the impact at various times of modifications to federal student financial aid programs; and increasing costs of compliance with changes in federal or state regulatory laws or regulations. See **APPENDIX I: “CERTAIN INFORMATION CONCERNING PENNSYLVANIA’S STATE SYSTEM OF HIGHER EDUCATION.”** Appendix I should be read in its entirety.

Certain State Appropriations

A significant portion of the System’s operating revenues consists of appropriations made to the System by the Commonwealth of Pennsylvania. There is a risk that such Commonwealth appropriations may not continue at current levels as a percentage of the System’s current unrestricted revenues which, in turn, may require greater than historic rates of tuition increases. See **APPENDIX I: “CERTAIN INFORMATION CONCERNING PENNSYLVANIA’S STATE SYSTEM OF HIGHER EDUCATION – Commonwealth Appropriations”** for a discussion of such appropriations.

Tuition Revenues

The System relies on tuition revenues to fund a substantial portion of its operations. There is no assurance that a satisfactory level of student demand for the academic programs offered at its institutions will continue throughout the term of the Series AZ Bonds.

The COVID-19 Pandemic

On January 31, 2020, the United States Department of Health and Human Services declared a public health emergency for the United States to aid the nation's health care community in responding to the novel coronavirus ("COVID-19"). On March 11, 2020, the World Health Organization ("WHO") declared the COVID-19 outbreak a global pandemic and on March 13, 2020, the President of the United States declared a national state of emergency.

Due to the increase in the number of COVID-19 cases around the country and internationally, federal, state, and local governmental bodies have and continue to enact and implement legislative actions, regulations, and other administrative directives and guidance to mitigate the impacts of COVID-19 on the general population and the economy. On March 6, 2020, the Governor declared a disaster emergency in the Commonwealth. On April 1, 2020, the Governor issued a stay-at-home order for all counties in the Commonwealth for all activities, except as needed to access, support, or provide life sustaining business, emergency, or government services. As of the date of this Official Statement, the stay-at-home order has been lifted in all counties in the Commonwealth although many restrictions continue to remain in effect for throughout the Commonwealth.

The System continues to monitor and assess the effects of the COVID-19 pandemic and its impact on the System's financial position and operations. While no assurance can be given by the System at this time, all System universities are planning for a return of normal campus operations and instruction for the Fall 2021 semester.

For more information on the System's response to COVID-19 and the related impact on the System's finances and operations, see **APPENDIX I: "COVID-19."**

Reorganization of the State System

The System is confronted with the challenges of demographic decline and significant reliance on state support, which has been stable. See **"CERTAIN BONDHOLDERS' RISKS – Certain State Appropriations"** above. To address the issues, the System is undergoing a System redesign and as a part thereof, has implemented a sustainability policy with targeted goals and monitoring of financial performance, and is in the process of reviewing the integration of several universities as a means to drive down costs while maintaining affordable higher education services for the students of the Commonwealth.

See **APPENDIX I: "CERTAIN INFORMATION CONCERNING PENNSYLVANIA'S STATE SYSTEM OF HIGHER EDUCATION – System Redesign – University Integrations"** for a further discussion regarding the impact of Act 50 on the redesign of the System.

Cybersecurity Risks

The System and its universities are focused on the importance of protecting the confidentiality of individuals' personal information, including certain student and employee information. The unauthorized release of such information, inappropriate access thereof, and failure to comply with certain required security safeguards with respect thereto, could result in materials adverse reputations and business operations consequences, including possible legal actions and economic liability. Electronic record and

other information technology systems utilized for purposes of student and employee recordkeeping may be targets for cyberattacks that could result in system breaches, system damage, unauthorized access and dissemination of personal information and disruption of online instruction. Cyberattacks and other cyber incidents are occurring frequently, are constantly evolving in nature, are becoming sophisticated and are being made by individuals and groups (including criminal hackers, so-called “hacktivists,” state-sponsored institutions, terrorist organizations and individuals or groups participating in organized crime) with a wide range of expertise and motives.

Enforceability of Remedies

The remedies available to Bondowners upon an Event of Default under the PHEFA Indenture or the Loan Agreement are, in many respects, dependent upon judicial action that is subject to discretion or delay. Under existing law and judicial decisions, the remedies specified in the PHEFA Indenture and the Loan Agreement may not be readily available or may be limited. A court may decide not to order specific performance.

The various legal opinions to be delivered concurrently with the original delivery of the Series AZ Bonds will be qualified as to enforceability of the various legal instruments by limitations imposed by bankruptcy, reorganization, insolvency or other similar laws or legal or equitable principles affecting creditor’s rights.

No Recourse

All covenants, stipulations, promises, agreements and obligations of the Authority contained in the PHEFA Indenture are deemed to be covenants, stipulations, promises, agreements and obligations of the Authority and not of any member, officer or employee of the Authority in his or her individual capacity, and no recourse shall be had for the payment of the principal or redemption price of or interest on the Series AZ Bonds or for any claim based thereon or on the PHEFA Indenture against any member, officer or employee of the Authority or any person executing the Series AZ Bonds.

LEGALITY FOR INVESTMENT

Under the Act, the Series AZ Bonds are designated securities in which all officers of the Commonwealth and its political subdivisions and municipal officers and administrative departments, boards and commissions of the Commonwealth, all banks, bankers, savings banks, trust companies, savings and loan associations, investment companies and other persons carrying on a banking business, all insurance companies, insurance associations and other persons carrying on an insurance business, and all administrators, executors, guardians, trustees and other fiduciaries, and all other persons whatsoever who are authorized to invest in bonds or other obligations of the Commonwealth, may properly and legally invest any funds, including capital belonging to them or within their control, and the Series AZ Bonds are securities which properly and legally may be deposited with, and received by, any Commonwealth or municipal officers or agency of the Commonwealth for any purpose for which the deposit of bonds or other obligations of the Commonwealth is authorized by law.

NEGOTIABILITY

Under the Act, the Series AZ Bonds have all the qualities of negotiable instruments under the law merchant and the laws of the Commonwealth relating to negotiable instruments.

TAX MATTERS

Federal Income Taxation

In the opinion of Bond Counsel, interest on the Series AZ Bonds is not excludable from gross income for purposes of federal income tax purposes. Interest on the Series AZ Bonds is taxable as ordinary income for federal income tax purposes at the time the interest accrues or is received in accordance with a Bondowner's method of accounting for federal income tax purposes. Prospective purchasers of the Series AZ Bonds who are not United States persons, as defined for federal income tax purposes, may be subject to special rules and should consult their tax advisors.

State Income Tax Exemption

Bond Counsel is of the opinion that under current Pennsylvania law, interest on the Series AZ Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax. Bond Counsel will express no opinion regarding other state or local tax consequences arising with respect to the Series AZ Bonds, including whether interest on the Series AZ Bonds is exempt from taxation under the laws of any jurisdiction other than the Commonwealth of Pennsylvania.

PROSPECTIVE PURCHASERS OF THE SERIES AZ BONDS SHOULD CONSULT THEIR TAX ADVISERS WITH RESPECT TO THE FEDERAL, STATE AND LOCAL INCOME TAX CONSEQUENCES OF OWNERSHIP OF THE SERIES AZ BONDS AND ANY CHANGES IN THE STATUS OF PENDING OR PROPOSED TAX LEGISLATION.

LEGAL MATTERS

Legal matters incident to the authorization, issuance and sale of the Series AZ Bonds will be passed upon by Ahmad Zaffarese LLC of Philadelphia, Pennsylvania, Bond Counsel. In connection with the issuance of the Series AZ Bonds, each of such firms will render an opinion in substantially the form included as Appendix IV hereto. Certain legal matters will be passed upon for the Authority by its counsel, Barley Snyder LLP, Lancaster, Pennsylvania and for the System by its Chief Legal Counsel.

RATINGS

Fitch Ratings has assigned its unenhanced/underlying municipal bond rating of "A+" (stable outlook) to the Series AZ Bonds. Moody's has assigned the bonds its unenhanced/underlying municipal bond rating of "Aa3" (stable outlook) (based upon the highest of AGM's financial strength ratings), and S&P has assigned its rating of "AA" (stable outlook) to the Series AZ Bonds on the understanding that the Policy insuring the scheduled payment of the principal of and interest due with respect to the Series AZ Bonds will be issued by AGM upon the issuance of the Series AZ Bonds.

Any explanation of these ratings may be obtained only from the rating agencies issuing such ratings. Generally, rating agencies base their ratings on information and materials supplied to them and on their own investigations, studies and assumptions. There is no assurance that such ratings, once assigned, will remain for any given period of time or that they will not be lowered or withdrawn entirely by either rating agency concerned if in its judgment circumstances so warrant. Any such downward change or withdrawal of such ratings may have an adverse effect on the market price and/or marketability of the Series AZ Bonds.

LITIGATION AND LEGAL PROCEEDINGS

No Litigation Affecting the Series AZ Bonds

There is no litigation of any nature pending or, to the Authority's knowledge, threatened against the Authority at the date of this Official Statement to restrain or enjoin the issuance, sale, execution or delivery of the Series AZ Bonds, or in any way contesting or affecting the validity of the Series AZ Bonds or any proceedings of the Board of the Authority taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or the security provided for the payment of the Series AZ Bonds or the existence or powers of the Authority or the performance of the Series AZ Project.

Commonwealth Litigation Against RBC Capital Markets, LLC

On May 20, 2018, the Commonwealth of Pennsylvania and City of Harrisburg filed a lawsuit in the Commonwealth Court of Pennsylvania ("Commonwealth Complaint") against a number of professional advisors and financial firms alleging, inter alia, professional malpractice, unjust enrichment and breach of fiduciary duty in connection with a series of bonds issued by the Pennsylvania Economic Development Financing Authority in 2003, which has since defaulted, to finance an incinerator project ("Defaulted 2003 Bonds"). RBC Capital Markets, LLC ("RBC"), Municipal Advisor to the System in connection with the issuance of the Series AZ Bonds, was one of the underwriters of the Defaulted 2003 Bonds and, accordingly, is one of the defendants named in the Commonwealth Complaint. RBC intends to vigorously defend itself against the allegations in the Commonwealth Complaint and does not believe that such litigation has a material impact on its ability to act as Financial Advisor in connection with the issuance of the Series AZ Bonds.

CONTINUING DISCLOSURE

To assist the Underwriters in satisfying the requirements of Rule 15c2-12 (the "Rule") promulgated by the Securities and Exchange Commission, the System will enter into a Continuing Disclosure Agreement with The Bank of New York Mellon Trust Company, N.A., as dissemination agent (in such capacity, the "Dissemination Agent") for the benefit of Bondowners of the Series AZ Bonds. Pursuant to such agreement, the System will covenant to provide, through the Dissemination Agent, to the Electronic Municipal Market Access ("EMMA") system of the Municipal Securities Rulemaking Board (the "MSRB"), certain annual financial information and operating data of the nature included in the following sections of Appendix I to this Official Statement: Accreditation; Degrees Awarded; Enrollment; Application and Admissions; Tuition, Student Fees and Competition; Freshman Enrollment Composition; Student Financial Aid; Commonwealth Appropriations; Unrestricted Net Position; Faculty and Staff; and Outstanding Indebtedness. Audited financial statements of the System also will be provided to EMMA when available. The System will covenant to provide such information for a fiscal year within 150 days following the end of such fiscal year, commencing with the fiscal year ending June 30, 2020. The System will covenant to provide notice in a timely manner to EMMA of a failure of the System to provide the required annual financial information on or before the date specified in the Continuing Disclosure Agreement.

In the Continuing Disclosure Agreement, the System also will covenant to provide, within 10 business days, to EMMA notice of the occurrence of any of the following events with respect to the Series AZ Bonds: (1) principal and interest payment delinquencies, (2) non-payment related defaults, if material, (3) unscheduled draws on debt service reserves reflecting financial difficulties, (4) unscheduled draws on credit enhancements reflecting financial difficulties, (5) substitution of credit or liquidity providers, or their failure to perform, (6) 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 AZ Bonds, or other material events affecting the tax status of the Series AZ Bonds, (7) modifications to rights of Bondowners of the Series AZ Bonds, if material, (8) Series AZ Bond calls, if material, and tender offers, (9) defeasances, (10) release, substitution or sale of property securing repayment of the Series AZ Bonds, if material, (11) rating changes, (12) bankruptcy, insolvency, receivership or similar event of the System, (13) the consummation of a merger, consolidation, or acquisition involving the System or the sale of all or substantially all of the assets of the System 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, (14) appointment of a successor or additional trustee or the change of name of a trustee, if material, (15) the incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation (as defined in the Rule) of the obligated person, any of which affect securities holders, if material; (16) A default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties, and (17) failure to provide annual information as required. 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 shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

The System and the Dissemination Agent may amend the Continuing Disclosure Agreement, including amendments deemed necessary or appropriate in the judgment of the System (whether to reflect changes in the availability of information or in accounting standards or otherwise), and any provision of the Continuing Disclosure Agreement may be waived, provided that the following conditions are satisfied: (a) if the amendment or waiver relates to the undertakings of the System to provide annual financial information and notices, such amendment is made in connection with a change in circumstances that arises from a change in legal requirements, change in law or change in the identity, nature or status of the System or the type of business or operations conducted by the System; (b) the undertakings contained in the Continuing Disclosure Agreement, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Series AZ Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and (c) the amendment either (i) is approved by the Bondowners of the Series AZ Bonds in the same manner as provided in the PHEFA Indenture for amendments to the PHEFA Indenture with the consent of Bondowners, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Bondowners or Beneficial Owners of the Series AZ Bonds, the Authority or the Dissemination Agent. The System's obligation to provide the foregoing annual financial information and notices of the specified events when material will terminate when the Series AZ Bonds have been fully paid or legally defeased or at such other times as such information and notices (or any portion thereof) are no longer required to be provided by the Rule as it applies to the Series AZ Bonds. Notice of such amendment will be provided to EMMA.

Under the Continuing Disclosure Agreement, the sole remedy for a breach or default by the System of its covenants to provide annual financial information and notices will be an action to compel specific performance. No action may be brought for monetary damages or otherwise under any circumstances. A breach or default under the Continuing Disclosure Agreement will not constitute an Event of Default under the PHEFA Indenture or the Loan Agreement.

The Authority has no responsibility for the Continuing Disclosure Agreement or for the System's compliance with the Continuing Disclosure Agreement or for the contents of the financial information, operating data or notices provided thereunder or any omissions therefrom.

During the last five years, the System failed to file with EMMA, in a timely manner, certain Annual Financial Information in accordance with the Rule and as required under its previous continuing disclosure undertakings as follows. For the fiscal year ended June 30, 2016, Annual Financial Information otherwise timely filed was not properly associated with certain CUSIPs associated with four series of the System's Prior Bonds. The required filings were corrected on EMMA on or before September 1, 2017.

UNDERWRITING

The Series AZ Bonds are being purchased for reoffering by a group of banks and investment banking firms represented by Robert W. Baird & Co., Inc., as the underwriter (the "Underwriter"). The Underwriter has agreed to purchase the Series AZ Bonds at an aggregate purchase price of \$143,898,430.76.

FINANCIAL ADVISOR

The System has retained RBC Capital Markets, LLC as its financial advisor in connection with the issuance of the Series AZ Bonds. The receipt of a fee by RBC Capital Markets, LLC is contingent upon the issuance of the Series AZ Bonds. The Financial Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information in this Official Statement.

The Financial Advisor may also receive a fee for conducting a competitive bidding process regarding the investment of certain proceeds of the Series AZ Bonds.

MISCELLANEOUS

All of the summaries of the provisions of the Act, Act 188, the PHEFA Indenture, the PEDFA Indenture, the Loan Agreement and of the Series AZ Bonds set forth herein are only brief descriptions of certain provisions thereof, and do not purport to be complete statements of the provisions of any such document and are qualified in all respects by reference to such documents in their entireties to which attention is hereby directed for further information.

Information concerning the System has been provided by the Office of the Chancellor. All estimates, projections and assumptions herein have been made on the best information available and are believed to be reliable, but no representations whatsoever are made that such estimates, projections or assumptions are correct or will be realized. So far as any statements herein involve matters of opinion, whether or not expressly so stated, they are intended merely as such and not as representations of fact.

This Official Statement is not to be construed as a contract or agreement between the Authority or the System and the purchasers or Bondowners of any of the Series AZ Bonds. The information hereinabove set forth and that which follows should not be construed as constituting all of the conditions affecting the Authority, the System or the Series AZ Bonds.

The distribution of this Official Statement has been duly authorized by the Authority and the System. The Authority has not assisted in the preparation of this Official Statement, except for the statements concerning the Authority under the sections captioned "**The Authority**" and "**Litigation**" herein and, except for those sections, the Authority is not responsible for any statements made in this Official Statement. Except for the execution and delivery of documents required to effect the issuance of the Series AZ Bonds, the Authority has not otherwise assisted in the public offer, sale or distribution of the Series AZ Bonds. Accordingly, except as aforesaid, the Authority assumes no responsibility for the disclosures set forth in this Official Statement.

**PENNSYLVANIA HIGHER EDUCATIONAL
FACILITIES AUTHORITY**

By: /s/ Eric Gutshall
Eric Gutshall
Executive Director

Approved:

STATE SYSTEM OF HIGHER EDUCATION

By: /s/ Sharon P. Minnich
Sharon P. Minnich
Executive Vice Chancellor

Appendix I: Certain Information Concerning Pennsylvania's State System of Higher Education

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PENNSYLVANIA'S STATE SYSTEM OF HIGHER EDUCATION

History and Philosophy of the System

Pennsylvania's State System of Higher Education (the "System") is a body corporate and politic constituting a public corporation and a governmental instrumentality of the Commonwealth of Pennsylvania, created by the State System of Higher Education Act of November 12, 1982, P.L. 660, No. 188, as amended ("Act 188").

Act 188 established a Board of Governors and the Office of the Chancellor and awarded university status to the 13 state-owned colleges on July 1, 1983. (Indiana University of Pennsylvania was awarded university status prior to the enactment of Act 188.) On that date, the System, composed of the 14 state-owned universities in the Commonwealth and the Office of the Chancellor, embarked upon its primary mission to provide "instruction for undergraduate and graduate students to and beyond the master's degree in the liberal arts and sciences, and in the applied fields, including the teaching profession." The System Universities are herein referred to individually as a "University" or a "System University" and collectively as the "Universities" or "System Universities." The Universities also have specific missions in business, human services, public administration, and technology. The 14 System Universities are:

Bloomsburg University of Pennsylvania
California University of Pennsylvania
Cheyney University of Pennsylvania
Clarion University of Pennsylvania
East Stroudsburg University of Pennsylvania
Edinboro University of Pennsylvania
Indiana University of Pennsylvania
Kutztown University of Pennsylvania
Lock Haven University of Pennsylvania
Mansfield University of Pennsylvania
Millersville University of Pennsylvania
Shippensburg University of Pennsylvania
Slippery Rock University of Pennsylvania
West Chester University of Pennsylvania

Bound together by the mission and by the mandate set forth in Act 188, the Universities strive to provide the highest quality education feasible for their students at the lowest possible cost.

The history of each University evolved from a need to train teachers for the Commonwealth's secondary educational institutions and to elevate the accepted standards of education. The Commonwealth adopted the Normal School Act on May 20, 1857, which provided the standards by which teachers for the Commonwealth's Normal Schools were to be trained. During the 25 years following passage of the Normal School Act, all of the universities that now comprise the System were privately established and were recognized as State Normal Schools.

On September 22, 1921, the Commonwealth enacted legislation for the acquisition of 13 State Normal Schools, adding the 14th State Normal School in 1922. These schools subsequently were redesignated as State Teachers' Colleges in 1929 (the "State Colleges"). The responsibility for certifying teachers was then transferred from the county superintendents to the Commonwealth. Within ten years following this transfer of responsibility, teacher certification requirements changed from a two-year certificate program to a four-year college degree program.

In 1959, the State Teachers' Colleges were redesignated State Colleges and, in 1961, legislation was enacted to allow the State Colleges to offer a wider range of educational opportunities. (See the section titled "Degrees Awarded" herein for more information on current educational opportunities.) Graduate programs were soon approved and instituted at many of the State Colleges. Indiana State College achieved university status in 1965, and the remaining 13 State Colleges were recognized as Universities in 1983 with the enactment of Act 188. Each University, with its unique geography and array of academic offerings, serves as a cultural center for its surrounding community.

Additionally, eight of the Universities are involved with the operation of the Chincoteague Bay Field Station of the Marine Science Consortium, a nonprofit educational 501(c)(3) corporation located in Wallops Island, Virginia (the "Consortium"), committed to excellence in education and research in the marine and environmental sciences. The Consortium was founded by eight of the Universities in 1970 and maintains marine stations where both field and laboratory investigations of coastal ecosystems are conducted under the supervision of University faculty and qualified marine education instructors. The Consortium supports precollege, college, and Road Scholar programs, an adult education initiative.

The Board of Governors

The System is governed and guided by a Board of Governors (the "Board") composed of 20 members: the Governor of Pennsylvania (or designee), the Secretary of Education (or designee), one senator appointed by the President Pro Tempore of the Senate, one senator appointed by the minority leader of the Senate, one representative appointed by the Speaker of the House of Representatives, one representative appointed by the minority leader of the House of Representatives, and 14 members who are appointed by the Governor of Pennsylvania and confirmed by the Senate. The Board has the authority to exercise all sanctioned corporate powers in the administration of its overall responsibility to plan and to coordinate the development and operation of the System. Members of the Board appointed from the General Assembly serve a term of office concurrent with their respective elective terms as members of the General Assembly with the Governor and Secretary of Education (or their respective designees), serving so long as they continue in office. Eleven members of the Board, appointed by the Governor, customarily will serve four-year appointments, at which time a reappointment for an additional four-year term may be commissioned. Three of the members of the Board, appointed by the Governor, must be undergraduate students presently attending a System University. The student members are selected from the presidents of the local campus student government associations or their local equivalents, and their terms automatically expire upon graduation or separation from the System. Five members of the Board also must hold membership in one of the local councils of trustees serving the Universities with no more than one trustee representing a University. The Board annually elects a chair, and at present there are two vice chairs. Members of the Board receive no compensation for their service; however, all expenses incurred in the performance of their duties may be reimbursed by the System.

As members of the Board, the Governor of Pennsylvania and the Secretary of Education (or their respective designees), are entitled to attend all scheduled meetings, to address matters of concern before the Board, and to vote. However, they cannot be elected as officers of the Board.

In accordance with Act 188, the Board has "overall responsibility for planning and coordinating the development and operation of the System." To this end, the Board employs the chancellor as the chief executive officer of the System. The chancellor has the authority to address any matters of discussion before the Board but does not have voting privileges. The Board must approve the chancellor's salary and delineate any duties and responsibilities beyond those prescribed in Act 188.

Act 188 requires the Board conduct a public meeting quarterly; however, additional meetings may be convened by the chair or upon the request of six members of the Board. The Office of the Chancellor has the responsibility of presenting an agenda to the Board for action at each scheduled meeting. Eleven members of the Board attending any meeting of the Board constitute a quorum.

The president of each University is appointed by the Board originally for an initial fixed term from a list of qualified candidates submitted by the chancellor to the Board. Performance evaluations are used to evaluate the services of each president before the term of such president's appointment can be extended.

Through the chancellor and the 14 presidents of the Universities, the Board administers broad fiscal, personnel, and educational policies and establishes general policies that will be beneficial to the System in attaining its goal to offer an education of high quality to all its students.

The Board approves the annual operating and capital budgets for the System. The Board's request for operating and capital appropriations is submitted to the State Board of Education for comment. As required by statute, the Board then submits its request for operating and capital appropriations to the Governor not later than November 1 of the fiscal year preceding the fiscal year for which the appropriations are requested. The Board independently submits its request for operating and capital appropriations to the General Assembly. When required, the Board or its chancellor must represent the System before the General Assembly, the Governor of Pennsylvania, and the State Board of Education.

Under Act 188, the Board fixes the levels of tuition fees across the System, including the allowance for a differential between students who are residents of the Commonwealth and those who are nonresidents. All other fees are set locally by each University.

There are five standing committees which make policy recommendations to the full Board: Audit and Compliance, Executive, Governance and Leadership, Student Success, and University Success. The present bylaws provide that members of the Board may attend and participate in the meetings of any of the committees; however, only committee members may vote on an issue under consideration.

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BOARD OF GOVERNORS

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Student
Shippensburg, PA

Neil R. Weaver
Executive Deputy Secretary
Department of Community and Economic
Development
York, PA

Tom Wolf
Governor
Commonwealth of Pennsylvania
Harrisburg, PA

Janet L. Yeomans
Former Executive, 3M Corporation
Philadelphia, PA

4 vacancies

Office of the Chancellor

Act 188 stipulates the chancellor “shall be responsible for the administration of the System under policies prescribed by the Board.” As the chief executive officer of the System, the chancellor advises the Board on budgetary matters, academic program matters, and the formulation of personnel and administrative policies and procedures. In order to oversee and control all of the important daily endeavors of the System, the chancellor is empowered to employ a central office staff to fulfill the mandates of both Act 188 and the Board. Under the chancellor’s direction, the presidents, line officers, and support staff provide Systemwide management in such areas as academic and student policy, planning, business affairs, faculty and staff affairs, legislative policy, institutional research, legal affairs, capital planning, System relations, advancement, and equal educational opportunities. The chancellor assists the Board in its appointment of the presidents by submitting to the Board, with his or her recommendation, the names of individuals recommended for consideration by the councils of trustees. Upon the appointment of each president, an annual evaluation process must be conducted, the results of which are reviewed thoroughly by the Board.

Daniel I. Greenstein Chancellor

Dr. Daniel I. Greenstein became the fifth chancellor of Pennsylvania’s State System of Higher Education on September 4, 2018. In that role, he serves as chief executive officer of the System, which operates Pennsylvania’s 14 public universities, serving approximately 100,000 students. The chancellor works with the Board of Governors to recommend and develop overall policies for the System. Dr. Greenstein previously led the Postsecondary Success strategy at the Bill and Melinda Gates Foundation, where he worked with other higher education leaders across the country on initiatives designed to raise educational attainment levels and to promote economic mobility, especially among low-income and minority students. He developed and implemented a national strategy for increasing the number of degrees awarded and for reducing the attainment gaps among majority and nonmajority students at U.S. colleges and universities. Before joining the foundation, Dr. Greenstein was vice provost for academic planning and programs for the University of California (UC) system. In that role, he oversaw systemwide academic planning and programs, including the University of California Press; the California Digital Library; the UC system’s Education Abroad Program; internship programs in Washington, D.C., and Sacramento, CA; and UC Online Education. Dr. Greenstein has created and led several internet-based academic information services in the United States and the United Kingdom, and served on boards and acted in strategic consulting roles for educational, cultural heritage, and information organizations. He began his academic career as a senior lecturer in Modern History at Glasgow University in Scotland. He holds both bachelor’s and master’s degrees from the University of Pennsylvania and a D.Phil. from the University of Oxford.

The Office of the Chancellor operates with a core leadership team comprising an executive vice chancellor; deputy chancellor; a vice chancellor and chief academic officer; a vice chancellor and chief diversity, equity, and inclusion officer; and a chief information officer. Leadership team members serve the System in an important capacity, individually and collectively, and work together to ensure that the academic programs offered on all of the campuses best suit the needs of the Commonwealth.

Sharon P. Minnich Executive Vice Chancellor

The executive vice chancellor provides executive-level oversight and leadership for the effective execution of budget, finance, facilities management, human resources, labor relations, general administration, and shared services functions Systemwide while advising the chancellor regarding high-impact practices to advance the System Redesign (as defined below) efforts. She renders guidance in the development of policy and business procedures to be implemented by the chancellor and the Board. Such policy issues include accounting and financial policy and reporting; treasury operations including cash management, commercial banking, and investment programs; capital financing and planning; emergency management; physical plant planning; security

management; insurance management; annual System budget development and management; and procurement management.

Ms. Minnich was appointed vice chancellor for administration and finance in January 2019, and recently named executive vice chancellor. Prior to joining the System, she served as secretary of the Governor's Office of Administration, a position she held since 2015. As a member of Governor Tom Wolf's senior staff and cabinet, she led the agency responsible for oversight and administration of the enterprise functions of human resources, information technology, and continuity of government and records management for nearly 80,000 employees under the Governor's jurisdiction, implementing shared services for both human resources and information technology. Ms. Minnich previously served as the assistant chief information officer for the Commonwealth, chief information officer for the Department of Revenue, deputy secretary for financial administration in the Office of the Budget, and deputy secretary for procurement at the Department of General Services. In these roles, she improved operations and managed significant process and system changes, including the implementation of a new financial shared services model for Pennsylvania, the implementation of Pennsylvania's tax amnesty project, and the state's enterprise resource planning system implementation. In addition to her work in state government, Ms. Minnich has worked as a consultant in the private sector, specializing in strategy and transformation. Her experience includes positions at Highmark Blue Cross/Blue Shield; Meridian Bank; SAP Business Consulting; and Deloitte Consulting, LLP. She served for 12 years on the Board of Trustees for her alma mater, Albright College, where she earned a Bachelor of Arts in economics and political science, and holds a master's degree in government administration from the University of Pennsylvania.

Randy A. Goin, Jr.
Deputy Chancellor

The deputy chancellor provides executive-level oversight for effective and efficient operation of the Board of Governors and the Office of the Chancellor and works closely with leaders from the System, Universities, government, and business to ensure timely advancement of System strategic priorities.

Dr. Goin joined the System as chief of staff in December 2013 and was named Deputy Chancellor in April 2019. Prior to joining the System's leadership team, Dr. Goin was chief of staff for the Florida Board of Governors, which oversees the second largest university system in America. He also led the public affairs, governmental relations, and communications group, which worked to articulate a clear message and vision with all constituents. He launched his career in the private sector more than two decades ago and later moved into communications management roles in higher education. He ultimately served as associate vice president for marketing at Florida Atlantic University, where he helped build the communications organization and reposition the institution's brand. Dr. Goin was then named university chief of staff and worked closely with the president to reshape the institution's organizational structure by increasing focus on top priorities. He served as a conduit between the administration and the university trustees—enhancing board relations and operations. He earned a bachelor of architecture degree and a master of arts degree with a focus in corporate and political communication from Florida Atlantic University and a Ph.D. in communication from Indiana University of Pennsylvania.

Donna F. Wilson
Vice Chancellor and Chief Academic Officer

The vice chancellor and chief academic officer (CAO) provides executive leadership and support for academic program planning and for the academic success of the Universities and the System as a whole. The CAO works closely with the 14 university chief academic officers to develop and execute a strategy that strengthens and incentivizes the use of collaborative, shared, or system-level enterprise infrastructure and provides leadership to support the collaborative development of policies, procedures, and practices that strengthen an inclusive model of shared governance at the system level and to foster dialogue among all System internal stakeholders to improve systemwide shared governance and collaboration.

Dr. Donna F. Wilson was appointed as the System's chief academic officer in October 2019. She was the Provost and Executive Vice President at Lock Haven University, a position she had held since July 2012. Wilson served the university as interim president for several months in 2018. She was responsible for sustaining and improving excellence in all academic matters, community partnerships, assessment and accreditation, institutional research, NCAA athletics, generating revenue, and strategic planning and implementation. Prior to appointment at Lock Haven University, Dr. Wilson served at Brooklyn College of the City University of New York as associate provost, dean of undergraduate studies, director of the CUNY Honors College, and faculty in the Department of Classics and the CUNY Graduate Center. Dr. Wilson was awarded a Leonard and Claire Tow Professorship, a Mrs. Giles Whiting Award for Excellence in Teaching in the Humanities, and multiple university grants to sponsor research in the Classics. The Harvard Center for Hellenic Studies awarded her a prestigious one-year fellowship to advance research on divine twins in Indo-European epic. Dr. Wilson holds a PhD in Classics from the University of Texas at Austin. She is the author of *Ransom, Revenge, and Heroic Identity in the Iliad* (2002, Cambridge University Press), articles, book chapters, and book reviews, and has delivered numerous invited lectures and refereed papers for learned societies.

Denise Pearson

Vice Chancellor and Chief Diversity, Equity, and Inclusion Officer

The vice chancellor and chief diversity, equity, and inclusion officer (VC-DEI) is a new position in 2020. This position is responsible for developing and operationalizing an outcomes-oriented strategy that addresses persisting inequalities in areas including but not limited to student access and outcomes, employee recruitment, retrenchment, and progression. The strategy will seek to optimize the cultural competencies, policy/procedural landscape, and overall level of engagement required for the effective and respectful operation of more diverse, equitable, and inclusive campuses. The VC-DEI works closely with the chancellor and Board of Governors, the System's Universities' presidents and trustees, and other system-level and university-level leaders to achieve this vision.

Dr. Denise Pearson was appointed as the System's chief diversity officer in August 2020. Prior to joining the System, she served as Vice President for Academic Affairs and Equity Initiatives for the association of State Higher Education Executive Officers (SHEEO) where she was responsible for collaborating with chief executives of state higher education agencies and their staffs to promote policies and practices that improved access and student success across member states and territories. During her tenure at SHEEO, Dr. Pearson worked closely with chief academic and chief diversity officers to support effectiveness and build capacity to improve student outcomes in a variety of areas including equity-minded leadership, teacher preparation, adult learners, state degree attainment, and postsecondary education for incarcerated populations. She is the author and co-author of several publications spanning these areas. Dr. Pearson is a 2019 graduate of the American Association of State Colleges and Universities (AASC&U) Millennium Leadership Initiative and a current member of the National Association of Diversity Officers in Higher Education. She earned a Ph.D. in Education Administration and Supervision (Marquette University), M.A. in Conflict Resolution (University of Denver), M.S. in Education Administration (Concordia University), and B.A. in Human Services (Pace University). Dr. Pearson also completed mediation training through the Colorado Bar Association.

Rosa Lara

Chief Information Officer

The chief information officer is a new position in 2020. This position is responsible for overseeing IT strategy, governance, policy and compliance, and works closely with various stakeholders in the System. Ms. Lara joined the System in April 2019 as the project manager for System Redesign and was named chief information officer in January 2020.

Prior to joining the System, Ms. Lara was the director of the Office of Strategy and Management in the Office of Information Technology (OIT) Governor's Office of Administration, a position she held since July 2017. Ms. Lara has more than 19 years' experience in the information technology field, including oversight of

very visible and highly complex initiatives. She has experience in the areas of business process reengineering, large scale implementation efforts, financial management, procurement, and managing for results. Ms. Lara held numerous positions within OIT, serving as the deputy chief information officer for the Commonwealth, overseeing OIT's planning and budgeting process and human resource functions, including special projects such as the Enterprise Grants Management initiative and the implementation of an enterprise system to oversee the American Recovery and Reinvestment Act (ARRA) funds. She also led the Commonwealth's IT shared services transformation initiative, which implemented a new shared services operating model for IT services focused on improving service delivery while reducing cost. Ms. Lara earned a bachelor's in public administration from The College of New Jersey, a master's of public administration from the Maxwell School of Citizenship Affairs, and a master's of information resource management from Syracuse University.

The Presidents of the Universities

The presidents of the 14 Universities are appointed by the Board for a specified term. In an effort to ensure that the presidents are guiding their respective Universities toward the achievement of the System's unified goals, the chancellor reviews the goals and objectives of each president annually. As the chief executive officers of the Universities, the presidents are responsible for development and implementation of policies and procedures regarding personnel administration, fiscal management, admissions, discipline and expulsion guidelines, instructional programs, research programs, and public service programs within the framework prescribed by the Board.

The presidents must ensure that prudent fiscal policies are followed in the expenditure of all Commonwealth appropriations, tuition, fees, and all other available funds. They have the authority to obligate their respective Universities for ongoing contractual liabilities within the limitations of the operating budget of the University. Overall, their primary responsibility is to implement the policies of the Board and to perform all of those operations necessary for the orderly and judicious management of the University. Each president may attend any scheduled meeting of the University's council of trustees and address matters before such council, but may not vote.

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The 14 University presidents are listed below.

Dr. Bashar W. Hanna
Bloomsburg University of Pennsylvania

Mr. Robert Thorn (interim effective 2/1/2021)
California University of Pennsylvania

Mr. Aaron A. Walton
Cheyney University of Pennsylvania

Dr. Dale-Elizabeth Pehrsson
Clarion University of Pennsylvania

Mr. Kenneth Long (interim effective 07/31/20)
East Stroudsburg University of Pennsylvania

Dr. Dale-Elizabeth Pehrsson (interim effective
12/31/20)
Edinboro University of Pennsylvania

Dr. Michael A. Driscoll
Indiana University of Pennsylvania

Dr. Kenneth S. Hawkinson
Kutztown University of Pennsylvania

Dr. Bashar W. Hanna (interim effective 2/5/2021)
Lock Haven University of Pennsylvania

Dr. Charles E. Patterson (until 06/30/21)
Mansfield University of Pennsylvania

Dr. Daniel A. Wubah
Millersville University of Pennsylvania

Ms. Laurie A. Carter, J.D. (until 06/30/21)
Dr. Charles E. Patterson (interim effective
07/01/21)
Shippensburg University of Pennsylvania

Dr. William J. Behre
Slippery Rock University of Pennsylvania

Dr. Christopher M. Fiorentino
West Chester University of Pennsylvania

The Councils of Trustees

Each University within the System maintains a council of trustees consisting of 11 members. Members (other than student members) are nominated and appointed by the Governor with the advice and consent of the Senate. Student members are selected with the advice and consent of University presidents and are appointed by the Board of Governors for a term which expires upon graduation, separation from the University or failure to maintain good academic standing at the University in which the student is enrolled. At least two of these members must be alumni of the institution. Ten of the members serve terms of six years while one member must be a full-time undergraduate student, enrolled full time at the institution of which he/she is a trustee. The student member serves a term of four years or for so long as he/she is a full-time undergraduate student in good academic standing. Six members of a council constitute a quorum, and each council meets at least quarterly and additionally at the call of the president, or its chair, or upon the request of three of its members.

Each council's specific responsibilities include making recommendations to the chancellor for the appointment and retention of the president of its University following input by students, faculty, staff and alumni; making recommendations to the chancellor for the dismissal of the president; reviewing and providing input to the president pertaining to policies and procedures governing the use of institutional facilities and property; and reviewing and approving the recommendations of the president pertaining to annual operating and capital budget requirements for submission to the Board. The council has the authority to approve schools and academic programs; to review and approve recommendations for charges for tuition and to approve room and board, and miscellaneous fees with the exception of student activity fees and any fees related to the provision of contracted health services; to review all contracts and purchases negotiated or awarded by the president, including any contract or purchase reports, with or without competitive bidding, and all contracts for consulting services entered into by the president; and to take such action as may be necessary to effectuate the powers and duties

delegated by Act 188. As stated above, the Board of Governors has the statutory authority to fix the levels of tuition fees across the System.

Capital Facilities

The campuses of the 14 Universities encompass more than 4,700 acres. To date, there are almost 900 physical plant structures, with over 32 million gross square feet. Capital facilities in place prior to the System's inception in 1983, state-appropriated capital renovations of those facilities, and new state-appropriated capital facilities are made available to the System at no cost. In 2002, the Commonwealth transferred custody and control of these facilities to the System. Under this arrangement, the Commonwealth retains fee title for the facilities and continues to provide state appropriations for capital facilities construction and renovations. Capital facilities acquired and constructed after 1983 by the System from sources other than state appropriations, as well as capitalized renovations and capital assets, such as equipment, furnishings, and library books, are assets on the System's balance sheet and have a book value, as of June 30, 2020, of \$2 billion net of accumulated depreciation. The current replacement cost of the total System capital facilities and infrastructure is estimated to be in excess of \$11 billion.

Educational and General Facilities—The Commonwealth appropriates funds for capital repairs and renovations while the System contributes regular maintenance funds from its operating budget. Currently, the Commonwealth is providing approximately \$70 million annually toward capital improvement for the System's academic facilities. The System contributes any additional funding for capital repairs and renovations needed through bond financing, operating funds, or fundraising. The System has expended approximately \$2 billion for renovation and replacement of existing academic facilities since 1996, and the Commonwealth has also appropriated approximately \$2 billion over the same period.

Each University's capital budget request for the forthcoming fiscal year is submitted to the Office of the Chancellor. In order for a capital project to be included in the appropriations request to the Governor and to the General Assembly, the Office of the Chancellor assesses the project's priority using criteria that include: University priorities; academic benefit; space requirements; ADA, safety, and code compliance deficiencies; new revenue or matching funds potential; cost savings potential; and impact on deferred maintenance. The equitable distribution of capital funds to each of the Universities is also considered in developing the plan. The Office of the Chancellor conducts a thorough review of each capital project request to determine the overall contribution of the project to the well-being of the System as a whole.

Auxiliary Facilities—The Board of Governors has adopted 2000-02-A: *Capital Facilities Planning, Programming, and Funding Policy* to govern the investment in auxiliary facilities at the Universities and, which permits the System to seek bond funding to finance renovation and construction of new auxiliary facilities such as residence and/or dining halls, recreation centers, student unions, and such other facilities, equipment, real property, or other needs as the Board decides. Auxiliary facilities are primarily sustained with student fees, not Commonwealth appropriations or tuition. Act 188 requires the maintenance of an Auxiliary Facilities Reserve Fund, established from mandatory resident student fees, to accumulate funds with which to repair or construct new residence halls. To ensure longevity of existing residence halls, a capital renewal fee is charged per resident student for use in implementing capital maintenance projects. The monies collected are restricted for the specific purpose of roof replacement, floor replacement, or any major repair/replacement project that will significantly prolong the usable life of the building for use as a residence hall. The System has expended approximately \$1.6 billion for auxiliary facilities since 1996.

Accreditation

All of the System Universities are fully accredited by the Middle States Commission on Higher Education ("Middle States"). Certain academic programs are accredited individually by various national professional organizations.

Degrees Awarded

A range of undergraduate and graduate degree programs is offered across the System: 797 undergraduate and 300 graduate programs are offered in 254 major academic areas¹. In addition, certification programs are offered in 203 areas. The System awarded 17,388 bachelor's degrees and 5,305 master's degrees in 2019/20. The System also awarded 312 doctoral degrees and 382 associate's degrees through all the Universities.

¹Prior to 2017/18, undergraduate and graduate program counts were based on the CIP (Classification of Instructional Program) codes. The revised reporting is based on the actual number of programs that reside in the System's Academic Program Inventory. This change results in a higher number of programs overall, but it is more accurate. "Academic areas" is a count of unique six-digit CIPs across all undergraduate and graduate programs.

Enrollment

The following data shows the System's fall semester enrollment by headcount and full-time equivalent enrollment for the last five academic years.

	2016/17	2017/18	2018/19	2019/20*	2020/21
Headcount					
Undergraduate	89,802	86,971	82,805	80,426	78,308
Graduate	14,977	15,330	15,289	15,376	15,400
Total	104,779	102,301	98,094	95,802	93,708
Headcount					
Full-Time	86,905	84,098	79,694	77,012	73,942
Part-Time	17,874	18,203	18,400	18,790	19,766
Total	104,779	102,301	98,094	95,802	93,708
	2016/17	2017/18	2018/19	2019/20	2020/21**
Full-Time Equivalent					
Undergraduate	83,611	80,788	76,786	74,136	71,676
Graduate	8,606	8,825	8,758	8,793	8,750
Total	92,217	89,613	85,544	82,929	80,426

*Effective in Fall 2019, clock hour students (308 students) are included in total headcount.

**Effective in Fall 2020, clock hour students (212.8 FTE) are included in undergraduate FTE.

As a result of the COVID-19 pandemic, all System universities began the fall 2020 semester with a range of face-to-face and remote instruction options, ranging from 30 percent to 100 percent remote. With the persistence of the pandemic, the spring 2021 semester continued these hybrid and remote options for students. The total undergraduate FTE enrollment was 3.3 percent lower for Fall 2020 as compared to the prior year, in part due to changes in the delivery of instruction prompted by COVID-19. Graduate enrollment remained fairly steady to the prior year, with a drop of 43 students, or less than one half of one percent. At this time, all System universities are planning for a return of normal campus operations and instruction for the Fall 2021 semester.

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Applications and Admissions

The following data shows the fall semester application/enrollment figures for the System for five academic years, including the current fiscal year.

	2016/17	2017/18	2018/19	2019/20	2020/21
Applied	79,426	81,619	77,528	79,732	77,017
Accepted	63,606	66,409	64,123	67,317	68,458
Enrolled	18,137	18,008	17,133	16,861	16,117
% Accepted	80.1%	81.4%	82.7%	84.4%	88.9%
% Enrolled/Accepted	28.6%	27.1%	26.7%	25.0%	23.5%

Tuition, Student Fees, and Competition

The following includes the current and previous four years of Systemwide average in-state full-time undergraduate tuition and fees.

Full-Time Undergraduate Tuition and Student Fees

	2016/17	2017/18	2018/19	2019/20	2020/21
System Average	\$10,436	\$10,876	\$11,309	\$11,271	\$11,223

System Universities compete with many other colleges and universities for qualified applicants. The undergraduate tuition and required fees collected by various higher education sectors in Pennsylvania during the current year are illustrated in the following table. The private colleges and universities listed were chosen because of geographic location, similar academic offerings, and similar selectivity ratios.

	2020/21 Required Fees and Tuition
Selected Private Colleges and Universities	
Washington and Jefferson College	\$49,308
Juniata College	\$49,175
Delaware Valley University	\$40,620
Gannon University	\$34,526
Elizabethtown College	\$32,960
State-Related Universities (in-state)	
Temple University	\$19,749
The University of Pittsburgh	\$19,678
The Pennsylvania State University	\$18,980
Community Colleges (in-state)	
Community Colleges Average (full-time equivalent course load)	\$5,680
Pennsylvania's State System of Higher Education (in-state)	
System Average	\$11,223

Source: *The College Board*

Freshmen Enrollment Composition

The following tables highlight the high school rank and average SAT scores of the System's incoming freshmen for the years indicated.

Percentage of Freshmen by High School Rank

Quintile	2016	2017	2018	2019	2020
1	19.6%	21.0%	21.1%	21.7%	23.8%
2	27.5%	28.0%	28.2%	28.4%	28.4%
3	26.8%	26.5%	26.3%	25.9%	25.2%
4	19.0%	18.6%	18.4%	18.0%	16.6%
5	7.1%	5.9%	6.1%	6.2%	6.1%

Average SAT Scores

	2016	2017*	2018	2019	2020
Verbal	488	534	538	535	534
Math	489	524	526	523	522
Total	977	1058	1064	1058	1056

**SAT score for 2017 represents the new SAT score for tests taken on or after March 1, 2016. The Verbal score for 2017, and future years, is now the Evidence-Based Reading & Writing (ERW) score (combination of old SAT Writing and Critical Reading section scores). The changes in scoring resulted in higher test scores overall.*

Student Financial Aid

Ninety-one percent of all first-time, full-time, degree-seeking undergraduate students attending System Universities during academic year 2019/20 received financial aid. Thirty-nine percent of these students received awards from federal grant aid, while thirty-eight percent received awards from the Commonwealth or local agencies. Forty-five percent of these students received awards from the institution. Seventy-seven percent of all first-time, full-time undergraduates received a student loan.

The major sources of financial aid available to System students are the Federal Pell Grant Program, Pennsylvania State Grant Program, Federal Supplemental Educational Opportunity Grant Program, Federal Work Study Program, and Federal Direct Loan Program. Of these sources, the Federal Pell Grant, Pennsylvania State Grant, and Federal Direct Loan programs constitute the three main sources of financial aid received by System students. Each University maintains a fully operational student financial aid office.

Commonwealth Appropriations

In Act 188, the General Assembly defined the System as an instrumentality of state government and declared its operating costs ordinary expenses of state government, entitling it to preferred appropriations status under Article III, Section 11, of the Pennsylvania Constitution. Preferred appropriations are authorized only for state government, public schools, and payment of the public debt. Preferred appropriations bills require only a simple majority vote of the General Assembly, while "nonpreferred appropriations" bills, authorized by Article III, Section 30, of the Pennsylvania Constitution to fund state-related universities and private state-aided institutions, require a two-thirds majority vote.

One advantage of preferred appropriations status is that a smaller constitutional majority is required for passage of bills, thereby reducing the possibility of defeat. It also is settled law that, in exigent times, the

Governor may reduce or entirely abate nonpreferred appropriations. See *Schnader v. Liveright*, 308 Pa. 35 (1932).

The System's FY 2020/21 annual appropriation, based on the Commonwealth's spending plan as enacted on May 29, 2020, represents approximately 22 percent of total revenues. The Commonwealth General Fund spending plan provided for 12 months of sustained public education funding at FY 2019/20 levels, while most other state agencies were supported through five months of the fiscal year due to the impact of COVID-19 on collected state revenues (a budget supporting full funding for all agencies for the remaining seven months was eventually signed into law on November 23, 2020). Receipt of an appropriation in a given year does not ensure an appropriation or the amount of such appropriation in the following year. The chart below shows the current fiscal year and a five-year history of total annual appropriations received by the System.

Fiscal Year	Appropriations	% of Total Revenues
2020/21	\$477,470,000	22%
2019/20	\$477,470,000	23%
2018/19	\$468,108,000	23%
2017/18	\$453,108,000	22%
2016/17	\$444,224,000	22%
2015/16	\$433,389,000	22%

In the midst of the COVID-19 pandemic, the General Assembly approved level FY 2020/21 funding for the System ahead of the overall budget. Previously, increases have been provided in each of the past five years as follows: \$20.6 million (5 percent) in FY 2015/16; \$10.8 million (2.5 percent) in FY 2016/17; \$8.9 million (2 percent) in FY 2017/18; \$15 million (3.3 percent) in FY 2018/19; and \$9.4 million (2 percent) in FY 2019/20. The combined result is restoration of approximately 71 percent of the \$90.6 million cut made in FY 2011/12. At its April 2021 meeting, the Board of Governors voted to freeze tuition for FY 2021/22. This was the third consecutive year tuition rates remained unchanged. In addition, the System continues to receive state funding for deferred maintenance through a portion of the realty transfer tax. See the section titled "Realty Transfer Tax" herein.

In February 2021, Governor Wolf proposed to allocate to the System a state appropriation of \$477.47 million for FY 2021/22, sustaining funding at the current level. The budget recommendation from the Governor for the 2021/22 budget also proposed repurposing \$199 million from the Pennsylvania Race Horse Development Trust Fund to support the Nellie Bly Tuition Program. This program is designed to provide financial assistance to targeted full-time System students, with priority on students pursuing careers in education. The Legislature is currently holding budget hearings with state agencies; by law, the Commonwealth budget is required to be enacted by June 30, 2021.

On March 18, 2021, as part of budget hearings before the Senate Appropriations Committee the chancellor referenced an option to dissolve the System in the context of explaining the urgency of System Redesign. During the same hearing and following the hearing, the chancellor reiterated the need and value of the System by affirming his commitment to System Redesign and emphasizing the value of the System and its Universities to the Commonwealth in providing affordable education opportunities for all students from all regions and all backgrounds. (For more information on the options considered as part of the System Redesign, please see the section titled "System Redesign" herein.)

COVID-19 Relief Funds—System Universities have received funds under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA), and the American Rescue Plan Act of 2021 (ARPA) in response to costs and revenue losses associated with the impacts of COVID-19.

Coronavirus Aid, Relief, and Economic Security (CARES) Act—Enacted March 27, 2020, the CARES Act allocated \$2.2 trillion in support to individuals and businesses affected by the COVID-19 pandemic and related economic downturn. System Universities have been awarded grants from the education component of the Act, administered through the U.S. Department of Education’s (ED) Higher Education Emergency Relief Fund (HEERF). Additionally, the Commonwealth was appropriated funds from the state and local governments section, administered through the U.S. Treasury’s Coronavirus Relief Fund (CRF), of which a portion was appropriated by the state to the System. In August 2020, the Pennsylvania Department of Education also awarded a portion of the Governor’s Education Emergency Relief Fund (GEERF) to System Universities to assist with fall 2020 reopening efforts.

Coronavirus Response and Relief Supplemental Appropriation Act (CRRSA)—Enacted December 27, 2020, the CRRSAA authorizes \$81.88 billion in support for education to ensure learning continues for students during the COVID-19 pandemic. Of those funds, \$22.7 billion was issued to Universities of higher education under the Higher Education Emergency Relief Funds (HEERF II). System Universities received approximately \$125 million in HEERF II funding, inclusive of emergency student aid allocations. The allowable uses of the funds have been expanded to encompass items such as lost revenue, excluding any reduction in funding from the Commonwealth.

In addition, in February 2021, \$5 million of the Governor’s Education Emergency Relief Funds (GEERF II) were designated to be distributed to the System to support ongoing functionality of its member institutions as directed by the chancellor. Minority Serving Higher Education Institutions were allocated distinct funding through this Act; System Universities have been awarded approximately \$3.8 million.

American Rescue Plan Act (ARPA) – The \$1.9 trillion plan was enacted on March 11, 2021, to help speed up recovery from the effects of the COVID-19 pandemic and the ongoing recession. \$40 billion was allocated to higher education to help defray expenses related to COVID-19, “implement evidence-based practices to monitor and suppress the Coronavirus, in accordance with public health guidelines, and conduct direct outreach to financial aid applicants about the opportunity to receive a financial aid adjustment due to the recent unemployment of a family member or independent student, or other circumstances.” - American Rescue Plan Act of 2021

System universities received approximately \$220 million in HEERF III funding, inclusive of emergency student aid allocations, and the allowable uses of funds reflect similar expanded uses as described in the CRRSA section above.

Below is a summary of funds received by the System to date through the CARES, CRRSA, and ARP Acts.

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Federal Stimulus Funds Available to System Universities

	(\$ in millions)		
	CARES Act	CRRSA Act	ARP Act
Emergency Aid to Students ¹	\$40.0	\$40.0	\$110.6
Institutional Share ¹	40.0	85.3	109.0
Strengthening Institutions Program ¹	2.8	3.8	-
State Appropriated Coronavirus Relief Funds ²	30.0	TBD	-
Governor's Education Emergency Relief Funds ³	4.2	5.0	-
Total Funds Available	\$116.8	\$134.0	\$219.6

Funds Available for University Use (less Emergency aid)	\$76.8	\$94.1	\$109.0
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¹ Higher Education Emergency Relief Funds, U.S. Department of Education

² Title V, Assistance for State, Local and Tribal Governments, U.S. Treasury

³ U.S. Department of Education, as distributed by Pennsylvania Department of Education

Refer to COVID-19 section for additional information.

Realty Transfer Tax

In 1993, the General Assembly and the Governor of Pennsylvania passed into law a dedicated allocation of 2.7 percent of the Pennsylvania Realty Transfer Tax to the System. These revenues are restricted to use for deferred maintenance on academic facilities. The chart below shows the estimate for the current fiscal year and a four-year history of revenues the System received from this tax.

Fiscal Year	Revenue
2020/21	\$13,771,000*
2019/20	\$17,608,000
2018/19	\$18,371,000
2017/18	\$18,023,000
2016/17	\$16,081,000

*\$15.6 million was budgeted by the State for the System for FY 2020/21, based on estimated realty transfer tax revenues; however, in July 2020 the System was notified that this amount would be reduced by \$1.8 million to adjust for lower than anticipated revenue received in FY 2019/20 and the State expected that lower than anticipated actual tax revenues would continue in FY 2020/21.

Statement of Revenues, Expenses, and Changes in Net Position

This statement reports the revenues earned and the expenses incurred in the fiscal year. The resulting net income or loss is reported as an increase or decrease in net position on the *Balance Sheet*.

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Pennsylvania's State System of Higher Education

**Statement of Revenues, Expenses, and Changes in Net Position
For the Years Ended June 30, 2020 and 2019**

(dollars in thousands)

	2020	2019
Operating Revenues		
Tuition and fees, net	\$ 818,906	\$ 841,415
Grants and contracts	163,653	164,883
Sales and services	36,417	42,077
Auxiliary enterprises, net	245,680	320,684
Other revenues, net	8,129	16,615
Total Operating Revenues	1,272,785	1,385,674
Operating Expenses		
Instruction	717,658	750,456
Research and Public Service	61,150	59,301
Academic support	174,585	183,312
Student services	184,816	190,256
Institutional support	266,267	255,983
Operations and maintenance of plant	122,618	145,333
Depreciation	148,635	143,899
Student aid	120,874	71,911
Auxiliary enterprises	164,140	254,518
Total Operating Expenses	1,960,953	2,054,969
Operating Loss	(708,168)	(669,095)
Nonoperating Revenues (Expenses)		
State appropriations, general and restricted	477,470	468,108
Federal and State appropriations and grants-COVID	74,590	-
Pell grants	129,398	136,010
Investment income, net	50,255	50,198
Unrealized gain (loss) on investments	(9,089)	402
Gifts for other than capital purposes	21,502	22,852
Interest expense on capital asset-related debt	(41,006)	(42,025)
Loss on disposal/acquisition of assets	(1,747)	(28,322)
Other nonoperating revenue	11,838	11,410
Net Nonoperating Revenues	713,211	618,633
Income (Loss) before other revenues and special item	5,043	(50,462)
State appropriations, capital	34,735	18,244
Capital gifts and grants	6,253	10,930
Income (Loss) before special item	46,031	(21,288)
Special item - regulatory matter	-	(14,308)
Increase (Decrease) in Net Position	46,031	(35,596)
Net position—beginning of year	(1,610,199)	(1,574,603)
Net position—end of year	\$ (1,564,168)	\$ (1,610,199)

Investment of Working Capital

The System invests its working capital in accordance with the Board of Governors' Investment Policy. The investment priorities of the System as stated in this policy are, in order of priority: (1) safety of principal, (2) liquidity, and (3) yield. This policy expressly prohibits leverage and speculative investment strategies.

Unrestricted Net Position

Unrestricted net position, which totals \$2.61 billion, includes the effects of three unfunded liabilities: the net pension liability totaled \$955.9 million for the year ended June 30, 2020 (see 2020 Audited Financial Statements Note 8 in Appendix II for more information and refer to "Funding Agreement" section herein); the comprehensive liability for postretirement benefits for employees who participate in all the System plans totaled \$1.74 billion for the year ended June 30, 2020 (see 2020 Audited Financial Statements Note 9 in Appendix II for more information); and the liability for compensated absences totaled \$143.4 million for the year ended June 30, 2020 (see 2020 Audited Financial Statements Note 7 in Appendix II for more information). Without the effect of these liabilities and the related deferred inflows and outflows, total unrestricted net position would equal \$779.7 million.

Faculty and Staff

As of October 31, 2020, System faculty numbered 4,235 full-time employees and 1,131 part-time employees. Of the full-time faculty employees, 2,974 have been awarded tenure, and 851 are tenure-track.

As of October 31, 2020, the System employed 5,706 full-time staff members and 159 part-time staff members. The System believes that it provides a competitive compensation program for its staff, and that it is able to attract persons with outstanding qualifications.

Most System employees are represented by various labor unions. The American Federation of State, County and Municipal Employees (AFSCME), (contract expiration date of June 30, 2023), and the Association of Pennsylvania State College and University Faculties (APSCUF) (contract expiration date of June 30, 2023, for faculty and June 30, 2023, for nonfaculty coaches, which are two separate bargaining units) represent the largest number of employees. Other labor unions include the State College and University Professional Association (SCUPA) (contract expiration date of June 30, 2023); Office and Professional Employees International Union Healthcare Pennsylvania (OPEIU) (contract expiration date of June 30, 2023); Security, Police and Fire Professionals of America (SPFPA) (contract expiration date of August 31, 2022); the Pennsylvania Doctor's Alliance (PDA) (contract expiration date of June 30, 2023); the Service Employees International Union (SEIU, Local 668) (contract expiration date of June 30, 2023); and the Police Officers Association (POA) a new union (contract expiration date of August 31, 2022). The System has complete autonomy in the negotiation processes for the APSCUF, SCUPA, SPFPA, OPEIU, and POA contracts. The System engages in coalition bargaining with the Commonwealth of Pennsylvania on all other labor union contracts. The System experienced a three-day work stoppage with APSCUF in October 2016, but it did not result in any adverse financial situation.

Retirement

The System participates in three different retirement systems funded in part each year from each University's operating budget: the State Employees' Retirement System (SERS), the Public School Employees' Retirement System (PSERS), and the Alternative Retirement Plan (ARP, which includes Fidelity and TIAA). Liabilities of the respective retirement systems are not the responsibility of the System.

On June 12, 2017, Governor Tom Wolf signed into law a new retirement plan designed for future employees in the Public School Employees' Retirement System (PSERS) and State Employees' Retirement System (SERS). The new plan provides three retirement benefit options: two "side-by-side" hybrid retirement

plans, which include a defined benefit and defined contribution component (Class A-5 and A-6), and a third stand-alone defined contribution retirement plan (Class 401a Only). The new SERS retirement plans were effective January 1, 2019, while PSERS took effect on July 1, 2019. Additional information can be found on the Governor's website and Pennsylvania Independent Fiscal Office website.

The basic benefits for each program are outlined below (see also 2020 Audited Financial Statements Note 8 in Appendix II).

(1) State Employees' Retirement System (SERS). The employee's contribution rate is 5.00 percent of gross salary for Class A and 6.25 percent of gross salary for Class AA. An employee is vested upon completion of five years of service with the state government for these classes. The employee's contribution rate is 6.25 percent of gross salary for Class A-3 and 9.3 percent of gross salary for Class A-4. Class A-3 and Class A-4 are applicable to new members enrolling after January 1, 2011. An employee in Class A-3 or A-4 is vested upon completion of ten years of service with the state government. The employee's contribution rate is 8.25 percent of gross salary (5 percent defined benefit pension and 3.25 percent defined contribution investment) for Class A-5 and 7.5 percent of gross salary (4 percent defined benefit pension and 3.5 percent defined contribution investment) for Class A-6. Class A-5, Class A-6, and the defined contribution plan are applicable to new members enrolling after January 1, 2019. Employee vesting for Class A-5 and A-6 is ten years for the defined benefit pension and three years for the employer share of the defined contribution investment. For Class 40 (straight defined contribution plan), the employee's contribution rate is 7.5 percent of gross salary, and the employer contribution rate is 3.5 percent. Employee vesting for Class 40 is three years for employer contributions.

(2) Public School Employees' Retirement System (PSERS). The employee's contribution rate ranges from 5.25 percent to 7.50 percent of gross salary, depending upon class and hire date. Most employees elected the 7.5 percent Class T-D when offered the higher benefit effective January 1, 2002. An employee is vested upon completion of five years of service with the state government for these classes. The employee's contribution rate is 7.5 percent of gross salary for Class T-E and 10.3 percent of gross salary for Class T-F. Class T-E and Class T-F are applicable to new members enrolling after July 1, 2011. An employee in Class T-E or T-F is vested upon completion of ten years of service with the state government. The employee's contribution rate is 8.25 percent of gross salary (5.5 percent defined benefit pension and 2.75 percent defined contribution investment) for Class T-G and 7.5 percent of gross salary (4.5 percent defined benefit pension and 3 percent defined contribution investment) for Class T-H. Class T-G, Class T-F, and the defined contribution plan are applicable to new members enrolling after July 1, 2019. Employee vesting for Classes T-G and T-H is ten years for the defined benefit pension and three years for the employer share of the defined contribution investment. For the DC only (straight defined contribution plan), the employee's contribution rate is 7.5 percent of gross salary, and the employer contribution rate is 2 percent. Employee vesting for the DC only is three years for employer contributions.

(3) Alternative Retirement Plan (ARP). The employee's contribution rate is 5.00 percent of gross salary. An employee is immediately vested in this retirement program upon employment. Early retirement can be requested at any age; however, the amount of annuity is based on the employee/employer contributions and investment income.

The following table summarizes the System's contribution rates for employee retirement benefits for five years (including the current year) for each of the above-mentioned retirement plans. All of the figures are a percent of the employee's gross salary. (See 2020 Audited Financial Statements Note 8 in Appendix II for the dollar amount of such contributions.)

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	SERS*					PSERS	ARP
	Class A	Class AA	Class A-3 and A-4	Class A-5 and A-6	401a Only		
2020/21	29.48%	36.84%	25.47%	19.59%	19.56%	17.255%	9.29%
2019/20	28.84%	36.04%	24.92%	19.18%	19.12%	17.145%	9.29%
2018/19	27.71%	34.63%	23.94%	18.42%	18.39%	16.715%	9.29%
2017/18	27.55%	34.44%	23.80%	-	-	16.29%	9.29%
2016/17	23.96%	29.95%	20.70%	-	-	15.02%	9.29%

**There are five different rates for SERS employees, depending on their class. The majority of System employees that participate in SERS are in Class AA. Newly enrolled employees hired after January 1, 2011, are in Class A-3 or A-4. Newly enrolled employees hired after January 1, 2019, are in Class A-5, A-6, or 401a Only.*

In the most recent fiscal year, the distribution of System participants in the three plans noted above were as follows: SERS, 40%, PSERS, 8%, and ARP, 52%.

The System's employer contribution rates for SERS and PSERS participants are not set by the System. The System's employer contribution rates are certified for both SERS and PSERS each year as a result of the actuarial valuation of their respective pension systems, assessing the current funds, and determining the future expected liabilities. The employer contribution rate is set so that it can fund all retirement benefits earned by employees working during the year and pay toward any unfunded liabilities that may exist. The System has no authority over benefits and no authority or responsibility for the operation and administration of the SERS or PSERS plans.

Funding Agreement. On November 27, 2019, the Governor approved HB 1982 (Act of Nov. 27, 2019, P.L. 723, No. 105 ("Act 105")), which authorizes a one-time advance payment to SERS by eligible employers, which includes the System. In return, the eligible employer would receive a schedule of credits or setoffs against its future annual accrued liability contributions to SERS for a period up to thirty (30) years. Under Act 105, the System could fund 75 percent to 100 percent of its estimated \$1.1 billion unfunded accrued pension liability. The System entered into a Funding Agreement with SERS for the prepayment of \$825 million, which equates to approximately 75 percent of the System's allotted portion of the SERS unfunded pension liability, and used the proceeds of the Series of 2021 Bonds, issued through Pennsylvania Economic Development Financing Authority (PEDFA) on April 28, 2021, to make such payment. The application of the credits or setoffs will result in significant cash flow savings over the term of the Funding Agreement. The annual setoff amounts included in the Funding Agreement are as follows:

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Fiscal Year	SERS Setoff Amount	Fiscal Year	SERS Setoff Amount
2022	\$79,939,555	2037	69,427,421
2023	79,939,555	2038	52,258,540
2024	79,939,555	2039	52,258,540
2025	79,939,555	2040	52,258,540
2026	79,939,555	2041	52,258,540
2027	79,939,555	2042	22,001,027
2028	79,939,555	2043	12,093,718
2029	79,939,555	2044	12,093,718
2030	79,939,555	2045	11,043,542
2031	79,939,555	2046	9,574,074
2032	69,427,421	2047	4,938,453
2033	69,427,421	2048	2,686,967
2034	69,427,421	2049	2,686,967
2035	69,427,421	2050	2,686,967
2036	69,427,421	2051	2,686,967
Total		\$1,507,486,640	

The planned savings generated for the System through Act 105 and the Funding Agreement provides cash flow to assist in supporting long-term financial health and funding important future strategic investments. With respect to the cash flow associated with this program, the Board of Governors has charged the chancellor to consult with the presidents of the Universities to develop an accountability-based investment strategy that provides a positive return on investment, emphasizing student success and mitigating associated financial risks. The net proceeds may not be used for general operating expenditures.

Accounting Matters

The System's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting in accordance with the accounting principles generally accepted in the United States of America, as prescribed by the Governmental Accounting Standards Board (GASB) and are attached to this Official Statement as Appendix II.

As of July 1, 1983, with the enactment of Act 188, the System became responsible for the use of all appropriations for all the Universities. Any funds unexpended at the end of any given fiscal year by any University or the Office of the Chancellor do not lapse to the Commonwealth, but remain in the respective accounts for future use. The presidents have the authority to expend their respective University's allocated funds as they deem proper and necessary, with review by the Office of the Chancellor. The amount of appropriations granted by the General Assembly and the Governor of Pennsylvania for the next fiscal year is not affected adversely by any cumulative amounts remaining unexpended by the Universities and the Office of the Chancellor from the prior fiscal year appropriations.

U.S. Department of Education Program Review of Cheyney—The System contracted with an external firm that, along with System personnel and in cooperation with the U.S. Department of Education (ED), analyzed and reconciled fiscal years 2011/12, 2012/13, and 2013/14 student financial aid awards of Cheyney University of Pennsylvania, a historically black university (HBCU). In August 2015, Cheyney University self-reported to the ED of federal student financial aid improperly administered and delivered in the fiscal years under review. In September 2015, the ED placed the University on Heightened Cash Monitoring 2 (HCM2) status, meaning that the Cheyney University does not receive federal student financial aid funds in advance, but must use its own cash to grant federal financial aid to its students and then request reimbursement from the ED. In November 2019, Middle States Commission on Higher Education acted to reaffirm Cheyney University's accreditation, citing the actions Cheyney has taken to be in compliance with Middle States requirements. Currently, the

University is still on HCM2 status. however, in September 2020 Cheyney was granted a reduction of documentation requirement after submission of six positive results.

On August 8, 2019, Cheyney University received a letter from ED (the “ED Letter”) relating to its proposed resolution of its Program Review of Cheyney (the “Program Review”), asserting that Cheyney’s overall response to the Program Review did not fully address ED’s findings or accurately document the federal student aid funds disbursed during the periods under review (the 2011/2012, 2012/2013 and 2013/2014 award years). The ED Letter stated that under normal circumstances, ED would assess Cheyney full Federal Pell Grant and Federal Direct Loan liabilities in the amount of \$57,531,566 for the award years reviewed. However, ED did acknowledge that Cheyney has, since the beginning of the review, undertaken significant steps to accurately document its administration of federal student aid funds despite being limited in its ability to do so by the past deficiencies and, accordingly, expressed a willingness to presume that significant amounts of the financial aid funds were provided to, and earned by, the students and to conclude the Program Review in consideration of Cheyney’s (1) payment of \$14,308,377, (2) waiver of its rights to any administrative appeal, and (3) entry into an acceptable repayment agreement with ED.

In February 2020, a settlement agreement was executed between ED and Cheyney and a payment schedule was established for the \$14.3 million settlement amount.

In the opinion of the System’s management, there has been no material adverse change in the financial condition of the System since June 30, 2020.

Budgetary Matters

The president of each University is required to submit a projected operating budget for each fiscal year to the Office of the Chancellor and financial projections for two additional years. With the passage by the Board of Governors of the University Financial Sustainability Policy and procedures and standards in 2019 (see the section titled “System Redesign” herein for additional information), Universities are assessed against sustainability metrics and classified in a sustainability plan category. Universities assessed as stable, or otherwise not identified for monitoring, are not required to provide additional budget submissions throughout the year. Universities in a plan category requiring monitoring will submit a midyear sustainability plan update to reforecast their current year financial activity based upon updated information. Currently, 9 of the 14 Universities in the System are conducting these midyear budget updates.

Financial Statements Audit

The financial statements of the System as of and for the year ended June 30, 2020 (the “2020 Audited Financial Statements”), included in Appendix II of this Official Statement, have been audited by CliftonLarsonAllen LLP, the System’s independent auditors, as stated in their report appearing herein.

CliftonLarsonAllen LLP has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. CliftonLarsonAllen LLP also has not performed any procedures relating to this offering document.

Legal Matters

It is the opinion of the Chief Counsel to the System that, to the best of his knowledge after reasonable investigation, there is no action, suit, proceeding, or investigation at law or in equity before or by any court, public board, or body, pending or threatened, against or affecting the System, wherein an unfavorable decision, ruling, or finding would materially adversely affect the transactions contemplated by this Official Statement or the validity of the Loan Agreement and the Continuing Disclosure Agreement.

Legislative Matters

From time to time, legislation is introduced in the Pennsylvania General Assembly which may affect the System. The System cannot predict if such legislation or other legislation will be enacted into law now or in the future and, if enacted, how any such legislation may affect the System.

Act 70 of 2019 established the Public Higher Education Funding Commission to review and make recommendations related to higher education funding, affordability, and effectiveness of administration and operations. The legislation charges the commission with issuing a report of its findings and recommendations to the General Assembly and other related committees by November 30, 2021, as amended by Act 30 of 2020.

On July 1, 2020, the Governor of Pennsylvania signed into legislation House Bill 2171 (Act 50 of 2020) (“Act 50”). It requires the System’s Board of Governors to develop policies and procedures by which the Board may create, expand, consolidate, transfer or affiliate an institution or college; provides that before the creation, expansion, consolidation, transfer, or affiliation of an institution or college, the Board must call upon the chancellor to conduct a review and analysis of the relevant institutions using certain metrics, including consultation with stakeholders and public hearings; make changes to the appointment process of students to the Board of Governors and councils of trustees; and make various changes to the sections relating to the powers and duties of councils of trustees and to the powers and duties of institution presidents, among other things. By updating and modernizing Act 188 of 1982, Act 50 has enabled the System to better manage and optimize the System, as well as be flexible and responsive to the changing landscape of higher education. (See “System Redesign” section herein for additional information.)

Insurance

The Commonwealth’s exposure to liability (other than for Workers’ Compensation Liability) is governed by the dictates of Act 152, as amended by Act 142 of 1980, commonly known as the Sovereign Immunity Tort Claims Act. Under this act, sovereign immunity was reaffirmed but waived in nine (9) specific areas of liability. In accordance with Section 8528 of the statute, eligible claims or suits against the Commonwealth, its officials or employees within the waived areas may be settled up to \$250,000.00 per person; \$1 million for each occurrence.

The Commonwealth has established a Tort Claims Self-Insurance Program to handle these claims or suits, which is administered by the Bureau of Risk and Insurance Management of the Department of General Services in close relationship with the Office of Attorney General. This coverage applies to all Commonwealth departments, officials and employees while performing Commonwealth activities. The System is a covered agency for this program.

Commonwealth owned properties, including Commonwealth owned building contents and Commonwealth owned building contents at leased locations are self-insured for fire or other casualty under the State Insurance Fund created by Act 227 (1915 P.L. 524, approved May 14, 1915, as amended). The Fund is administered by the Department of General Services. The State Insurance Fund provides coverage for fire, casualty, perils of flood and flood related hazards or any other natural disasters for approximately 14,000 Commonwealth owned properties with a value of \$20.8 Billion. The limit of coverage is \$3,000,000 any one loss. Additionally, the Commonwealth of Pennsylvania is certified as a qualified self-insurer under the Pennsylvania Motor Vehicle Financial Responsibility Act and the Workers’ Compensation Act providing the appropriate benefits required as a self-insurer.

Contingencies and Commitments

See 2020 Audited Financial Statements Note 15 in Appendix II for more information on such matters.

Future Financing

Other than the present transaction to acquire student housing for Millersville University, there are no additional capital projects approved to be bond financed in FY 2021/22 at this time. However, the System routinely engages in discussions with its universities on potential future financing needs and also reviews its financing portfolio on an ongoing basis to determine opportunities for refundings.

Outstanding Indebtedness

As of May 1, 2021, the outstanding long-term indebtedness of the System is as follows (each of which series below has been issued by the Pennsylvania Higher Educational Facilities Authority, except for Series 2021 which has been issued by PEDFA):

Original

	Issuance Date	Issuance Amount	Current Outstanding Principal	Maturit y Date
Series AI	08/07/08	\$32,115,000	\$160,000	06/15/25
Series AM	07/12/11	119,085,000	5,495,000	06/15/21
Series AN	03/20/12	76,810,000	8,065,000	06/15/23
Series AO	07/18/13	30,915,000	23,265,000	06/15/38
Series AP	05/07/14	46,110,000	29,995,000	06/15/24
Series AQ	05/07/15	94,975,000	62,825,000	06/15/36
Series AR	09/10/15	102,365,000	89,890,000	06/15/40
Series AS	06/07/16	47,280,000	38,120,000	06/15/37
Series AT	09/07/16	298,110,000	270,920,000	06/15/55
Series AU	09/14/17	128,260,000	114,540,000	06/15/42
Series AV	09/06/18	236,945,000	217,560,000	06/15/45
Series AW	09/10/19	84,980,000	84,610,000	06/15/44
Series AX	07/23/20	94,985,000	94,985,000	06/15/42
Series AY	10/01/20	78,925,000	78,925,000	06/15/36
Series 2021	04/28/21	827,580,000	827,580,000	06/15/42
Total		\$2,299,440,000	\$1,946,935,000	

The System has no other existing long-term indebtedness, except for the installment purchase and lease of office equipment, computer equipment, energy conservation equipment, and similar types of acquisitions and two master lease agreements for student housing. See Note 10 of the 2020 Audited Financial Statements in Appendix II for further information pertaining to the leases. The master lease agreement for Indiana University of Pennsylvania occurred subsequent to June 30, 2020, and is described in the 2020 Audited Financial Statements Note 16. Subsequent Events.

Maturities of long-term debt for the current fiscal year, as well as the next five fiscal years, are as follows:

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Series AI	\$30,000	\$30,000	\$30,000	\$35,000	\$35,000	-
Series AM	5,495,000	-	-	-	-	-
Series AN	2,825,000	2,965,000	2,275,000	-	-	-
Series AO	1,255,000	1,320,000	1,370,000	1,310,000	1,365,000	\$1,420,000
Series AP	7,030,000	7,300,000	7,650,000	8,015,000	-	-
Series AQ	7,965,000	6,960,000	7,880,000	8,275,000	8,690,000	5,910,000
Series AR	3,000,000	3,150,000	3,315,000	3,475,000	3,650,000	3,835,000

Series AS	3,175,000	3,245,000	2,850,000	2,990,000	3,135,000	3,295,000
Series AT	8,140,000	8,105,000	8,480,000	8,880,000	9,305,000	9,740,000
Series AU	7,525,000	8,715,000	9,135,000	7,245,000	7,660,000	8,760,000
Series AV	10,520,000	12,150,000	11,190,000	11,200,000	6,010,000	5,810,000
Series AW	3,330,000	8,500,000	9,060,000	17,095,000	5,200,000	5,465,000
Series AX	5,975,000	4,375,000	4,585,000	4,820,000	5,065,000	5,310,000
Series AY	-	7,250,000	7,310,000	7,385,000	7,470,000	7,570,000
Series 2021	-	34,225,000	36,715,000	36,860,000	37,140,000	37,575,000
Total	\$66,265,000	\$108,290,000	\$111,845,000	\$117,585,000	\$94,725,000	\$94,690,000

System Redesign

In March 2017, the National Center for Higher Education Management Systems (NCHEMS) was selected as the consulting firm to assist the Board of Governors with a Strategic System Review of the 14 Universities and the Office of the Chancellor (the “System Redesign”). On July 21, 2017, NCHEMS released the results of the report, which made various recommendations to increase efficiency throughout the System. The recommendations included modernizing the governance structure, leveraging Systemwide and regional resources to deliver programming, and sharing administrative functions more efficiently. These recommendations were received by the Board of Governors.

In 2018, the System moved from “review” to “redesign” mode, which consists of three phases; Phase 1 was to establish strategic priorities and address immediate needs; Phase 2 was to define the visions and develop detailed implementation plans; and Phase 3 is to execute plans with continual review for improvement. The System is currently in Phase 3. In its July 2020 Board meeting, the Board of Governors affirmed its commitment to the long-term stability of all 14 Universities in the System so that each may continue to serve students, its region, and the Commonwealth. A successful redesign will have a positive impact on students, promoting both affordability and long-term sustainability of the System.

The System has completed Phase 1 and in September 2018, the System launched Phase 2 of the redesign to develop a vision for the transformed System, including detailed implementation plans. The System Redesign is guided by three strategic priorities approved by the Board of Governors in January 2019: (1) ensuring student success, (2) leveraging University strengths, and (3) transforming the governance/leadership structure. Small, tactical groups are being utilized to support each of the three strategic priorities.

As part of System Redesign efforts, a variety of options were analyzed to determine the best path forward for the System for meeting its statutory objective of offering high quality affordable education and also achieving financial sustainability. In October 2019, the Board of Governors continued its commitment to System Redesign through the passage of the University Financial Sustainability Policy. This passage put in place processes and procedures to further improve the transparency and financial sustainability of Universities.

Act 50 made amendments to the System’s enabling legislation that included a requirement that the System’s Board of Governors develop policies and procedures by which the Board may create, expand, consolidate, transfer or affiliate an institution or college and prescribes the process by which that may occur. Act 50 added additional policy mandates beyond the existing Board of Governors University Financial Sustainability Policy which established criteria and reporting process for determining University financial status and serving as a tool for each individual University to align operations and achieve sustainability.

On July 16, 2020, in accordance with requirements for the Board to develop policies and procedures under Act 50, the Board authorized the chancellor to engage in a detailed, transparent, and broadly consultative review, planning and implementation review process to review the financial impacts of integrating operations at selected System Universities. For the purposes of this review process, the System used an approach that could identify combinations of certain Universities that would honor the local identity of the original institutions but

when integrated, would operate under a unified leadership team reporting through the chancellor to the Board of Governors and have a single faculty and staff, a single academic program array, a unified enrollment strategy, and a single budget.

The integration review process is being conducted in partnership with the General Assembly through quarterly check-ins with House and Senate Education and Appropriations Committees, consistent with the requirements of Act 50. As part of the System Redesign process, the chancellor has conducted three legislative hearings to date regarding the integrations, as well as a series of communication opportunities at the integrating Universities. The chancellor also issued a Procedure/Standard on Shared Services that established a shared services center to provide services within the specified functional areas of advanced data analytics, information technology, procurement, facilities, human resources, labor relations, payroll and finance to improve efficiencies and reduce costs across the System. (See the section titled “University Integrations” herein for more information on the integration process.)

During Commonwealth budget hearings before the Commonwealth Senate Appropriations Committee on March 18, 2021, the chancellor of the System referenced options which were considered to address the System’s future including dissolution. The System had meaningful discussions about all possible actions concerning the future of the System which included the following: dissolving the System, closing Universities, requesting substantial increases in state general fund appropriations, continuing forward on the path created through the Board of Governor’s 2019 Policy on University Financial Sustainability Policy or integrations of Universities. The first three options (dissolving the system, closing Universities, and requesting substantial increases in state general fund appropriations) could only be achieved by further enacted legislation.

Dissolving the System was determined not to be a viable option due primarily to the increased costs individual Universities would experience, ultimately driving up student net price and creating greater uncertainty for financially struggling Universities and the communities they serve. Additionally, legislation dissolving the System would have to transfer the System’s existing and ongoing financial obligations as a public corporation and government instrumentality to a new entity. This likely would require an additional appropriation separate from the appropriations made to the individual fourteen Universities.

Closing Universities was determined not to be a viable option because it would negatively impact students and communities and would not address the continued employee and physical facility obligations post closure. Closing individual Universities would also result in greater financial burden for the remaining Universities due to existing structures of financial interdependence and existing financial obligations. Similar to dissolution of the System, legislation closing individual Universities would need to account for and make provisions for that University’s ongoing financial obligations, likely requiring an additional appropriation. Closing Universities was ultimately specifically excluded from the powers of the Board of Governors under Act 50, removing this option as a legal possibility.

The likelihood of securing substantial increases in state general fund appropriations was deemed unlikely given both historic levels of funding to the System and the impacts of the COVID-19 pandemic on the Commonwealth’s overall budget.

For additional information on System Redesign [see](https://www.passhe.edu/systemredesign/Pages/redesign.aspx) (<https://www.passhe.edu/systemredesign/Pages/redesign.aspx>).

University Integrations. In July 2020, the Board of Governors affirmed the continued direction of Phase 3 of the System Redesign and efforts associated with University Integrations (“University Integrations”). The University Integration process currently underway consists of four phases as outlined in Act 50, with progress between each phase requiring affirmation by the Board of Governors.

- Phase 1 of the University Integrations involved a review of the financial impacts of a potential integration, which is completed. The Phase 1 process began with a review of the financial stability of

System Universities assuming the continuation of present operations and as impacted by potential integrations. Each integration would operate as a single accredited entity with a single leadership, faculty, enrollment management strategy, and budget while honoring local identity. Following review of Phase 1 financial analysis, the Board of Governors affirmed the ongoing institutional integrations process and authorized the chancellor to proceed with the development of appropriate implementation plans for review by the Board in spring of 2021. The results of the initial analysis presented to the Board of Governors showed the integration resulted in improved financials over standalone Universities. This analysis did not incorporate recommendations for growth, which is part of Phase 2 analysis.

- Phase 2 of the University Integrations began immediately following the October 2020 Board of Governors meeting and is now complete. Phase 2 involved the development of a detailed plan or plans to integrate selected institutions into two triads: the Western Region consisting of Clarion University, Edinboro University, and California University, and the Northeastern Region consisting of Bloomsburg University, Mansfield University, and Lock Haven University. Phase 2 established working groups in each triad surrounding the following key integration considerations:

1. Academics
2. Athletics
3. Communication and Marketing
4. Donors/Alumni Relations/Foundations
5. Enrollment Management
6. Facilities and Infrastructure
7. Finance and Administration
8. Human Resources and Labor Relations
9. Institutional Governance and Leadership
10. Technology.

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Combined working groups are addressing the following:

1. Accreditation
2. Financial Aid
3. System Technology
4. Human Resources and Labor Relations.

Regional-Specific working groups are evaluating specific focuses for growth in each triad:

Western Triad:

1. Online
2. Student Affairs
3. Student Success and Retention.

Northeastern Triad:

1. Workforce development and non-degree programs
2. Student success, services and campus life.

Five-year financial projections were a component of these integration plans for each region.

- Phase 3 of the University Integrations commenced following Board of Governors' affirmation on April 28, 2021, to move the draft implementation plan forward for public comment and hearings. The public comment period commenced April 28, 2021, and will run through July 2021. There are currently four public hearings scheduled on June 9 and 10, 2021. For additional information, see (<https://www.passhe.edu/publiccomment/Pages/default.aspx>).
- Should the Board of Governors affirm the final implementation plan at the conclusion of Phase 3, Phase 4 of the University Integrations would be initiated to implement activities so that the newly integrated Universities would be ready to accept students following July 2022.

The overarching integration parameters are the following:

1. One leadership team
2. A single faculty and staff
3. A single program array
4. A unified enrollment management strategy
5. A single, combined budget
6. One reporting relationship through the chancellor to the Board of Governors.

While complex, the goal of the University Integrations is to leverage the strength of these Universities to position them to better serve students and to improve financial sustainability. The parallel tracks of the University Financial Sustainability Policy and integrations will result in improved long-term financial sustainability, ultimately providing a better future for the students served across the Commonwealth and the communities in which System Universities reside.

COVID-19

Following the March 13, 2020, declaration of a national state of emergency due to COVID-19, the System Universities have been following state recommendations and restrictions that require remote working and remote education. The System continued remote education through the summer of 2020. Most Universities began fall 2020 with mostly or completely remote offerings and continued these measures for the spring 2021 semester. The System Universities modified their learning and living environments, and addressed requirements for health monitoring and social distancing. At this time, all System universities are planning for a return of normal campus operations and instruction for the Fall 2021 semester. Prior to COVID-19, the System was anticipating negative operating results and its Universities were implementing multi-year plans focused on cost

control, increased efficiencies, and aggressive management of their workforce. These efforts have intensified in response to the pandemic. The System has established directives for Universities to reach designated student-to-faculty ratios and achieve certain financial milestones. The System is supporting its Universities in these efforts through expanding shared services and offering retirement incentive programs.

In regard to the current impact of COVID-19, the most significant components to date have been the refunds of housing, dining, and other fees that Universities provided to students in spring 2020, and the loss of similar auxiliary revenue in the current fiscal year due to low occupancy on campus as a result of social distancing measures and the shift to more online instruction.

Housing ownership and management varies by University within the System. Those Universities that have established agreements in place with recognized affiliated entities to own or manage on-campus housing have been working closely with their affiliate to manage the financial impact of housing refunds and low occupancy in fiscal 2021. In addition, Universities have incurred costs for remote learning, remote working, pandemic mitigation, and student testing.

As part of increased efforts to address affordability and in response to the impact of the COVID-19 pandemic, the Board of Governors approved a tuition freeze for the current and coming academic year to provide assurances and financial relief to current and potential students. On May 29, 2020, the Commonwealth appropriated level state funding for the System at \$477.5 million for the full fiscal year 2020/21, even though the majority of the Commonwealth's spending plan was enacted for only five months.

Our estimates for the fiscal 2021 financial impact from COVID-19 are estimated at \$253M, with the three aid packages that together are anticipated to substantially address the COVID-19 expenses and revenue losses at our universities. The following table highlights the COVID-19 impact areas and also the associated institutional aid available. Our universities are currently making determinations on the allocation of their aid towards the appropriate and allowable uses.

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	In Millions
Revenues Reduced/Lost	FY 2020-21
E&G Fee Refunds and Rate Reductions	\$ (27.2)
Auxiliary Fee Refunds and Rate Reductions	\$ (33.0)
Lost E&G Student Fee Revenues From Reduced Occupancy	\$ (48.1)
Lost Auxiliary Student Fee Revenues From Reduced Occupancy	\$ (132.2)
Other Lost Revenues (e.g., camps/conferences, athletic ticket revenue)	\$ (12.7)
Revenues Reduced/Lost	\$ (251.2)
COVID Expenses	
COVID-Related Compensation	\$ 6.3
Incremental Distance Education Payments to Faculty	\$ 13.1
COVID Testing	\$ 5.6
Student Financial Aid	\$ 0.8
Technology to Support Remote Learning/Working	\$ 8.4
All Other Operating Expenses	\$ 14.5
Total Expenses	\$ 48.7
Related Savings	
Contract Savings	\$ (34.5)
Other Operational Savings (e.g., utilities, travel)	\$ (12.5)
Total Related Savings	\$ (46.9)
Total Revenues Lost/Reduced & Expenses Incurred, Less Savings	\$ (253.0)

		Institutional Share			
Relief Package	Awarded	In Millions	FY 20	FY 21	FY 22
HEERF 1 CARES Act	Apr-20	\$ 76.8	\$ 44.6	\$ 32.2	
HEERF 2 CRRSAA	Jan-21	\$ 94.1		\$ 94.1	
		\$ 170.9	\$ 44.6	\$ 126.3	\$ -
HEERF 3 ARPA	May-21	\$ 109.0 *		\$ 109.0	
		\$ 279.9		\$ 235.3	

*Universities are currently making determinations on the allocation of funds. Accordingly, the allocation between fiscal 2021 and 2022 is not available.

The System will continue to monitor and assess the effects of the COVID-19 pandemic and its impact on the System's financial position and operations. At this time, all System universities are planning for a return of normal campus operations and instruction for the Fall 2021 semester.

Housing Considerations

The System has been working with Universities, their housing affiliates, and financial partners to address the impact of enrollment reductions on housing occupancy and bond financing separately obtained for the Universities (or through related foundations or affiliates). In some cases, the System has joined in master lease agreements to alleviate some covenant restrictions. COVID-19 is having a significant impact on housing occupancy and associated revenue that is exacerbating these issues. As described above, the present transaction is to acquire the affiliate student housing for Millersville University because of financial challenges created by reduced occupancy from the COVID-19 pandemic. The Millersville Council of Trustees passed a resolution on March 17, 2021, recommending the Board of Governors authorize the issuance of bonds to acquire the Villages at Millersville University from Student Services, Inc., to be achieved prior to July 1, 2021. On April 15, 2021, the Board of Governors approved the issuance of bonds in an approximate amount of \$146 million to acquire the Villages at Millersville University from Student Services, Inc.

Appendix II: 2020 Audited Financial Statements

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PENNSYLVANIA'S STATE SYSTEM OF HIGHER EDUCATION



Pennsylvania's
STATE SYSTEM
of Higher Education

FINANCIAL STATEMENTS
JUNE 30, 2020

**Pennsylvania's State System of Higher Education
Financial Statements
June 30, 2020**

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INDEPENDENT AUDITORS' REPORT

Board of Governors
Pennsylvania State System of Higher Education
Harrisburg, Pennsylvania

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and the aggregate discretely presented component units of Pennsylvania's State System of Higher Education ("the State System"), a component unit of the Commonwealth of Pennsylvania as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the State System'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.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit the financial statements of certain of the discretely presented component units, which represent 81.85 percent, 91.37 percent, and 88.72 percent respectively, of the 2020 assets, net assets, and revenues and 80.94 percent, 85.34 percent, and 86.79 percent, respectively, of the 2019 assets, net assets, and revenues of the discretely presented component units. Those statements were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for the discretely presented component units, is based solely on the reports of the other auditors. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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 auditors' 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 opinions.

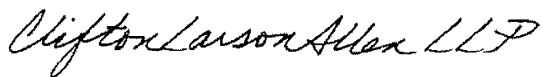
Opinions

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the State System as of June 30, 2020 and 2019, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3-18, and the various schedules of Proportionate Share of Net Pension Liability, OPEB Liability, Proportionate Share of Net OPEB Liability, and Contributions on pages 66-69 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.



CliftonLarsonAllen LLP

Plymouth Meeting, Pennsylvania
September 29, 2020

MANAGEMENT'S DISCUSSION AND ANALYSIS *(Unaudited)*

As members of the Commonwealth of Pennsylvania's (Commonwealth) public four-year higher education system, the 14 universities of Pennsylvania's State System of Higher Education (State System) are charged with providing high-quality education at the lowest possible cost to the students. With approximately 96,000 degree-seeking students enrolled, and thousands more enrolled in certificate and other career-development programs, the State System is the largest producer of bachelor's degrees in the Commonwealth. The campuses of the 14 universities encompass more than 4,800 acres and 900 physical plant structures. The universities function independently, but being part of the State System enables them to share administrative resources and academic courses and benefit from economies of scale.

The State System's financial statements comprise:

- Bloomsburg University of Pennsylvania.
- California University of Pennsylvania.
- Cheyney University of Pennsylvania.
- Clarion University of Pennsylvania, including its branch campus in Oil City.
- East Stroudsburg University of Pennsylvania.
- Edinboro University of Pennsylvania.
- Indiana University of Pennsylvania, including its branch campuses in Punxsutawney and Freeport.
- Kutztown University of Pennsylvania.
- Lock Haven University of Pennsylvania, including its branch campus in Clearfield.
- Mansfield University of Pennsylvania.
- Millersville University of Pennsylvania.
- Shippensburg University of Pennsylvania.
- Slippery Rock University of Pennsylvania.
- West Chester University of Pennsylvania.
- Office of the Chancellor, including the Dixon University Center in Harrisburg and the State System @ Center City Philadelphia.

SYSTEM REDESIGN

In 2016, the State System undertook a strategic review of all operations, with the goal of identifying the changes that are necessary to help ensure its long-term success. As a result of that review, the Board of Governors (Board) established three priorities:

- Ensuring student success.
- Leveraging university strengths.
- Transforming the governance/leadership structure.

In January 2019, the Board adopted the framework for System Redesign and endorsed the scope of measures for student and university success. System Redesign seeks long-range financial sustainability by leveraging the State System's operating scale and strengthening governance and accountability in a manner that drives to measurable outcomes with respect to universities' financial performance, operational efficiencies, and students' success. Small, tactical groups have been utilized to support the three strategic priorities.

In support of the System Redesign priorities, on July 1, 2020, the Governor of Pennsylvania signed into law Act 50 of 2020—legislation that passed the General Assembly with overwhelming bipartisan support. It requires the State System's Board of Governors to develop policies and procedures by which the Board may create, expand, consolidate, transfer or affiliate an institution or college; provides that before such may occur, the Board must call upon the chancellor to conduct a review and analysis of the relevant institutions using certain metrics,

including consultation with stakeholders and public hearings; makes changes to the appointment process of students to the Board and councils of trustees; and makes various changes to the sections relating to the powers and duties of councils of trustees and to the powers and duties of institution presidents, among other things. By updating and modernizing Act 188 of 1982, Act 50 enables the State System to better manage and optimize the System, address affordability for students and financial sustainability for its universities, as well as be flexible and responsive to the changing landscape of higher education.

On July 16, 2020, the Board entered into the next phase of System Redesign and authorized the chancellor to review the financial impacts of integrating operations at selected System universities. A financial review is the first step towards integrating universities as outlined in Act 50, which requires a detailed, transparent, and broadly consultative review, planning and implementation process—one that will be undertaken over the next two years. For the purposes of this review process the System is using an approach that could identify combinations of certain universities that, when integrated, would operate under a unified leadership team reporting through the chancellor to the Board of Governors, have a single faculty and staff, a single academic program array, a unified enrollment strategy, and a single budget—all while honoring the local identity of the original institutions.

The process for integrating State System universities is defined in Act 50. It is transparent, consultative, analytical, and intended to seek solutions, not implement solutions that have been predetermined. The process is conducted in partnership with the General Assembly through quarterly check-ins with House and Senate Education and Appropriations Committees. It consists of four phases, progress between which requires affirmation by the Board of Governors. The phases, and the most expeditious path for their completion are outlined below.

- Phase 1 involves a review of the financial impacts of a potential integration, which is underway.
- Phase 2 involves the development of a detailed plan or plans to integrate selected institutions.
- Phase 3 involves a public comment period.
- Phase 4 involves implementing the plan.

Detailed information on the progress of System Redesign can be found at <https://www.passhe.edu/SystemRedesign/>.

COVID-19

On January 31, 2020, the United States Department of Health and Human Services declared a public health emergency for the United States to aid the nation's health care community in responding to the novel coronavirus ("COVID-19"). On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic and on March 13, 2020, the President of the United States declared a national state of emergency.

On March 6, 2020, Governor Wolf declared a disaster emergency in the Commonwealth. On April 1, 2020, Governor Wolf issued a stay-at-home order for all counties in the Commonwealth for all activities, except as needed to access, support, or provide life-sustaining business, emergency, or government services.

Beginning in March 2020, the System has followed state recommendations and restrictions that require remote working and remote education. The System continued remote education through the summer of 2020. Most universities began fall 2020 with primarily remote offerings and continue to monitor and modify fall activities as necessary. The System universities are in the midst of developing various planning scenarios for the spring 2021 semester and beyond, including academic activities returning to normal at the beginning of the spring semester or continuing remote education through the spring. Plans also include various potential impacts on enrollment, changing expectations for learning and living environments, and the requirements for health monitoring and social distancing.

Prior to COVID-19, the System was anticipating negative operating results for fiscal year 2019/20 and its universities were implementing multi-year plans focused on cost control, increasing efficiencies, and aggressive

management of their workforce. These efforts have intensified in response to the pandemic. The System is supporting its universities in these efforts through expanding shared services and offering retirement incentive programs. The System's financial and operational planning is fluid at this time. As a result of the CARES Act funding awarded to the System, the associated costs incurred during fiscal year 2019/20 as a result of COVID-19 are anticipated to have minimal impact on the System's overall financial performance. However, the future financial impact will be dependent upon enrollment impacts, the continuing need for social distancing, ongoing response efforts to mitigate COVID-19, and any potential resurgence of the virus.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act was enacted March 27, 2020 and is the largest economic relief bill in U.S. history, allocating \$2.2 trillion in support to individuals and businesses affected by the Coronavirus pandemic and economic downturn. Seven main groups receive support from this Act: individuals, small businesses, big corporations, hospitals and public health, federal safety net, state and local governments, and education. The State System universities have been awarded grants from the education section through the Higher Education Emergency Relief Fund (HEERF), administered through the US Department of Education (ED). Additionally, the Commonwealth was appropriated funds from the state and local governments section, administered through the US Treasury, of which a portion was appropriated by the Commonwealth to the State System. In August 2020, the Pennsylvania Department of Education also awarded a portion of the ED Governor's Education Emergency Relief Fund (GEERF) to State System universities to assist with fall 2020 reopening efforts.

Below is a summary of CARES Act funds awarded to the State System. All but GEERF were awarded in fiscal year 2019/20.

	<i>\$ in millions</i>
Emergency Aid for Students ¹	\$40.0
Institutional Share ¹	40.0
Strengthening Institutions Program ¹	2.6
Appropriated Coronavirus Relief Funds ²	30.0
Governor's Education Emergency Relief ³	4.2
Total CARES Act Funds	\$116.8
For University Use (less Emergency Aid)	\$76.8

¹HEERF, US Department of Education

²Title V, Assistance for State, Local and Tribal Governments, US Department of the Treasury

³GEERF, US Department of Education, as distributed by Pennsylvania Department of Education

In addition to the CARES Act funds, universities may submit expenses associated with COVID-19 mitigation to the Pennsylvania Emergency Management Agency (PEMA) for reimbursement from the Federal Emergency Management Agency (FEMA) and PEMA. No such funds were received in 2019/20; universities are identifying such costs and managing the reimbursement process in fiscal year 2020/21.

In regard to the current impact of COVID-19, the largest component of the 2019/20 fiscal impact is the almost \$70 million in refunds of spring semester housing, dining and other fees that System universities provided to students, excluding approximately \$25 million in student housing refunds provided by university affiliates. Housing ownership and management varies by university and System universities are working closely with their affiliated entities that either own or manage on-campus housing with respect to the financial impact of housing refunds and reduced housing demand during remote learning. The HEERF Institutional Funds have been used primarily to offset the costs of the university refunds. Universities continue to incur costs for remote learning, remote working and pandemic mitigation, as well as revenue losses due to the impact on enrollment and auxiliary functions.

During the summer, counties in the Commonwealth began to phase in a lifting of the stay-at-home order on a regional basis, though such declaration and order remains in effect for several counties and regions in the Commonwealth. The Board provided a framework to guide operations of the System's universities for the fall 2020 semester. The framework provides flexibility for universities to plan locally while meeting Systemwide, state, and federal standards.

The System and its universities continue to monitor and assess the effects of the COVID-19 pandemic and its impact on the System's operations and financial position. A full assessment of the impact on the System depends, in part, on the Commonwealth, federal and student responses to the impact of COVID-19. It is not possible, at present, to project the total impact on the System's revenues, expenditures or financial position. Such impact will depend heavily on future events and actions by other governmental entities.

FINANCIAL HIGHLIGHTS

Following is an overview of the State System's financial activities for the year ended June 30, 2020, as compared to the year ended June 30, 2019, as well as future economic factors.

Tuition and Fees

In response to COVID-19 and to continue its efforts to address affordability, in April 2020, the Board voted to **freeze basic in-state tuition** for the 2020/21 academic year. This action resulted in an unprecedented two consecutive years in which tuition was frozen, even while confronting financial challenges brought on in part by the coronavirus pandemic. The Board also, for the first time, set a tentative tuition increase of 1% for the 2021/22 academic year. These actions provide assurances and financial relief to current and potential students and ensure that the State System will maintain its place as the affordable higher education option for students of the Commonwealth.

The base tuition rate for most full-time Pennsylvania residents will remain at \$3,858 per term, or \$7,716 for the full 2020/21 academic year. **Nonresident, undergraduate tuition** also was frozen, with rates ranging from \$10,032 to \$19,290 for the 2020/21 academic year. The basic resident **graduate tuition** rate remained at \$516 per credit, while the typical nonresident, graduate tuition rate remained at \$774 per credit.

The **technology tuition fee** remains at \$478 for full-time in-state students and \$728 for full-time out-of-state students. All funds raised by the technology tuition fee are used directly to benefit student learning. Universities have used the funds to install multimedia classrooms, design online instructional materials, increase university capacity for connectivity for students, and provide hardware, software, and support for students and faculty.

The State System's average **price of attendance** (tuition, mandatory fees, room, and board) for in-state undergraduate students decreased slightly for academic year 2020/21 at \$22,278, compared to \$22,362 in academic year 2019/20. This is a result of actions of the System's Board of Governors and universities' Councils of Trustees to address the impact of COVID-19 on student affordability through freezing tuition and most fees. The average price of attendance among all four-year public universities in the United States in academic year 2019/20 was \$21,950, while the average price of attendance for the Middle States region was \$22,770.

Appropriations

As part of the System Redesign strategy affirmed by the Board of Governors in January 2019, the System is developing a new methodology for distributing resources. In anticipation of changes to the **allocation formula** and to provide universities with greater stability and predictability of funding in the upcoming fiscal year, the Board suspended the use of the current allocation formula for fiscal years 2019/20 and 2020/21.

In fiscal year 2020/21, the State System will receive \$477.5 million in **General Fund appropriations**, equal to fiscal year 2019/20. Each university's fiscal year 2020/21 appropriation was set at the same amount as it received in fiscal year 2019/20.

Over the previous five years, the Commonwealth had restored about \$65 million of the nearly \$90 million in funding that was cut from the State System's annual appropriation at the beginning of the 2008 recession that severely impacted both the state and national economies and led to several years of funding cuts to the State System. Even so, the current year's appropriation is just slightly higher than what the System received in fiscal year 2008/09. Pennsylvania ranks 47th in the nation in public higher education appropriations per FTE student.

The State System received a \$17.6 million Realty Transfer Tax allocation in fiscal year 2019/20 from the Commonwealth's **Key '93** (Keystone Recreation, Park and Conservation) Fund, a decrease of \$0.8 million, or 4.3%, from fiscal year 2018/19. With the exception of fiscal years 2009/10 and 2010/11, when no funding was

received, Key '93 funds have provided a consistent revenue stream for university deferred maintenance projects since 1993.

The State System was allocated \$73 million in **Commonwealth capital funding** in fiscal year 2019/20, primarily for the renovation, replacement, and demolition of existing educational and general (E&G) buildings, all of which is completed under the direction and project management of the Commonwealth. This compares to \$70 million allocated in fiscal years 2020/21 and 2018/19, which was a \$5 million increase over the \$65 million in capital funding that has been allocated to the State System annually since fiscal year 2000/01, with the exception of fiscal years 2009/10 and 2010/11, when \$130 million was allocated. Except for associated furnishings and equipment, the universities do not record the value of Commonwealth-funded capital projects as revenue or assets, since the Commonwealth retains title to any part of a capital project for which they directly provide funding.

On January 15, 2020, an additional \$45 million of Commonwealth Public Improvement Project Capital Funding (PIP) was allocated to the State System, over and above the System's annual PIP funding for fiscal years 2019/20, 2020/21, and 2021/22. The System received \$17 million of these funds on a reimbursement basis in fiscal year 2019/20 and will be provided approximately \$15 million increments in each of fiscal years 2020/21, and 2021/22.

Enrollment

Fall 2019 student headcount was 95,782, a decrease of 2,568 students, or 2.6%, from fall 2018, and a decrease of 22,442 students, or 19%, from fall 2011. Following is the history of State System student headcount enrollment since 2011, for credit-bearing and clock hour students.

Year	Fall Enrollment	% Change from Prior Year
2019	95,782	(2.6%)
2018	98,350	(4.1%)
2017	102,547	(2.4%)
2016	105,038	(2.2%)
2015	107,386	(2.2%)
2014	109,808	(2.2%)
2013	112,225	(2.1%)
2012	114,688	(3.0%)
2011	118,224	(1.1%)

In academic year 2018/19, the universities awarded 26,789 degrees and certificates, a slight increase of 0.4% from the 26,682 degrees awarded in academic year 2017/18, and a 2.5% increase over the 26,131 completions in academic year 2016/17.

Degrees and Certificates Awarded (Academic Year)			
	2018/19	2017/18	2016/17
Undergraduate	20,646	20,589	20,297
Graduate	6,143	6,093	5,834
Total	26,789	26,682	26,131

With an undergraduate population comprising 88% Pennsylvania residents—and the majority of those being traditional-age students enrolling right out of high school—the State System's enrollment historically has been closely tied to the state's high school demographic trends. As the number of high school graduates in the state

continues to drop, most of the universities are expecting their enrollments to continue to decline, resulting in reduced revenue.

Since peaking at 131,733 students in academic year 2011/12, the number of **high school graduates** has dropped by 6.0% to 123,808 in academic year 2019/20. Following is the projected number of Pennsylvania high school graduates based on estimates from the Pennsylvania Department of Education.

Projected Pennsylvania High School Graduates		
Fiscal Year	Number of Graduates	% Increase (Decrease)
2019/20	123,808	-1.4%
2020/21	124,832	0.8%
2021/22	125,367	0.4%
2022/23	125,145	-0.2%
2023/24	127,051	1.5%
2024/25	129,158	1.7%
2025/26	129,726	0.4%
2026/27	126,762	-2.3%

The impact to the universities of the reductions in the number of high school graduates is compounded by a decline in the proportion of those who pursue higher education, an overcrowded higher education marketplace in the state, increased admissions standards at several universities designed to improve long-range retention, and the impact of COVID-19.

Employee Compensation Costs

Approximately 86% of PASSHE's FTE employees are covered by nine collective bargaining agreements. During 2019/20, new collective bargaining agreements were established with nearly all unions through fiscal year 2022/23. The only exceptions are two minor unions: the agreement for police supervisors with the International Union, Security, Police, and Fire Professionals of America (SPFPA), which expired on August 31, 2020 and for which a tentative agreement has been reached, and the Professional Doctors Association (PDA). The terms of the prior contracts remain in effect until a successor agreement is ratified.

In May 2019 the Board approved a **Voluntary Phased Retirement Program** in anticipation of full retirement for employee members of APSCUF. The program allows eligible faculty members to reduce their work commitment over a period of one to three years. During fall 2019, the System and faculty union successfully negotiated a second retirement incentive: the **Enhanced Sick Leave Program**, which provided for increased accrued sick leave reimbursement for faculty who would retire prior to the start of the fall 2020 semester. Due to the success of this program, it was expanded to all employee groups, resulting in over 400 participants.

Pension and OPEB Liabilities

The State System's liabilities related to **unfunded future pension and retiree healthcare costs total \$3.25 billion** when combined with the respective deferred inflows of resources and deferred outflows of resources. The System has virtually no control over \$1.8 billion of this amount, which represents its share of the plans administered by the Commonwealth, since the Commonwealth determines the associated benefits as well as the employer and retiree contribution rates for these plans.

The **Commonwealth's combined net pension and OPEB liabilities** totaled \$85.6 billion at June 30, 2020, compared to \$87.4 billion at June 30, 2019. Credit rating agencies consistently site these liabilities as significant challenges for both the State System and the Commonwealth and as factors that have contributed to credit rating downgrades. Recently enacted Commonwealth **pension legislation** will modify the pension benefits for new hires, slowing the rate of growth of the pension liability, but it will not aid in reducing the existing liability. No legislation has been enacted or proposed to either reduce or slow the growth of the OPEB liabilities administered by the Commonwealth, in which the AFSCME employees participate. The State System, however, closed the State System OPEB plan to new employees—except for employees represented by APSCUF—hired after January 2016. Although this will not reduce the existing liability, the new hires bring no additional OPEB liability, now or in the future.

Capital Investment and Debt

The State System purchased \$219.1 million in **capital assets** in fiscal year 2019/20, which includes \$114.1 million to build or improve academic and auxiliary facilities across all 14 universities.

During fiscal year 2019/20, the State System issued Series AW bonds, totaling \$85 million. Of this amount, \$70.7 million was used to current refund portions of Series AJ and Series AK bonds, and the remaining \$14.3 million was used to undertake various capital projects at the universities, comprising:

- \$2.5 million to finance replacement of HVAC equipment at Bloomsburg University.
- \$11.8 million to reimburse the acquisition of parking garages at West Chester University.

Bond principal and refundings of \$174.9 million and bond interest of \$41.0 million were paid, bringing the total outstanding **bond debt** to \$1,064.8 million at June 30, 2020.

In June 2020, Moody's Investors Service, Inc. maintained the State System's **bond rating** of Aa3, stable outlook. In June 2020, Fitch Ratings affirmed the State System's rating of A+ with stable outlook. These rates were reaffirmed September 11, 2020. Both rating agencies acknowledged the coronavirus pandemic and related mitigation measures have created an uncertain environment for the U.S. public higher education sector, constraining enrollment and revenue and contracting operating performance.

THE FINANCIAL STATEMENTS

Balance Sheet

The *Balance Sheet* reports the balances of the assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position of the State System as of the end of the fiscal year.

- *Assets* include cash; investments reported at market value; the value of outstanding receivables due from students and other parties; and land, buildings, and equipment reported at cost, less accumulated depreciation.
- *Deferred Outflows of Resources*, defined as a consumption of net position that applies to future periods, reports the deferred loss on bond defeasance and certain items associated with the pension and other postemployment benefits, or OPEB, liabilities (health and tuition benefits expected to be paid to eligible current and future retirees).
- *Liabilities* include payments due to vendors, employees, and students; revenues received but not yet earned; the balance of bonds payable; and amounts estimated to be due for items such as workers' compensation (the State System is self-insured), compensated absences (the value of sick and annual leave earned by employees), pension benefits, and OPEB.
- *Deferred Inflows of Resources*, defined as an acquisition of net position that applies to future periods, reports the deferred gain on bond defeasance, the fair value of irrevocable split-interest agreements, and certain items associated with the pension and OPEB.
- *Net Position*, informally referred to as *Net Assets* or *Fund Balance* (as it was previously called), is the sum of Assets and Deferred Outflows of Resources less Liabilities and Deferred Inflows of Resources.

Following is a summary of the State System's balance sheet at June 30, 2020, 2019, and 2018.

(in millions)

Balance Sheet						
	June 30, 2020	Change from Prior Year	June 30, 2019	Change from Prior Year	June 30, 2018	Change from Prior Year
Assets						
Cash and investments	\$1,257.6	(3.9%)	\$1,308.9	0.2%	\$1,305.8	(4.4%)
Capital assets, net	2,084.6	3.4%	2,016.2	5.0%	1,920.4	1.1%
Other assets	221.9	14.3%	194.1	(0.8%)	195.7	6.5%
Deferred outflows	224.6	(32.0%)	330.5	54.2%	214.4	(11.1%)
Total assets and deferred outflows	\$3,778.7	(1.8%)	\$3,849.7	5.9%	\$3,636.3	(1.5%)
Liabilities						
Workers' compensation	\$21.8	(4.0%)	\$22.7	1.3%	\$22.4	9.8%
Compensated absences	143.4	12.4%	127.6	1.1%	126.2	5.6%
Net pension liability	955.9	(13.8%)	1,108.3	18.2%	937.8	(8.3%)
Net OPEB liability	1,738.3	(12.1%)	1,976.6	(15.0%)	2,324.6	103.0%
Bonds payable	1,064.8	(7.8%)	1,154.7	11.5%	1,035.6	(3.5%)
Capital Lease Obligations	120.5	290.0%	30.9	(28.6%)	43.3	(6.5%)
Other Liabilities	524.4	11.4%	470.8	4.3%	451.6	(2.8%)
Deferred inflows	773.8	36.1%	568.4	111.0%	269.4	469.6%
Total liabilities and deferred inflows	5,342.9	(2.1%)	5,460.0	4.8%	5,210.9	32.3%
Net Position						
Net investment in capital assets	895.9	6.7%	839.6	5.1%	798.7	10.6%
Restricted	151.0	(0.8%)	152.3	2.7%	148.2	22.2%
Unrestricted	(2,611.1)	0.3%	(2,602.2)	3.2%	(2,521.5)	130.8%
Total net position	(1,564.2)	(2.9%)	(1,610.3)	2.3%	(1,574.6)	532.6%
Total liabilities, deferred inflows, and net position	\$3,778.7	(1.8%)	\$3,849.7	5.9%	\$3,636.3	(1.5%)

Net Position

Overall, **net position increased by \$46.1 million** in fiscal year 2019/20. This compares to a decrease of \$35.7 million in fiscal year 2018/19 from fiscal year 2017/18, and a decrease of \$1.326 billion in fiscal year 2017/18 from fiscal year 2016/17. The exceptionally large decrease in fiscal year 2017/18 is primarily the result of the implementation of GASB Statement No. 75, which alone caused net position to decrease by \$1.280 billion from the prior year. In accordance with GASB requirements, the State System reports three components of net position:

- *Net investment in capital assets*, informally referred to as *NIP* (from its former name, *Net Investment in Plant*), is the cost of land, buildings, improvements, equipment, furnishings, and library books, net of accumulated depreciation, less any associated debt (primarily bonds payable). This balance is not available for the State System's use in ongoing operations since the underlying assets would have to be sold in order to use the balance to pay current or long-term obligations. The Commonwealth prohibits the State System from selling university land and buildings without prior approval.
- *Restricted* net position represents the portion of balances of funds received from the Commonwealth, donors, or grantors, who have placed restrictions on the purpose for which the funds must be spent. *Nonexpendable* restricted net position represents the corpus of endowments and similar arrangements in which only the associated investment income can be spent. *Expendable* restricted net position represents the portion of restricted funds that is available for expenditure as long as any external purpose and time restrictions are met.

- *Unrestricted* net position includes funds that the Board, chancellor, or university presidents have designated for specific purposes, auxiliary funds, and all other funds not appropriately classified as restricted or invested in capital assets.

Unrestricted net position includes **three liabilities that the State System does not fund**, along with the respective deferred outflows and deferred inflows of resources. Because these liabilities will be realized gradually over future years, and because of their size, the universities are expected to fund these liabilities only on a "pay-as-you-go" basis; i.e., as they become due.

- The liability for **compensated absences** represents the dollar value, based on an employee's current salary, of annual and sick leave that employees have earned and could potentially receive in the form of cash payouts upon retirement or other termination. All full-time employees are eligible to be paid, upon termination, for their accumulated unused annual, personal, and holiday leave, with a maximum annual accumulation of 45 days. Sick leave payouts, however, are subject to vesting requirements, and the value of accumulated unused sick leave is paid only to those employees who retire and meet service and/or age requirements, and it is capped depending upon the number of days accumulated. The liability for sick leave is estimated based on historical sick leave payouts.

As employees earn and accumulate leave, the compensated absences liability increases; as employees use leave or terminate, the liability decreases. The liability increased by \$15.8 million to \$143.4 million for the year ended June 30, 2020, compared to a \$1.4 million increase over the prior year for the year ended June 30, 2019. Universities fund this liability only as cash payouts are made to employees upon termination. In fiscal year 2019/20, cash leave payouts to employees totaled \$12.7 million, compared to \$12.3 million and \$10.4 million in fiscal years 2018/19 and 2017/18, respectively. At June 30, 2020, the vested value of sick leave payable to employees upon retirement was \$60.9 million, and the value of annual leave payable upon any termination was \$41.4 million, for a total of \$102.3 million, or 71.3% of the total liability, due and payable to employees. By contrast, at June 30, 2019, the vested value of sick leave payable to employees upon retirement was \$50.8 million, and the value of annual leave payable upon any termination was \$35.3 million, for a total of \$86.1 million, or 67.5% of the total liability, due and payable to employees.

- The **net pension liability**, along with the related deferred outflows and inflows of resources, is the State System's allocated share of the difference between the Commonwealth's defined benefit pension obligations and the funding set aside by the Commonwealth in a qualified trust to pay the future benefits that are promised to current employees, retirees, and their beneficiaries. The annual increase in the liability is the amount that current employees earn each fiscal year as a pension benefit, actuarially calculated based on years of service, age, and estimates of future service and employee longevity. The liability decreases when funding of the qualified trust increases and when employees or retirees leave the pension plans. The negative effect of this liability, along with the related deferred outflows and inflows of resources, on net position at June 30, 2020, was \$932.1 million, compared to \$910.4 million at June 30, 2019 and \$861.4 million at June 30, 2018. Universities fund this liability on a "pay-as-you-go" basis; that is, they fund only the annual contractually required contributions to the State Employees Retirement System (SERS) and the Public School Employees Retirement System (PSERS).
- The liability for **other postemployment benefits, or OPEB**, represents the estimated future healthcare costs for current and future retirees. The annual increase in the liability is the amount that current employees earn each fiscal year as a retiree healthcare benefit, actuarially calculated based on years of service, age, and estimates of future service and employee longevity. The liability also increases as healthcare costs increase.

The liability decreases when required contributions by retirees are increased, when the number of eligible employees decreases, and when retirees leave the plan. The negative effect of this liability, along with the related deferred outflows and inflows of resources, on net position at June 30, 2020 was \$2.3 billion, at June 30, 2019, was \$2.4 billion, and at June 30, 2018 was \$2.5 billion. Like the pension liability, universities fund these liabilities on a "pay-as-you-go" basis: For the State System plan, universities make

biweekly contributions to fund the actual claims incurred by retirees during the year; for the Retired Employees Health Program (REHP) and PSERS OPEB plans, the universities make contractually required contributions as determined by the Commonwealth.

Following is a summary of the effect of the three unfunded liabilities, including the related deferred outflows of resources (DOR) and deferred inflows of resources (DIR), on the State System's net position. The State System's Alternative Retirement Plan is a defined contribution plan and has no liability.

(in millions)

**Effect of the Unfunded Liabilities,
including the respective Deferred Outflows of Resources and Deferred Inflows of Resources,
on Unrestricted Net Position**

	June 30, 2020	June 30, 2019	June 30, 2018
Unrestricted Net Position when the effect of the unfunded liabilities is included	(\$2,611.1)	(\$2,602.2)	(\$2,521.5)
Pension Liabilities, including DOR and DIR			
SERS Pension	852.8	833.2	785.5
PSERS Pension	79.3	77.2	75.9
Alternative Retirement Plan	0	0	0
Total Pension Liabilities	932.1	910.4	861.4
OPEB Liabilities, including DOR and DIR			
SSHE OPEB Plan	1,496.7	1,529.1	1,541.7
REHP OPEB Plan	815.0	886.4	918.6
PSERS OPEB Plan	3.6	3.7	3.7
Total OPEB Liabilities	2,315.3	2,419.2	2,464.0
Compensated Absences Liability	143.4	127.6	126.2
Total Unfunded Liabilities, including DOR and DIR	\$3,390.9	\$3,457.2	\$3,451.6
Unrestricted Net Position when the effect of the unfunded liabilities is excluded	\$779.7	\$855.0	\$930.1

When the unfunded liabilities and related DOR and DIR are excluded, unrestricted net position decreased by \$75.2 million, or 8.8%, from fiscal year 2018/19 to 2019/20, compared to a decrease of \$75.2 million, or 8.1%, from fiscal year 2017/18 to 2018/19. The cumulative two-year decrease of \$150.4 million, or 16.2%, is indicative of the declining revenues from enrollment losses as well as the continuing increases in employee salary and benefit costs, which together are straining university operations, draining cash, and requiring universities to draw from their reserves to balance operating budgets.

Statement of Revenues, Expenses, and Changes in Net Position

The *Statement of Revenues, Expenses, and Changes in Net Position* reports the revenues earned and the expenses incurred during the fiscal year. The result is reported as an increase or decrease in net position. In accordance with GASB requirements, the State System has classified revenues and expenses as either operating or nonoperating. GASB has determined that all public colleges' and universities' **state appropriations and appropriations and grants received as a result of the CARES Act are nonoperating revenues**. In addition, GASB requires classification of gifts, Pell grants, investment income and expenses, unrealized gains and losses on investments, interest expense, and gains and losses on disposals and acquisitions of assets as nonoperating. The State System classifies all of its remaining activities as operating.

Revenues and Gains

Following is a summary of revenues and gains for the years ending June 30, 2020, 2019, and 2018.

(in millions)

Revenues and Gains						
	June 30, 2020	Change from Prior Year	June 30, 2019	Change from Prior Year	June 30, 2018	Change from Prior Year
Operating revenues						
Tuition and fees, net	\$818.9	(2.7%)	\$841.4	(1.1%)	\$850.5	(0.6%)
Grants and contracts	163.7	(0.7%)	164.8	5.4%	156.3	(1.1%)
Auxiliary enterprises, net	245.7	(23.4%)	320.9	1.1%	317.4	(3.2%)
Other	44.5	(24.2%)	58.7	(3.8%)	61.0	2.0%
Total operating revenues	<u>1,272.8</u>	<u>(8.2%)</u>	<u>1,385.8</u>	<u>0.0%</u>	<u>1,385.2</u>	<u>(1.2%)</u>
Nonoperating revenues and gains						
State appropriations	512.2	5.3%	486.4	3.2%	471.1	2.3%
Federal & state approp. & grants-COVID	74.6	-	-	-	-	-
Investment income, net	50.3	0.2%	50.2	27.4%	39.4	12.6%
Unrealized gain on investments	-	(100.0%)	0.4	-	-	-
Gifts, nonoperating grants, and other	169.0	(6.7%)	181.2	(3.1%)	187.0	8.3%
Total nonoperating revenues and gains	<u>806.1</u>	<u>12.2%</u>	<u>718.2</u>	<u>3.0%</u>	<u>697.5</u>	<u>4.4%</u>
Total revenues and gains	<u>\$2,078.9</u>	<u>(1.2%)</u>	<u>\$2,104.0</u>	<u>1.0%</u>	<u>\$2,082.7</u>	<u>0.6%</u>

Overall, fiscal year 2019/20 **operating revenues** decreased from the prior fiscal year due to campus closures as a result of the coronavirus. Nonoperating revenues increased by 12.2%, due to increased appropriations and CARES Act funding. The overall decrease in revenues and gains was (1.2%).

Tuition and fee revenue is shown net of discounts and allowances and bad debt expense. Discounts and allowances represent financial aid to students in the form of grants, scholarships, and waivers. A freeze in tuition and most mandatory fees, combined with a decline in enrollment resulted in an overall decrease of **net tuition and fee revenue** of \$22.5 million in fiscal year 2019/20, or (2.7%), from fiscal year 2018/19. This follows a decrease in net tuition and fee revenue of \$9.1 million, or (1.1%), in fiscal year 2018/19 over fiscal year 2017/18. **Auxiliary enterprises** revenue, which includes food service sales, housing fees, and fees for the operation, maintenance, debt service, and renewal of student union and recreation centers, decreased by \$75.2 million in fiscal year 2019/20, or (23.4%), over fiscal year 2018/19. This compares to an increase of \$3.5 million or 1.1% in fiscal year 2018/19 from fiscal year 2017/18. The 2019/20 decrease can be attributed primarily to spring 2020 housing and dining refunds provided to students resulting from the mid-semester campus closures due to COVID-19.

State appropriations include cash as well as capital appropriations that are received in the form of noncash furnishings and equipment for the Commonwealth-funded construction projects. The fiscal year 2019/20 appropriation was \$512.2 million, a \$25.8 million increase over fiscal year 2018/19.

Other Revenue includes CARES Act funds that have been provided to State System universities for emergency aid to students whose lives have been disrupted by the pandemic, as well as funds that can be used by the institution to help cover costs associated with providing a safe campus and work environment throughout this pandemic. An overview of these funds is provided on page 5. A total of \$116.8 million in federal CARES Act funds have been awarded to date, of which \$74.6 million were recorded as revenue in 2019/20; the remaining will be recorded in 2020/21, when expended.

Expenses and Losses

Following is a summary of expenses and losses for the years ending June 30, 2020, 2019, and 2018.

(in millions)

	Expenses and Losses					
	June 30, 2020	Change from Prior Year	June 30, 2019	Change from Prior Year	June 30, 2018	Change from Prior Year
Operating expenses						
Instruction	\$717.9	(4.3%)	\$750.5	(0.7%)	\$755.6	(3.1%)
Research and public service	61.2	3.0%	59.4	16.5%	51.0	4.3%
Academic support	174.6	(4.7%)	183.3	(4.1%)	191.1	3.1%
Student services	184.8	(2.8%)	190.2	(0.1%)	190.3	0.4%
Institutional support	266.3	4.0%	256.0	(3.7%)	265.7	5.0%
Operations and maintenance of plant	122.6	(15.6%)	145.3	(10.3%)	162.0	1.7%
Depreciation	148.6	3.3%	143.9	5.5%	136.4	3.1%
Student aid	120.9	68.2%	71.9	(4.6%)	75.4	(1.3%)
Auxiliary enterprises	184.1	(27.7%)	254.5	(0.2%)	255.1	(1.5%)
Total operating expenses	<u>1,981.0</u>	<u>(3.6%)</u>	<u>2,055.0</u>	<u>(1.3%)</u>	<u>2,082.6</u>	<u>(0.1%)</u>
Other expenses and losses						
Interest expense on capital asset-related debt	41.0	(2.4%)	42.0	13.2%	37.1	(2.9%)
Loss on disposal/acquisition of assets	1.7	(94.0%)	28.3	1130.4%	2.3	(95.8%)
Unrealized loss on investment	9.1	(0.5%)	-	(100%)	19.6	(0.5%)
Total other expenses and losses	<u>51.8</u>	<u>(26.3%)</u>	<u>70.3</u>	<u>19.2%</u>	<u>59.0</u>	<u>(47.6%)</u>
Total expenses and losses	<u>\$2,032.8</u>	<u>(4.4%)</u>	<u>\$2,125.3</u>	<u>(0.8%)</u>	<u>\$2,141.6</u>	<u>(2.5%)</u>

The decrease in **operating expenses** of \$74.0 million, or (3.6%), in fiscal year 2019/20 compared to fiscal year 2018/19 is attributed to the \$86.9 million decrease in the actuarially calculated pension and OPEB expenses in excess of pay-as-you-go contributions.

Salaries and wages totaled \$934.3 million in fiscal year 2019/20, an increase of \$2.5 million, or 0.3%, over fiscal year 2018/19. The increase is the result of the salary increases granted in collective bargaining agreements and a slight decrease in complement. Annualized full-time equivalent employees, decreased to 11,164 in fiscal year 2019/20, compared to 11,401 in fiscal year 2018/19 and 11,397 in fiscal year 2017/18.

When the effects of the non-cash pension and OPEB expenses in excess of contributions are factored out, fiscal year 2019/20 **employee benefits** totaled \$440.8 million, a decrease of \$1.5 million, or (0.3%), below fiscal year 2018/19.

Following is a summary of salaries, wages, and benefits expenses for the years ending June 30, 2020, 2019, and 2018.

(in millions)

Salaries, Wages, and Benefits						
	June 30, 2020	Change from Prior Year	June 30, 2019	Change from Prior Year	June 30, 2018	Change from Prior Year
Salaries and wages	\$934.3	0.3%	\$931.8	2.2%	\$912.0	0.6%
Employer benefit contributions						
Employee healthcare	129.4	4.7%	123.6	(3.6%)	128.2	(2.3%)
Pension benefits	152.3	0.1%	152.2	3.0%	147.7	8.4%
Retiree healthcare	56.0	(11.3%)	63.1	6.4%	59.3	(15.9%)
Other benefits	103.1	(0.3%)	103.4	1.0%	102.4	4.1%
Total employer benefit contributions	<u>440.8</u>	<u>(0.3%)</u>	<u>442.3</u>	<u>1.1%</u>	<u>437.6</u>	<u>(0.3%)</u>
Noncash pension and OPEB expense						
Pension expense	32.2	(45.1%)	58.7	(64.9%)	35.6	(40.5%)
Retiree healthcare expense	(103.5)	(131.5%)	(44.7)	(212.6%)	39.7	1.5%
Total noncash pension and OPEB expense	<u>(71.3)</u>	<u>(609.3%)</u>	<u>14.0</u>	<u>(81.4%)</u>	<u>75.3</u>	<u>(23.9%)</u>
Total salaries, wages, and benefits	<u>\$1,303.8</u>	<u>(6.1%)</u>	<u>\$1,388.1</u>	<u>(2.6%)</u>	<u>\$1,424.9</u>	<u>(1.2%)</u>

The employer share of **employee healthcare contributions** increased by \$5.8 million in fiscal year 2019/20, or 4.7%, from fiscal year 2018/19. This follows a decrease of \$4.6 million, or (3.6%), in fiscal year 2018/19, and a decrease of \$3.0 million, or (2.3%), in fiscal year 2017/18, over the prior fiscal years. This cumulative three-year \$1.8 million decrease can be attributed to design changes in the plan administered by the State System, which increased employees' share of expenses through higher employee premium contributions, copays, deductibles, and coinsurance, and limited spousal participation.

The employer share of **retiree benefits contributions** decreased by \$7.0 million, or (11.2%), in fiscal year 2019/20 over fiscal year 2018/19. This follows an increase of \$8.2 million, or 4.0%, and an increase of \$0.3 million, or 0.1%, in fiscal years 2018/19 and 2017/18, respectively, over the prior fiscal years. Following is a summary of the State System's contributions for retiree pension and healthcare benefits for the years ending June 30, 2020, 2019, and 2018.

(in millions)

State System Employer Contributions for Retiree Pension and Healthcare Benefits						
	June 30, 2020	Change from Prior Year	June 30, 2019	Change from Prior Year	June 30, 2018	Change from Prior Year
Pension						
SERS	\$97.2	(0.3%)	\$97.5	3.0%	\$94.7	13.0%
PSERS	8.8	2.3%	8.6	8.9%	8.0	11.3%
ARP	46.3	0.4%	46.1	2.2%	45.1	(0.4%)
Retiree Healthcare						
System Plan	36.2	(2.4%)	37.1	(1.6%)	37.7	(2.1%)
REHP	19.6	(24.0%)	25.8	20.6%	21.4	(32.9%)
PSERS Healthcare	0.2	0.0%	0.2	0.0%	0.2	0.0%
Totals	<u>\$208.3</u>	<u>(3.3%)</u>	<u>\$215.3</u>	<u>4.0%</u>	<u>\$207.1</u>	<u>0.1%</u>

- **Employer contributions to SERS**, a defined benefits pension plan, were 36.04% of a participating employee's salary for the majority of participants in fiscal year 2019/20 and are expected to increase in the near future, but at a lesser rate than recent historical experience. This rate has been steadily and significantly increasing since fiscal year 2010/11, when the rate was 4.11% of an employee's salary. At December 31, 2019, 56.5% of the SERS liability was funded
- **Employer contributions to PSERS**, a defined benefits pension plan, were 16.7% of a participating employee's salary in fiscal year 2019/20. This rate is expected to increase in the near future, but at a lesser rate than recent historical experience. This rate has been significantly increasing, with some fluctuation, since fiscal year 2010/11, when the rate was 2.82% of an employee's salary. The Commonwealth makes annual pension contributions to PSERS on behalf of State System employees at the same annual rate. At June 30, 2019, 55.7% of the PSERS liability was funded.
- **Employer contributions to the ARP**, a defined contribution plan, were 9.29% of a participating employee's salary in fiscal year 2019/20, the same rate since the plan's inception, and are expected to remain at the same rate for the near future. Because it is a defined contribution plan, the ARP has no unfunded liability.
- **Employer contributions to the State System OPEB Plan**, a defined benefits retiree healthcare plan administered by the State System, are made to a third-party health insurance vendor based on claims estimates agreed to by the State System and the third-party vendor. The vendor charges an additional assessment or issues a cash refund in the following year to reconcile to the actual claims paid. Despite the increasing population of retirees and rising healthcare costs, the State System has seen flat or declining healthcare spending in this plan from retirees for the last several years. This can be attributed in part to design changes that increased retirees' share of expenses through higher retiree premium contributions, copays, deductibles, and coinsurance. The employer rate for fiscal year 2019/20 was set at \$194 per pay period per active participating employee and will decrease to \$171 in fiscal year 2020/21. Future year changes will depend upon actual claims experience. As of June 30, 2020, no funds have been placed in a trust to fund the future liability.
- **Employer contributions to the REHP**, a defined benefits retiree healthcare plan administered by the PEBTF, were \$230 per pay period per active participating employee in fiscal year 2019/20 and will remain the same during 2020/21. The contribution rate is set at the discretion of the Commonwealth and periodically fluctuates, ranging from \$200 in fiscal year 2010/11 to \$418 in fiscal year 2015/16. At June 30, 2019, only 3.8% of the REHP liability was funded.
- **Employer contributions to the PSERS Health Insurance Premium Assistance Program**, a defined benefits retiree healthcare plan administered by PSERS, were 0.42% of a participating employee's salary in fiscal year 2019/20. The rate has been and is expected to remain at approximately the same amount. Any State System retiree who is a member of PSERS is eligible for this additional healthcare benefit, which offers up to \$100 per month of reimbursements for healthcare costs, including insurance premiums.

The cost for **all other employee benefits**, such as Social Security and workers' compensation, decreased in fiscal year 2019/20 by a total of \$0.3 million, or (0.3%), over fiscal year 2018/19, compared to a fiscal year 2018/19 increase of \$1.0 million, or 1.0%, over fiscal year 2017/18. The decrease is due to a decline in workers compensation expense.

Other Expenses and Losses

Interest expense on capital asset-related debt was \$41.0 million, a decrease of \$1.0 million below fiscal year 2018/19, which can be attributed to the State System's annual practice of refunding existing debt with debt that carries lower interest rates. Also offsetting debt increases is the faster amortization of the State System's older, more expensive, debt, as a higher ratio of debt service is applied to principal rather than interest in the later years of the payment schedules.

Statement of Cash Flows

The *Statement of Cash Flows* provides information about the State System's cash receipts and cash payments. It can be used to determine the State System's ability to generate future net cash flows and meet its obligations as they come due and its need for external financing.

The universities record their share of the State System pooled deposits and investments account at cost; that is, without regard to the fair value of the underlying investments. The associated markup or markdown for the fair value, as well as the annual unrealized gains or losses on investments, are recorded only at the consolidated level. In fiscal year 2019/20, the unrealized loss on the State System pooled deposits and investments account was \$9.7 million, while the accumulated fair value markup at June 30, 2020, was \$55.3 million. This compares to an unrealized loss on investments in fiscal year 2018/19 of \$3.7 million and an accumulated fair value markup of \$65.1 million at June 30, 2019.

The combination of factors such as years of relatively low appropriations, declining enrollment, low interest rates, increasing personnel costs, and high long-term debt, and COVID-19 related campus closures continues to cause **cash flow pressures** for some State System universities. Total unrestricted operating cash (combined Educational & General and Auxiliary) decreased by \$84.9 million, or 8.7%, in fiscal year 2019/20, to \$894.7 million, compared to a balance of \$979.6 million at June 30, 2019. Cash flow weaknesses, which can seriously challenge financial viability, have begun to significantly affect most universities, with Slippery Rock University and West Chester University being notable exceptions. The Office of the Chancellor is monitoring universities whose cash, revenue, expenditure, and enrollment trends may be an indication of future cash flow weaknesses. Mansfield University received a \$6.0 million line of credit from the State System pooled account in May 2020 on which it had \$4.0 million outstanding at June 30, 2020. .

Over the course of the past several years, the State System had provided lines of credit, System notes and other support to Cheyney University. On November 13, 2019, Governor Wolf pledged support to the System through a letter to Cheyney's President assuring that "Cheyney's obligation to other PASSHE institutions and the Office of the Chancellor, totaling \$40,264,814, is eliminated."

OTHER ECONOMIC FACTORS

The **Commonwealth** ended fiscal year 2019/20 with \$32.3 billion in General Fund collections, \$2.6 billion below the previous year and 9.1% below estimate, due to reduced economic activity during the COVID-19 pandemic. The Commonwealth extended tax filing deadlines to July 15, 2020; \$1.6 billion of the revenue collected July 2020 is attributed to extending due dates for various taxes due to the COVID-19 pandemic.

On May 29, 2020, Governor Tom Wolf signed a fiscal year 2020/21 Commonwealth General Fund budget of \$25.75 billion that provided for 12 months of sustained public education funding at 2019/20 levels, while supporting most other state agencies through five months of the fiscal year. It is anticipated a supplemental budget bill will be passed in November 2020 for the remainder of the fiscal year. The spending plan appropriated to the State System was \$477.5 million in General Funds and \$30 million in CARES Act Title V federal appropriations.

Cheyney Accreditation and Title IV Status

On November 22, 2019, Middle States informed Cheyney University of its "...reaffirm[ed] accreditation because the institution is now in compliance with Standard VI (Planning, Resources, and Institutional Improvement) and Requirement of Affiliation 11. The Commonwealth of Pennsylvania, Office of the Governor, has provided written assurance of the elimination of Cheyney University's debt to the Pennsylvania State System of Higher Education (PASSHE) and the Office of the Chancellor. Prior to this notification, Cheyney had been on probation since November 2015.

Cheyney has been on the Department of Education's (ED) Heightened Cash Monitoring 2 (HCM2) status since September 2015, which means that the university does not receive federal student financial aid funds in advance, but must use its own cash to grant federal financial aid to its students and then request reimbursement from the ED. Given Cheyney's success in meeting ED requirements, it is anticipated Cheyney will be removed from HCM2 status in fiscal year 2020/21.

In August 2019, ED notified Cheyney that it was assessing a repayment liability of \$14.3 million to Cheyney for the federal student financial aid improperly administered during fiscal years 2011/12, 2012/13, and 2013/14. Recording this assessment resulted in an overall unrestricted loss of \$12.3 million for fiscal year 2018/19. In February 2020, a settlement agreement was executed between ED and Cheyney and a payment schedule was established for the settlement amount.

*For **further information** about these financial statements, contact Pennsylvania's State System of Higher Education, Administration and Finance Division, 2986 North Second Street, Harrisburg, PA 17110.*

Pennsylvania's State System of Higher Education

Balance Sheet

(dollars in thousands)

Assets and Deferred Outflows of Resources

	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Current Assets		
Cash and cash equivalents	\$ 103,963	\$ 33,626
Short-term investments	404,376	686,442
Accounts receivable, students, net	41,553	45,996
Accounts receivable, other	17,682	26,435
Governmental grants and contracts receivable	52,141	30,511
Prepaid expenses	14,496	14,443
Current portion of loans receivable	4,660	7,158
Due from component units	27,584	11,445
Other current assets	<u>5,772</u>	<u>7,274</u>
Total Current Assets	672,227	863,330
Noncurrent Assets		
Restricted cash and cash equivalents	25	25
Long-term investments, including endowments	749,252	588,807
Beneficial interests	23,598	23,917
Loans receivable	20,517	25,250
Due from component units	1,177	1,072
Capital assets, net of accumulated depreciation	2,084,626	2,016,155
Other noncurrent assets	<u>2,636</u>	<u>704</u>
Total Noncurrent Assets	2,881,831	2,655,930
Total Assets	<u>3,554,058</u>	<u>3,519,260</u>
Deferred Outflows of Resources	224,637	330,493
Total Assets and Deferred Outflows of Resources	<u><u>\$ 3,778,695</u></u>	<u><u>\$ 3,849,753</u></u>

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

Balance Sheet *(continued)*

(dollars in thousands)

Liabilities, Deferred Inflows of Resources, and Net Position

	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Current Liabilities		
Accounts payable and accrued expenses	\$ 283,614	\$ 243,007
Unearned revenue	70,994	48,076
Deposits	5,922	6,381
Current portion of workers' compensation liability	4,098	4,779
Current portion of compensated absences liability	18,728	12,894
Current portion of OPEB liability	55,817	62,924
Current portion of capitalized lease obligations	6,800	3,899
Current portion of bonds payable	66,595	86,590
Due to component units	10,596	12,569
Other current liabilities	<u>52,681</u>	<u>54,160</u>
Total Current Liabilities	575,845	535,279
Noncurrent Liabilities		
Unearned revenue	616	899
Workers' compensation liability, net of current portion	17,676	17,948
Compensated absences liability, net of current portion	124,673	114,738
Net pension liability	955,901	1,108,260
OPEB liability, net of current portion	1,682,524	1,913,725
Capitalized lease obligations, net of current portion	113,705	26,958
Bonds payable, net of current portion	998,195	1,068,070
Other noncurrent liabilities	<u>100,011</u>	<u>105,628</u>
Total Noncurrent Liabilities	3,993,301	4,356,226
Total Liabilities	<u>4,569,146</u>	<u>4,891,505</u>
Deferred Inflows of Resources	773,717	568,447
Net Position		
Net investment in capital assets	895,905	839,644
Restricted for:		
Nonexpendable:		
Scholarships and fellowships	57,477	57,339
Student loans	3,421	4,749
Other	3,121	3,228
Expendable:		
Scholarships and fellowships	31,076	30,602
Capital projects	35,342	38,265
Other	20,637	18,164
Unrestricted	<u>(2,611,147)</u>	<u>(2,602,190)</u>
Total Net Position	<u>(1,564,168)</u>	<u>(1,610,199)</u>
Total Liabilities, Deferred Inflows of Resources, and Net Position	<u><u>\$ 3,778,695</u></u>	<u><u>\$ 3,849,753</u></u>

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

**Statement of Revenues, Expenses, and Changes in Net Position
For the Years Ended June 30, 2020 and 2019**

(dollars in thousands)

	<u>2020</u>	<u>2019</u>
Operating Revenues		
Tuition and fees, net	\$ 818,906	\$ 841,415
Grants and contracts	163,653	164,883
Sales and services	36,417	42,077
Auxiliary enterprises, net	245,680	320,884
Other revenues, net	8,129	16,615
Total Operating Revenues	<u>1,272,785</u>	<u>1,385,874</u>
Operating Expenses		
Instruction	717,858	750,456
Research and Public Service	61,150	59,301
Academic support	174,595	183,312
Student services	184,816	190,256
Institutional support	266,267	255,983
Operations and maintenance of plant	122,618	145,333
Depreciation	148,635	143,899
Student aid	120,874	71,911
Auxiliary enterprises	184,140	254,518
Total Operating Expenses	<u>1,980,953</u>	<u>2,054,969</u>
Operating Loss	<u>(708,168)</u>	<u>(669,095)</u>
Nonoperating Revenues (Expenses)		
State appropriations, general and restricted	477,470	468,108
Federal and State appropriations and grants-COVID	74,590	-
Pell grants	129,398	136,010
Investment income, net	50,255	50,198
Unrealized gain (loss) on investments	(9,089)	402
Gifts for other than capital purposes	21,502	22,852
Interest expense on capital asset-related debt	(41,006)	(42,025)
Loss on disposal/acquisition of assets	(1,747)	(28,322)
Other nonoperating revenue	11,838	11,410
Net Nonoperating Revenues	<u>713,211</u>	<u>618,633</u>
Income (Loss) before other revenues and special item	<u>5,043</u>	<u>(50,462)</u>
State appropriations, capital	34,735	18,244
Capital gifts and grants	6,253	10,930
Income (Loss) before special item	<u>46,031</u>	<u>(21,288)</u>
Special item - regulatory matter	-	(14,308)
Increase (Decrease) in Net Position	<u>46,031</u>	<u>(35,596)</u>
Net position—beginning of year	(1,610,199)	(1,574,603)
Net position—end of year	<u><u>\$ (1,564,168)</u></u>	<u><u>\$ (1,610,199)</u></u>

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

Statement of Cash Flows
For the Years Ended June 30, 2020 and 2019

(dollars in thousands)

	2020	2019
Cash Flows from Operating Activities		
Tuition and fees	\$ 818,703	\$ 841,039
Grants and contracts	151,787	152,805
Payments to suppliers for goods and services	(456,429)	(486,118)
Payments to employees	(1,359,584)	(1,367,042)
Loans issued to students	(135)	(169)
Loans collected from students	7,303	6,684
Student aid	(121,679)	(72,519)
Auxiliary enterprise charges	244,523	320,334
Sales and services	37,228	41,036
Other receipts	65,376	58,048
Net cash used in operating activities	<u>(612,907)</u>	<u>(505,902)</u>
Cash Flows from Noncapital Financing Activities		
State appropriations	507,470	468,108
Gifts and nonoperating grants for other than capital purposes	216,143	158,868
PLUS, Stafford, and other loans receipts (non-Perkins)	849,366	884,992
PLUS, Stafford, and other loans disbursements (non-Perkins)	(849,358)	(884,992)
Agency transactions, net	(677)	202
Other	1,014	1,527
Net cash provided by noncapital financing activities	<u>723,958</u>	<u>628,705</u>
Cash Flows from Capital Financing Activities		
Proceeds from capital debt and leases	100,436	111,333
Capital appropriations	34,735	18,244
Capital grants and gifts received	5,643	5,635
Proceeds from sales of capital assets	201	151
Purchases of capital assets	(114,002)	(120,204)
Principal paid on capital debt and leases	(180,195)	(138,287)
Interest paid on capital debt and leases	(51,621)	(46,585)
Net cash used in capital financing activities	<u>(204,803)</u>	<u>(169,713)</u>
Cash Flows from Investing Activities		
Proceeds from sales and maturities of investments	26,161,377	41,026,530
Interest on investments	51,239	50,013
Purchase of investments	<u>(26,048,527)</u>	<u>(41,040,024)</u>
Net cash provided by investing activities	<u>164,089</u>	<u>36,519</u>
Net Increase (Decrease) in Cash and Cash Equivalents	70,337	(10,391)
Cash and cash equivalents—beginning of year	33,651	44,042
Cash and cash equivalents—end of year	<u><u>\$ 103,988</u></u>	<u><u>\$ 33,651</u></u>

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

Statement of Cash Flows *(continued)*
For the Years Ended June 30, 2019 and 2018
(dollars in thousands)

	<u>2020</u>	<u>2019</u>
Reconciliation of Operating Loss to Net Cash Used in Operating Activities		
Operating loss	\$ (708,168)	\$ (669,095)
Adjustments to reconcile operating loss to net cash used in operating activities:		
Depreciation expense	148,635	143,899
Expenses paid by Commonwealth or donor	3,135	6,344
Effect of changes in operating assets, liabilities, deferred outflows of resources, and deferred inflows of resources:		
Receivables, net	(15,805)	(12,471)
Other assets	(10,072)	6,706
Accounts payable	(649)	(426)
Unearned revenue	2,988	(2,930)
Student deposits	(459)	664
Compensated absences	15,769	1,431
Loans to students and employees	7,168	6,514
Defined benefit pensions	(152,359)	(347,964)
Other postemployment benefits liability (OPEB)	(238,308)	170,503
Other liabilities	26,590	9,337
Deferred outflows of resources related to pensions	104,728	(78,473)
Deferred outflows of resources related to OPEB	(190)	(39,141)
Deferred inflows of resources related to pensions	69,364	(43,006)
Deferred inflows of resources related to OPEB	134,728	342,206
Net cash used in operating activities	<u>\$ (612,905)</u>	<u>\$ (505,902)</u>
Noncash Activities		
Capital assets included in payables	\$ 9,524	\$ 6,467
Capital assets acquired by new capital leases	94,993	4,116
Capital assets acquired by gift or appropriation	534	5,220
Student housing capital assets acquired	-	104,984
Like-kind exchanges	20	52
Debt acquired for student housing acquisition	-	132,074
Commonwealth on-behalf contributions to PSERS	10,823	9,883

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

Component Units Statement of Financial Position

(dollars in thousands)

	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Assets		
Cash and cash equivalents	\$ 157,647	\$ 145,435
Accounts and interest receivable	5,489	20,340
Contributions/pledges receivable	27,108	16,452
Due from universities	10,670	12,466
Inventories and prepaid expenses	8,010	7,243
Restricted cash and cash equivalents	53,454	59,526
Short-term investments	22,593	71,698
Long-term investments	553,200	495,448
Land, buildings, and equipment, net	835,907	942,063
Other assets	140,640	76,867
Total Assets	<u>\$ 1,814,718</u>	<u>\$ 1,847,538</u>
Liabilities		
Accounts and interest payable	\$ 30,267	\$ 31,137
Deferred revenue	7,012	22,159
Annuity liabilities	6,566	6,310
Due to universities	26,391	12,413
Deposits payable	37,497	37,516
Interest rate swap agreements	84,267	58,115
Capitalized leases	26,479	27,123
Bonds and notes payable	1,054,670	1,076,920
Other liabilities	17,701	16,687
Total Liabilities	<u>1,290,850</u>	<u>1,288,380</u>
Net Assets		
Without donor restrictions	51,729	110,665
With donor restrictions	472,139	448,493
Total Net Assets	<u>523,868</u>	<u>559,158</u>
Total Liabilities and Net Assets	<u>\$ 1,814,718</u>	<u>\$ 1,847,538</u>

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

**Component Units Statement of Activities
For the Years Ended June 30, 2020 and 2019**

(dollars in thousands)

	2020	2019
Changes in net assets without donor restrictions		
Contributions	\$ 8,332	\$ 17,523
Sales and services	27,967	36,464
Student fees	27,229	31,991
Grants and contracts	8,899	9,419
Rental income	104,164	134,331
Investment return, net	8,051	17,338
Other revenues and gains	13,452	19,622
Net assets released from restrictions	39,378	31,524
Total Revenues and Gains	237,472	298,212
Expenses and Losses		
Program services:		
Scholarships and grants	25,832	21,810
Student activities and programs	26,153	31,026
University stores	19,975	22,542
Housing	110,163	120,324
Other programs	38,189	44,268
Management and general	27,596	28,059
Fundraising	11,753	11,639
Total Expenses	259,661	279,668
Other expenses and losses	37,022	12,219
Total Expenses and Losses	296,683	291,887
Change in net assets without donor restrictions	(59,211)	6,325
Changes in net assets with donor restrictions		
Contributions	\$ 50,828	\$ 28,542
Investment return, net	10,449	18,331
Other revenue and gains	2,928	2,595
Other expenses and losses	(906)	(601)
Net assets released from restrictions	(39,378)	(31,524)
Change in net assets with donor restrictions	23,921	17,343
Change in total net assets	(35,290)	23,668
Net assets—beginning of year	559,158	535,490
Net assets—end of year	\$ 523,868	\$ 559,158

See accompanying notes to financial statements.

Pennsylvania's State System of Higher Education

Component Units Expenses by Nature and Function

For the Years Ended June 30, 2020 and 2019

(dollars in thousands)

2020										
Natural Expense	Program Activities						Supporting Activities			Total Expenses
	Scholarships and grants	Student activities and programs	University stores	Housing	Other programs	Total Programs	Management and general	Fundraising	Total Supporting	
Salaries and benefits	\$459	\$4,020	\$5,161	\$11,865	\$6,589	\$28,094	\$14,857	\$5,764	\$20,621	\$48,715
Gifts and grants	18,973	4,843	9	531	7,913	32,269	1,441	179	1,620	33,889
Supplies and travel	27	6,432	4,370	965	2,744	14,538	540	707	1,247	15,785
Services and professional fees	22	2,158	230	4,641	3,324	10,375	2,910	2,825	5,735	16,110
Office and occupancy	13	947	1,459	17,496	1,697	21,612	1,887	444	2,331	23,943
Depreciation	0	462	377	28,409	2,852	32,100	1,221	49	1,270	33,370
Interest	0	0	0	34,783	5,267	40,050	1,156	31	1,187	41,237
Other	6,338	7,291	8,369	11,473	7,803	41,274	3,584	1,754	5,338	46,612
Total Expenses	\$25,832	\$26,153	\$19,975	\$110,163	\$38,189	\$220,312	\$27,596	\$11,753	\$39,349	\$259,661

2019										
Natural Expense	Program Activities						Supporting Activities			Total Expenses
	Scholarships and grants	Student activities and programs	University stores	Housing	Other programs	Total Programs	Management and general	Fundraising	Total Supporting	
Salaries and benefits	\$415	\$4,687	\$5,522	\$13,031	\$6,286	\$29,941	\$14,417	\$5,096	\$19,513	\$49,454
Gifts and grants	14,283	5,758	254	1,680	13,352	35,327	1,015	142	1,157	36,484
Supplies and travel	23	7,586	5,284	1,120	4,014	18,027	730	1,070	1,800	19,827
Services and professional fees	25	2,578	284	6,349	3,450	12,686	3,072	2,871	5,943	18,629
Office and occupancy	11	1,228	1,557	19,763	987	23,546	1,942	309	2,251	25,797
Depreciation	0	484	389	29,282	2,540	32,695	1,582	45	1,627	34,322
Interest	0	0	0	36,833	4,926	41,759	1,518	32	1,550	43,309
Other	7,053	8,705	9,252	12,266	8,713	45,989	3,783	2,074	5,857	51,846
Total Expenses	\$21,810	\$31,026	\$22,542	\$120,324	\$44,268	\$239,970	\$28,059	\$11,639	\$39,698	\$279,668

See accompanying notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

Years Ended June 30, 2020 and 2019

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

Pennsylvania's State System of Higher Education (State System) is a body corporate and politic, created by the State System of Higher Education Act of November 12, 1982, P.L. 660, No. 188, as amended (Act 188). The State System is a component unit of the Commonwealth of Pennsylvania (Commonwealth) and is governed by a Board of Governors (Board), as provided for in Act 188. The State System comprises the 14 universities and the Office of the Chancellor.

Reporting Entity

The State System functions as a Business Type Activity, as defined by the Governmental Accounting Standards Board (GASB).

Certain affiliated organizations are included in the State System's financial statements as discretely presented component units. Some of the organizations, such as university student associations, are included because the Board has oversight responsibility for the organizations. The criteria used in determining the organizations for which the State System has oversight responsibility include financial interdependency, the ability to select members of the governing body, the ability to designate management, the ability to influence operations significantly, and accountability for fiscal matters. Other affiliated organizations for which the Board does not have oversight responsibility, such as university foundations and alumni associations, are included when the economic resources received or held by the organization are entirely or almost entirely for the direct benefit of the State System, the activity of the organization is significant to the State System universities, and the State System historically has received a majority of these economic resources. Neither the State System nor its universities control the timing or amount of receipts from these organizations.

The State System does not consider any of its component units to be major and has aggregated all component unit information into a separate set of financial statements. Information on individual component units can be obtained by contacting the respective universities.

Transactions between the universities and the Office of the Chancellor have been eliminated in the accompanying financial statements.

Measurement Focus, Basis of Accounting, and 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 (GAAP), as prescribed by GASB. The economic resources measurement focus reports all inflows, outflows, and balances that affect an entity's net position. Under the accrual basis of accounting, 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 have been met.

The accompanying financial statements of the component units, which are all private nonprofit organizations, are reported in accordance with Financial Accounting Standards Board (FASB) requirements, including Accounting Standards Update No. 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities*, an amendment of FASB Codification Topic 958, *Not-for-Profit-Entities*. As such, certain revenue recognition criteria and presentation features are different from GASB revenue recognition criteria and presentation features. No modifications for these differences have been made to the component units' financial information presented herein.

Operating Revenues and Expenses

The State System records tuition, all academic, instructional, and other student fees, student financial aid, auxiliary activity, and corporate partnerships as operating revenue. In addition, governmental and private grants and contracts in which the grantor receives equal value for the funds given to the university are recorded as operating revenue. All expenses, with the exception of interest expense and extraordinary expenses, are recorded as operating expenses. Appropriations, gifts, investment income, parking and library fines, capital grants, gains and losses on investments, gains and losses on the acquisition and disposal of assets, and governmental and private research grants and contracts in which the grantor does not receive equal value for the funds given to the university are reported as nonoperating.

Deferred Outflows and Deferred Inflows of Resources

The balance sheet reports separate sections for *Deferred Outflows of Resources* and *Deferred Inflows of Resources*.

Deferred Outflows of Resources, reported after *Total Assets*, is defined by GASB as a consumption of net position that applies to future periods. The expense is recognized in the applicable future period(s). *Deferred Inflows of Resources*, reported after *Total Liabilities*, is defined by GASB as an acquisition of net position that applies to future periods. The revenue is recognized in the applicable future period(s).

Transactions are classified as deferred outflows of resources or deferred inflows of resources only when specifically prescribed by GASB standards.

The State System is required to report the following as Deferred Outflows of Resources or Deferred Inflows of Resources.

- Deferred gain or loss on bond refundings, which results when the carrying value of a refunded bond is greater or less than its reacquisition price. The difference is deferred and amortized over the remaining life of the old bond or the life of the new bond, whichever is shorter.
- For defined benefit pension plans and other postemployment benefit (OPEB) plans: the difference between expected (actuarial) and actual experience, changes in actuarial assumptions, the net difference between projected (actuarial) and actual earnings on pension and OPEB plan investments, changes in the State System's proportion of expenses and liabilities of the pension and OPEB plans as a whole, differences between the State System's pension and OPEB contributions and its proportionate share of contributions, and State System pension and OPEB contributions subsequent to the respective pension or OPEB plan valuation measurement date.

Net Position

Net position is the residual of Assets, plus Deferred Outflows of Resources, less Liabilities, less Deferred Inflows of Resources. The State System maintains the following classifications of net position.

Net investment in capital assets: Capital assets, net of accumulated depreciation and outstanding principal balances of debt attributable to the acquisition, construction, repair, or improvement of those assets.

Restricted—nonexpendable: The portion of net position subject to externally imposed conditions requiring that it be maintained by the State System in perpetuity.

Restricted—expendable: The portion of net position use of which is subject to externally imposed conditions that can be fulfilled by the actions of the State System or by the passage of time.

Unrestricted: All other categories of net position. Unrestricted net position may be designated for specific purposes by the Board.

When both restricted and unrestricted funds are available for expenditure, the decision as to which funds are used first is left to the discretion of the universities.

Cash Equivalents and Investments

The State System considers all demand and time deposits and money market funds to be cash equivalents. Investments purchased are stated at fair value. Investments received as gifts are recorded at their fair value or appraised value as of the date of the gift. The State System classifies investments as short-term when they are readily marketable and intended to be converted to cash within one year.

Accounts and Loans Receivable

Accounts and loans receivable consist of tuition and fees charged to current and former students and amounts due from federal and state governments in connection with reimbursements of allowable expenditures made pursuant to grants, contracts, and other miscellaneous sources. Accounts and loans receivable are reported at net realizable value. Accounts are written off when they are determined to be uncollectible based upon management's assessment of individual accounts. The allowance for doubtful accounts is estimated based upon the universities' historical losses and periodic review of individual accounts.

Capital Assets

Land and buildings at the 14 university campuses acquired or constructed prior to its creation on July 1, 1983, are owned by the Commonwealth and made available to the universities of the State System. Since the State System neither owns such assets nor is responsible to service associated bond indebtedness, no value is ascribed thereto in the accompanying financial statements. Likewise, no value is ascribed to the portion of any land or buildings acquired or constructed using capital funds appropriated by the Commonwealth after June 30, 1983 and made available to the universities. The only exception to this policy is the recording of assets funded by \$45 million of Commonwealth Public Improvement Project Capital Funding that was awarded to the State System by Governor Tom Wolf on January 15, 2020. The amount distributed and recorded as capital assets during fiscal year 2019/20 totaled \$17 million. The remaining amount is to be distributed during fiscal years 2020/21 and 2021/22, and the associated assets will be recorded as the funds are expended.

All assets with a purchase cost, or fair value if acquired by gift, in excess of \$5,000, with an estimated useful life of two years or greater, are capitalized. Buildings, portions of buildings, and capital improvements acquired or constructed by the universities after June 30, 1983, through the expenditure of university funds or the incurring of debt are stated at cost less accumulated depreciation.

Equipment and furnishings are stated at cost less accumulated depreciation. Library books are capitalized on a composite basis in the year of purchase. Assets under capital leases are recorded at the lower of the present value of the minimum lease payments or the fair value of the asset. The State System provides for depreciation on the straight-line method over the estimated useful lives of the related assets. Buildings and improvements are depreciated over useful lives ranging from 10 to 40 years. Equipment and furnishings are depreciated over useful lives ranging from 3 to 10 years. Library books are depreciated over 10 years. Amortization of assets under capital leases is included in depreciation expense. Normal repair and maintenance expenditures are not capitalized because they neither add to the value of the property nor materially prolong its useful life.

The State System does not capitalize collections of art, rare books, historical items, etc., as they are held for public exhibition, education, or research rather than financial gain.

Impairment of Capital Assets

Management reviews capital assets for impairment whenever events or changes in circumstances indicate that the service utility of an asset has declined significantly and unexpectedly. Any write-downs due to impairment are charged to operations at the time impairment is identified. No write-down of capital assets was required for the years ended June 30, 2020 and 2019.

Unearned Revenue

Unearned revenue includes amounts for tuition and fees, grants, corporate sponsorship payments, and certain auxiliary activities received prior to the end of the fiscal year but earned in a subsequent accounting period.

Compensated Absences

The estimated cost of future payouts of annual leave and sick leave that employees have earned for services rendered, and which the employees may be entitled to receive upon termination or retirement, is recorded as a liability.

Pension Plans and OPEB Plans

Eligible employees of the State System enroll in one of three available pension plans immediately upon employment. The State System also offers healthcare and tuition benefits to eligible employees upon employment, which vary depending upon the employee's labor group.

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 State Employees' Retirement System (SERS) and Public School Employees' Retirement System (PSERS) and additions to/deductions from SERS and PSERS fiduciary net position have been determined on the same basis as they are reported by SERS and PSERS. 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.

For purposes of measuring the net Other Postemployment Benefits (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 System Plan, Retired Employees Health Program (REHP) and Premium Assistance Program (Premium Assistance) and additions to/deductions from the System Plan, REHP and Premium Assistance plans' fiduciary net position have been determined on the same basis as they are reported by the System Plan, REHP and Premium Assistance plans. 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.

Scholarships and Waivers

In accordance with a formula prescribed by the National Association of College and University Business Officers (NACUBO), the State System allocates the cost of scholarships, waivers, and other student financial aid between *Discounts and allowances* (netted against tuition and fees) and *Student aid expense*. Scholarships and waivers of room and board fees are reported in Auxiliary enterprises. The cost of tuition waivers granted to employees is reported as employees' benefits expense.

Income Taxes

The State System and its member universities are tax-exempt; accordingly, no provision for income taxes has been made in the accompanying 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, disclosures 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.

Reclassifications

Certain amounts in the prior period presented have been reclassified to conform to the current period financial statement presentation. These reclassifications have no effect on the previously reported net position or changes therein.

New Accounting Standards

GASB has issued several accounting standards that are required to be adopted by the State System in future years. The State System is evaluating the impact of the adoption of these standards on its financial statements as discussed below.

In May 2020, GASB issued Statement No. 95, *Postponement of Effective Dates*, which is effective immediately. Statement 95 provides relief to governments and other stakeholders in light of the COVID-19 pandemic. It postpones the following standards, which are evaluated below, by one year from the original effective date: Statements 84, 89, 92 and 93. It postpones the effective date of Statement 87 by 18 months. Statement 94 and those issued after were not affected by Statement 95.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. Statement No. 84 establishes criteria for identifying fiduciary activities of all state and local governments to determine whether an activity should be reported in a fiduciary fund in the financial statements. The State System is evaluating the impact of the adoption of this standard on its financial statements. The provisions in Statement No. 84 are effective for reporting periods beginning after December 15, 2019.

In June 2017, GASB issued Statement No. 87, *Leases*. Statement No. 87 establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. In other words, most leases currently classified as operating leases will be accounted for and reported in a similar manner as capital leases, with assets and liabilities recorded at lease inception. The State System has determined that the effect on net position and results of operations will be immaterial. The provisions in Statement No. 87 are effective for reporting periods beginning after June 15, 2021.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. Statement No. 89 requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred and should no longer be capitalized as part of the cost of an asset. The State System has determined that the effect of Statement No. 89 on its financial statements will vary from year to year, depending upon the amount of new debt incurred for capital assets. The provisions of Statement No. 89 are effective for reporting periods beginning after December 15, 2020.

In March 2020, GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. The objective of Statement No. 93 is to address accounting and financial reporting implications that result from the replacement of LIBOR. The State System is evaluating the impact of the adoption of this standard on its financial statements. The provisions in Statement No. 93 are effective for the fiscal year ending June 30, 2022.

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The objective of Statement No 94 is to address issues related to situations in which a government contracts with an operator to provide public services by conveying control of the right to operate or use a nonfinancial asset. In addition, it addresses an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining or operating a nonfinancial asset. The State System is evaluating the impact of the adoption of this standard on its financial statements. The provisions in Statement No. 94 are effective for the fiscal years beginning after June 15, 2022.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITA)*. The objective of Statement No 96 is to provide the capitalization criteria for outlays other than subscription payments including implementation costs of a SBITA and the required note disclosures. The State System is evaluating the impact of the adoption of this standard on its financial statements. The provisions in Statement No. 96 are effective for the fiscal years beginning after June 15, 2022.

In June 2020, GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. The objective of Statement No. 97 is to address situations in which a primary government is financially accountable for its fiduciary component unit if there is no governing board over the unit and therefore the government takes up the role of the board. The State System is evaluating the impact of the adoption of this standard on its financial statements. The provisions in Statement No. 97 are effective for the fiscal years beginning after June 15, 2021.

(2) DEPOSITS AND INVESTMENTS

On June 30, 2020 and 2019, the carrying amount of the State System's demand and time deposits and certificates of deposit for all funds was \$118,871,000 and \$33,831,000, respectively, compared to bank balances of \$114,988,000 and \$33,064,000, respectively. The difference is caused primarily by items in transit. Of the bank balances, \$4,316,000 and \$3,418,000, respectively, were covered by federal government depository insurance or collateralized by a pledge of U.S. Treasury obligations held by Federal Reserve banks in the name of the banking institutions; \$1,630,000 and \$1,279,000, respectively, were uninsured and uncollateralized; and \$109,042,000 and \$28,367,000, respectively, were uninsured and uncollateralized but covered under the collateralization provisions of the Commonwealth of Pennsylvania Act 72 of 1971, as amended. Act 72 allows banking institutions to satisfy the collateralization requirements by pooling eligible investments to cover total public funds on deposit in excess of federal insurance. Such pooled collateral is pledged with the financial institutions' trust departments.

Board of Governors Policy 1986-02-A: *Investment*, authorizes the State System to invest in obligations of the U.S. Treasury, repurchase agreements, commercial paper, certificates of deposit, banker's acceptances, U.S. money market funds, municipal bonds, corporate bonds, collateralized mortgage obligations (CMOs), asset-backed securities, and internal loan funds. Restricted nonexpendable funds and amounts designated by the Board or university trustees may be invested in the investments described above as well as in corporate equities and approved pooled common funds. For purposes of convenience and expedience, universities use local financial institutions for activities such as deposits of cash. In addition, universities may accept gifts of investments from donors as long as risk is limited to the investment itself. Restricted gifts of investments fall outside the scope of the investment policy.

In keeping with its legal status as a system of public universities, the State System recognizes a fiduciary responsibility to invest all funds prudently and in accordance with ethical and prevailing legal standards. Investment decisions are intended to minimize risk while maximizing asset value. Adequate liquidity is maintained so that assets can be held to maturity. High quality investments are preferred. Reasonable portfolio diversification is pursued to ensure that no single security or investment or class of securities or investments will have a disproportionate or significant impact on the total portfolio. Investments may be made in U.S. dollar-denominated debt of high-quality U.S. and non-U.S. corporations. Investment performance is monitored on a frequent and regular basis to ensure that objectives are attained and guidelines are followed.

Safety of principal and liquidity are the top priorities for the investment of the State System's operating funds. Within those guidelines, income optimization is pursued. Speculative investment activity is not allowed: this includes investing in asset classes such as commodities, futures, short-sales, equities, real or personal property, options, venture capital investments, private placements, letter stocks, and unlisted securities.

The State System's operating funds are invested and reinvested in the following types of instruments with qualifications as provided. (See Board of Governors Policy 1986-02-A: *Investment*, for a complete list of and more details on permissible investments and associated qualifications.)

Investment Categories	Qualifications/Moody's Ratings Requirements
United States Government Securities	Together with repurchase agreements, must comprise at least 20% of the market value of the fund.
Repurchase Agreements	Underlying collateral must be direct obligations of the U.S. Treasury and be in the State System's or its agent's custody.
Commercial Paper	P-1 and P-2 notes only, with no more than 5% and 3%, respectively, of the market value of the fund invested in any single issuer. Total may not exceed 20% of the market value of the fund.
Municipal Bonds	Bonds must carry long-term debt rating of A or better. Total may not exceed 20% of the market value of the fund.
Corporate Bonds	15% must carry long-term debt rating of A or better; 5% may be rated Baa2 or better. Total may not exceed 20% of the market value of the fund.
Collateralized Mortgage Obligations (CMOs)	Must be rated Aaa and guaranteed by the U.S. government. Total may not exceed 20% of the market value of the fund.
Asset-Backed Securities	Must be Aaa rated. Total may not exceed 20% of the market value of the fund, with no more than 5% invested in any single issuer.
System Investment Fund Loans (university loans and bridge notes)	Total may not exceed 20% of the market value of the fund, and loan terms may not exceed 5 years.

CMO Risk: CMOs sometimes are based on cash flows from interest-only (IO) payments or principal-only (PO) payments and are sensitive to prepayment risks. The CMOs in the State System's portfolio do not have IO or PO structures; however, they are subject to extension or contraction risk based on movements in interest rates.

Moody's Rating: The State System uses ratings from Moody's Investors Service, Inc., to indicate the credit risk of investments; i.e., the risk that an issuer or other counterparty to an investment will not fulfill its obligations. An Aaa rating indicates the highest quality obligations with minimal credit risk. Ratings that begin with Aa indicate high quality obligations subject to very low credit risk; ratings that begin with A indicate upper-medium-grade obligations subject to low credit risk; and ratings that begin with Baa indicate medium-grade obligations, subject to moderate credit risk, that may possess certain speculative characteristics. Moody's appends the ratings with numerical modifiers 1, 2, and 3, with 1 indicating a higher ranking and 3 indicating a lower ranking within the category. For short-term obligations, a rating of P-1 indicates that issuers have a superior ability to repay short-term debt obligations, and a rating of P-2 indicates that issuers have a strong ability to repay short-term debt obligations.

Modified Duration: The State System denotes interest rate risk, or the risk that changes in interest rates will affect the fair value of an investment, using *modified duration*. *Duration* is a measurement in years of how long it takes for the price of a bond to be repaid by its internal cash flows. *Modified duration* takes into account changing interest rates. The State System maintains a portfolio duration target of 1.8 years with an upper limit of 2.5 years for the intermediate-term component of the operating portion of the investment portfolio. The State System's duration targets are not applicable to its long-term investments.

Fair Value Hierarchy: GASB Statement No. 72, *Fair Value Measurement and Application*, requires that investments be classified according to a "fair value hierarchy." With respect to Statement No. 72's fair value hierarchy, GASB defines "inputs" as "the assumptions that market participants would use when pricing an asset or liability, including assumptions about risk." Statement No. 72 further categorizes inputs as *observable* or *unobservable*: *Observable inputs* are "inputs that are developed using market data, such as publicly available information about actual events or transactions, and which reflect the assumptions that market participants would use when pricing an asset or liability;" *Unobservable inputs* are "inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing an asset or liability."

Statement No. 72's fair value hierarchy categorizes the inputs to valuation techniques used to measure fair value into three levels:

Level 1: Investments whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market, such as stocks listed in the S&P 500 or NASDAQ. If an up-to-date price of the investment can be found on a major exchange, it is a Level 1 investment.

Level 2: Investments whose values are based on their quoted prices in inactive markets or whose values are based on models, and the inputs to those models are observable either directly or indirectly for substantially the full term of the asset or liability.

Level 3: Investments that trade infrequently, and as a result do not have many reliable market prices. Valuations of Level 3 investments typically are based on management assumptions or expectations. For example, a private equity investment or complex derivative would likely be a Level 3 investment.

In addition, the fair value of certain investments that do not have a readily determinable fair value is classified as NAV, meaning Net Asset Value per share, when the fair value is calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies.

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Securities classified in Level 3 of the fair value hierarchy lack an independent pricing source and so are valued using an internal fair value as provided by the investment manager.

Commonfund investments, held locally by some of the universities, are valued based upon the unit values (NAV) of the funds held by the universities at year end. Unit values are based upon the underlying assets of the funds derived from inputs principally from or corroborated by observable market data, by correlation, or other means. Redemption restrictions for the Commonfund vary, depending upon the type of fund in which the universities have invested, and are restricted to withdrawals only on a weekly basis or the last business day of the month. All withdrawals require five days' notice.

State System Pooled Deposits and Investments

The carrying values (fair values) of deposits and investments for the State System's pooled funds in M&T Bank on June 30, 2020 and 2019, follow.

State System Pooled Deposits and Investments				
June 30, 2020				
(in thousands)				
	Fair Value Hierarchy Level	Moody's Rating (if applicable)	Modified Duration (if applicable)	Fair Value
Deposits				
Demand and time deposits				\$59,505
Money market funds				14,552
Total deposits				74,057
Investments				
Commercial paper	2	P1	0.15	148,958
Government money market mutual fund	2	Aaa	0.00	64,694
U.S. government and agency obligations	2	Aaa	1.19	210,559
	2	Aa1	0.81	10,006
Asset-backed securities	2	Aaa	0.49	193,491
Collateralized mortgage obligations (CMOs)	2	Aaa	1.79	172,332
	2	Aa1	1.35	1,822
	2	Aa2	0.26	8,037
Corporate bonds and notes	2	Aa3	2.16	5,202
	2	A1	1.86	21,430
	2	A2	2.25	68,054
	2	A3	1.62	68,515
	2	Baa1	2.93	18,404
	2	Baa2	3.46	27,359
	2	Baa3	0.00	726
Treasury bills	2	NA	0.28	52,986
Total investments				1,072,575
Total deposits and investments				\$1,146,632

State System Pooled Deposits and Investments				
June 30, 2019				
(in thousands)				
	Fair Value Hierarchy Level	Moody's Rating (if applicable)	Modified Duration (if applicable)	Fair Value
Deposits				
Demand and time deposits				\$1,944
Money market funds				11,026
Total deposits				12,970
Investments				
Commercial paper	2	P1	0.13	243,505
Government money market mutual fund	2	Aaa	0.00	22,970
U.S. government and agency obligations	2	Aaa	0.99	377,747
Asset-backed securities	2	Aaa	0.57	177,260
	2	A2	0.54	4,833
Collateralized mortgage obligations (CMOs)	2	Aaa	2.99	134,811
Corporate bonds and notes	2	Aaa	2.69	9,153
	2	Aa1	0.32	3,550
	2	Aa2	1.25	7,988
	2	Aa3	1.25	18,099
	2	A1	1.63	48,876
	2	A2	1.88	61,842
	2	A3	1.62	54,183
	2	Baa1	0.82	32,551
	2	Baa2	0.74	10,534
	2	Baa3	0.00	727
Total investments				1,208,629
Total deposits and investments				\$1,221,599

Of the investments noted above at June 30, 2020 and 2019, \$59,505,000 and \$69,720,000, respectively, were held by a trustee to be used for projects funded under the Pennsylvania Higher Educational Facilities Authority/State System of Higher Education bond issues (note 11). Such investments are made subject to the restrictions of the bond indenture and may be liquidated only for the payment of costs associated with the projects described in the bond indenture.

University Local Deposits and Investments

The carrying values (fair values) of local university deposits and investments on June 30, 2020 and 2019, follow.

University Local Deposits and Investments				
June 30, 2020				
(in thousands)				
	Fair Value Hierarchy Level	Moody's Rating (if applicable)	Modified Duration (if applicable)	Fair Value
Deposits				
Demand and time deposits				\$44,483
Certificates of deposit				332
Total deposits				44,815
Investments				
U.S. government and agency obligations	1		1.96	358
	2		1.50	15
Bond mutual funds	1		5.91	3,891
	NAV		3.74	14,082
Debt securities	1	A1	2.28	40
	1	A2	1.82	133
	1	A3	0.88	135
	1	Ba1	1.23	34
	1	Ba2	0.44	37
	1	Baa1	2.13	108
	2	Aa1	4.02	43
	2	Aa2	5.45	17
	2	Aa3	4.46	16
	2	Aaa	7.27	431
Equity/balanced mutual funds	1			16,971
	2			2,960
	3			1,652
	NAV			22,599
Common stock	1			2,647
Total investments				66,169
Total deposits and investments				\$110,984

University Local Deposits and Investments				
June 30, 2019				
(in thousands)				
	Fair Value Hierarchy Level	Moody's Rating (if applicable)	Modified Duration (if applicable)	Fair Value
Deposits				
Demand and time deposits				\$20,681
Certificates of deposit				180
Total deposits				20,861
Investments				
U.S. government and agency obligations	1		0.53	354
	2		0.06	42
Bond mutual funds	1		5.40	3,161
	2		4.60	7,225
	NAV		4.84	6,975
Debt securities	1	A1	1.81	94
	1	A2	2.34	89
	1	A3	2.36	95
	1	Baa1	1.60	203
	1	Baa2	1.58	127
	2	Aaa	5.45	340
	2	Aa1	5.66	57
	2	Aa2	6.30	16
	2	Aa3	5.40	16
Equity/balanced mutual funds	1			21,034
	2			1,768
	3			1,647
	NAV			18,701
Common stock	1			4,496
Total investments				66,440
Total deposits and investments				\$87,301

Investment revenue is reported net of related investment expenses. Gross investment revenue totaled \$51,016,000 and \$50,796,000 at June 30, 2020, and June 30, 2019, respectively. Of this amount, \$761,000 and \$598,000 at June 30, 2020, and June 30, 2019, respectively, represent the amount of related investment expenses.

(3) STUDENT REVENUE AND ACCOUNTS RECEIVABLE

Accounts receivable for tuition and fees charged to current and former students totaled \$88,433,000 and \$88,398,000 at June 30, 2020, and June 30, 2019, respectively. Of this amount, \$46,880,000 and \$42,402,000 at June 30, 2020, and June 30, 2019, respectively, are estimated to be uncollectible based upon the universities' historical losses and periodic review of individual accounts. Other receivables are reported at net realizable value. Accounts will be written off when they are determined to be uncollectible based upon management's assessment of individual accounts.

Tuition and fee revenue is reported net of scholarship discounts and allowances. Gross tuition and fee revenue totaled \$1,032,047,000 and \$1,081,192,000 at June 30, 2020, and June 30, 2019, respectively. Of this amount, \$213,141,000 and \$239,777,000 at June 30, 2020, and June 30, 2019, respectively, represent the amount of student grants, waivers, and scholarships calculated to be a discount against tuition and fees.

Revenue from auxiliary enterprises, which primarily comprises fees from student room and board, student recreation centers, and parking, is reported net of discounts. Gross auxiliary revenue totaled \$247,864,000 and \$324,292,000 at June 30, 2020, and June 30, 2019, respectively. Of this amount, \$2,184,000 and \$3,408,000 at

June 30, 2020, and June 30, 2019, respectively, represent the amount of student grants, waivers, and scholarships calculated to be a discount.

(4) BENEFICIAL INTERESTS

At June 30, 2020, the fair value of beneficial interests totaled \$23,598,000, compared to \$23,917,000 at June 30, 2019. Of this amount, \$23,594,000 at June 30, 2020, and \$23,912,000 at June 30, 2019, represent gifts that donors placed in trust in perpetuity with third parties, with the respective universities receiving a restricted revenue stream in accordance with the donors' wishes; and \$3,556 at June 30, 2020, and \$5,255 at June 30, 2019, represent a split-interest agreement that a donor placed in trust with a third party, and to which the university will take title upon the death of the donor.

(5) CAPITAL ASSETS

The classifications of capital assets and related depreciation at June 30, 2020, 2019 and 2018, follow.

(in thousands)

	Balance June 30, 2018	2018/19 Additions	2018/19 Retirements/ Adjustments	Balance June 30, 2019	2019/20 Additions	2019/20 Retirements/ Adjustments	Balance June 30, 2020
Land	\$32,513	\$1,354	\$143	\$34,010	\$417	\$353	\$34,780
Construction in progress	106,182	60,936	(85,266)	81,852	80,158	(52,440)	109,570
Total capital assets not being depreciated	138,695	62,290	(85,123)	115,862	80,575	(52,087)	144,350
Buildings, including improvements	2,618,055	142,968	64,681	2,825,704	114,103	32,988	2,972,795
Improvements other than buildings	307,987	7,115	6,740	321,842	6,624	7,205	335,671
Equipment and furnishings	503,230	28,022	(8,774)	522,478	17,335	2,043	541,856
Library books	79,502	648	(4,709)	75,441	434	(2,708)	73,167
Total capital assets being depreciated	3,508,774	178,753	57,938	3,745,465	138,496	39,528	3,923,489
Less accumulated depreciation:							
Buildings and improvements	(1,078,975)	(102,784)	10,356	(1,171,403)	(106,667)	1,849	(1,276,221)
Land improvements	(158,569)	(11,208)	194	(169,583)	(11,581)	61	(181,103)
Equipment and furnishings	(415,386)	(28,598)	10,489	(433,495)	(29,273)	6,006	(456,762)
Library books	(74,091)	(1,309)	4,709	(70,691)	(1,114)	2,678	(69,127)
Total accumulated depreciation	(1,727,021)	(143,899)	25,748	(1,845,172)	(148,635)	10,594	(1,983,213)
Total capital assets being depreciated, net	1,781,753	34,854	83,686	1,900,293	(10,139)	50,122	1,940,276
Capital assets, net	\$1,920,448	\$97,144	(\$1,437)	\$2,016,155	\$70,436	(\$1,965)	\$2,084,626

(6) WORKERS' COMPENSATION

The State System is self-insured for workers' compensation losses. For claims occurring prior to July 1, 1995, State System universities must pay up to \$100,000; for claims occurring on or after July 1, 1995, State System universities must pay up to \$200,000. Claims in excess of the self-insurance limits are funded through the Workers' Compensation Collective Reserve Fund (Reserve Fund), to which all State System universities contribute an amount determined by an independent actuarial study. Based on updated actuarial studies, the universities contributed \$817,000, \$690,000, and \$1,633,000 to the

Reserve Fund during the years ended June 30, 2020, 2019, and 2018, respectively.

For the years ended June 30, 2020, 2019, and 2018, the aggregate liability for claims under the self-insurance limit was \$7,910,000, \$9,338,000, and \$9,327,000, respectively. The Reserve Fund assets of \$13,865,000, \$13,389,000, and \$13,121,000 were equal to the liability for claims in excess of the self-insurance limits for the years ended June 30, 2020, 2019, and 2018, respectively. Changes in the workers' compensation claims liability in fiscal years 2018, 2019, and 2020 follow.

(in thousands)

Year	Beginning Balance	Current Year Claims and Changes in Estimates	Claim Payments	Ending Balance
2018	\$20,367	\$6,049	\$3,968	\$22,448
2019	\$22,448	\$4,336	\$4,057	\$22,727
2020	\$22,727	\$3,260	\$4,213	\$21,774

(7) COMPENSATED ABSENCES

Compensated absences are absences for vacation, holiday, and sick leave for which employees will be paid in cash at termination or retirement. Changes in the compensated absences liability in fiscal years 2020 and 2019 are as follows.

(in thousands)

Year	Beginning Balance	Current Changes in Estimates	Less Payouts	Ending Balance
2019	\$126,201	\$13,741	\$12,310	\$127,632
2020	\$127,632	\$28,440	\$12,671	\$143,401

(8) PENSION BENEFITS

Employees of the State System enroll in one of three available retirement plans immediately upon employment: the Commonwealth of Pennsylvania State Employees' Retirement System (SERS), the Public School Employees' Retirement System (PSERS), or the Alternative Retirement Plan (ARP).

Following is the total of the State System's pension liabilities, deferred outflows and inflows of resources related to pensions, and the pension expense for the fiscal years ended June 30, 2020 and 2019.

(in thousands)

	SERS		PSERS		ARP		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
Net pension liabilities	\$867,669	\$1,020,123	\$88,232	\$88,137	\$0	\$0	\$955,901	\$1,108,260
Deferred outflows of resources:								
Difference between expected and actual experience	\$10,819	\$15,309	\$486	\$709	—	—	\$11,305	\$16,018
Net difference between projected and actual investment earnings on pension plan investments	-	99,252	—	432	—	—	—	99,684
Changes in assumptions	33,435	27,179	843	1,643	—	—	34,278	28,822
Difference between employer contributions and proportionate share of contributions	—	—	256	348	—	—	256	348
Changes in proportion	8,982	14,631	2,355	1,504	—	—	11,337	16,135
Contributions after the measurement date	54,073	55,177	8,771	8,565	—	—	62,844	63,742
Total deferred outflows of resources	\$107,309	\$211,548	\$12,711	\$13,201	\$0	\$0	\$120,020	\$224,749
Deferred inflows of resources:								
Difference between expected and actual experience	\$5,877	\$11,054	\$2,924	\$1,364	—	—	\$8,801	\$12,418
Net difference between projected and actual investment earnings on pension plan investments	61,881	—	253	—	—	—	62,135	—
Difference between employer contributions and proportionate share of contributions	4,537	5,449	—	—	—	—	4,537	5,449
Changes in proportion	20,194	8,068	565	931	—	—	20,758	8,999
Total deferred inflows of resources	92,489	\$24,571	\$3,742	\$2,295	\$0	\$0	\$96,231	\$26,866
Pension expense	\$116,776	\$145,114	\$21,412	\$19,646	\$46,274	\$46,085	\$184,462	\$210,845
Contributions recognized by pension plans	\$97,074	\$97,467	\$8,771	\$8,565	N/A	N/A	\$105,845	\$106,032

The State System will recognize the \$54,073,000 reported as 2020 SERS deferred outflows of resources resulting from pension contributions after the measurement date, and the \$8,771,000 reported as 2020 PSERS deferred outflows of resources resulting from pension contributions after the measurement date, as reductions of the respective net pension liabilities in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows.

(in thousands)		
Fiscal Year Ended	Amortization	
	SERS	PSERS
June 30, 2021	(\$2,847)	\$1,052
June 30, 2022	(12,113)	(779)
June 30, 2023	5,106	(255)
June 30, 2024	(29,746)	180
June 30, 2025	347	0
Totals	(\$39,253)	\$198

SERS

Plan Description

SERS is the administrator of the State Employees' Retirement fund, a cost-sharing multiple-employer defined benefit pension plan. SERS also is the administrator of the State Employees' Defined Contribution Plan, which was established as part of Commonwealth Act 2017-5. Both the defined benefit plan and the defined contribution plan were established by the Commonwealth to provide retirement benefits for employees of state government and certain independent agencies. SERS is a component unit of the Commonwealth and is included in the Commonwealth's financial report as a pension trust fund. SERS issues a publicly available annual financial report that includes financial statements and required supplementary information for the plan. A copy of the report may be obtained from the SERS website at www.sers.state.pa.us.

Membership in SERS is mandatory for most state employees. Members and employees of the General Assembly, certain elected or appointed officials in the executive branch, department heads, and certain employees in the field of education are not required, but are given the option, to participate.

Benefits Provided

SERS provides retirement, death, and disability benefits. Article II of the Commonwealth's Constitution assigns the authority to establish and amend the benefit provisions of the plan to the General Assembly. Cost of Living Adjustments (COLA) are provided ad hoc at the discretion of the General Assembly.

Employees who were hired prior to January 1, 2011, and retire at age 60 with three years of service, or with 35 years of service if under age 60, are entitled to a normal annual retirement benefit; members of the General Assembly and certain employees classified in hazardous duty positions can retire with full benefits at age 50 with at least three years of service. Act 120 of 2010 (Act 120) preserved all benefits in place for members, but mandated a number of benefit reductions for new members effective January 1, 2011, through December 31, 2018. The benefit reduction included a new class of membership that accrues benefits at 2% of members' final average salary instead of the previous 2.5%. The vesting period changed from 5 to 10 years of credited service, and the option to withdraw lump-sum accumulated deductions was eliminated. The new normal retirement age is 65 for most employees and 55 for members of the General Assembly and certain employees classified in hazardous duty positions. Act 2017-5 preserved all benefits in place for members, but fundamentally changed retirement options for new hires beginning January 1, 2019: most employees who first become SERS members on or after January 1, 2019, must choose from one of two new defined benefit/defined contribution hybrid options or a straight 401(a) defined contribution option.

According to the State Employees' Retirement Code (SERC), all obligations of SERS will be assumed by the Commonwealth should SERS terminate.

Contributions

The contribution rate for both active members and the State System depends upon when the active member was hired and what benefits class was selected. Section 5507 of the SERC (71 Pa. C.S. §5507) requires the Commonwealth and other employers whose employees are SERS members to make contributions on behalf of all active members and annuitants to fund the liabilities and provide the annuity reserves required to pay benefits. The SERS funding policy, as set by the SERS Board, provides for periodic active member contributions at statutory rates. The SERS funding policy also provides for periodic employer contributions at actuarially determined rates based on SERS' funding valuation, expressed as a percentage of annual retirement covered payroll, such that the employer contributions, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay benefits when due. In fiscal year 2017/18, the Commonwealth paid the full actuarially required rate after being collared in previous years due to Act 120.

For the SERS defined benefit plan, the State System's actuarially determined contribution rate for most active members was 36.04% of active members' annual covered payroll at June 30, 2020, with less common rates ranging between 24.92% and 28.84%, depending upon the defined benefit plan chosen by the employee. For the SERS defined benefit/defined contribution hybrid plan, the State System's actuarially determined contribution rate was either 16.93% or 17.18% of annual covered payroll, depending upon the hybrid plan chosen by the employee. In addition, the State System was required to contribute to the defined benefit plan 15.62% of the annual covered payroll of employees who selected the straight 401(a) defined contribution plan. The State System's contributions to the SERS defined benefit plan for the years ended June 30, 2020, 2019, and 2018, were \$97,074,000, \$97,467,000, and \$94,727,000, respectively, equal to the required contractual contribution.

The contribution rate of most active members who participate in the SERS defined benefit plan was 6.25% of gross salary, with less common rates ranging between 5% and 9.3% of salary, depending upon when the member was hired and what class of membership was elected. Defined benefit contribution rates for active members who participate in the defined benefit/defined contribution hybrid plan were either 4.0% or 5.0% of gross salary, depending upon what class of membership was elected.

For the SERS defined contribution plan, the State System contributed at actuarially determined rates of between 2.0% and 3.5% of active members' annual covered payroll at June 30, 2020, depending upon the plan chosen by the employee. The State System recognized \$189,000 in SERS defined contribution pension expense for the year ended June 30, 2020 and \$21,000 for the year ended June 30, 2019, the first year of the plan's implementation. The vesting period for employer contributions to the defined contribution plan, both for members who participate in the straight 401(a) defined contribution plan and those who participate in one of the defined benefit/defined contribution hybrid plans, is three years. Once money is contributed to the plan, it cannot be removed from the plan, except for making distribution payments to participants. Forfeitures of unvested employer contributions and earnings are invested in the PA Treasury short-term investment fund. The funds are forfeited to the employee's most recent employer and used to offset future contributions to the plan and correct funding discrepancies. Forfeitures seized under the Pension Forfeiture Act are used for administrative expenses of the plan.

The contribution rate to the defined contribution plan for active members who participate in the SERS defined benefit/defined contribution hybrid plan was either 3.25% or 3.5% of gross salary (in addition to the required contributions to the defined benefit plan), depending upon what class of membership was elected. The contribution rate to the defined contribution plan for active members who participate in the straight 401(a) defined contribution plan was 7.5% of gross salary.

Actuarial Methods and Assumptions

Actuarial valuations are performed annually using a December 31 measurement date. Every five years, SERS is required to conduct an actuarial experience study to determine whether the assumptions used in its annual

actuarial valuations remain accurate based on current and anticipated demographic trends and economic conditions. The 18th *Investigation of Actuarial Experience* study for the period 2011–2015 was released in March 2016. The actuary, under oversight of the SERS Board, reviewed economic assumptions (such as the assumed future investment returns and salary increases) as well as demographic assumptions (such as employee turnover, retirement, disability, and death rates). Some assumption adjustments increased projected cost and some decreased it, but the overall result was a slight increase to the net pension liability. The SERS Board adopted the actuarial assumptions set forth in the 18th *Investigation of Actuarial Experience* at its March 2016 meeting. In addition, SERS reviews its investment return assumption in light of economic conditions every year. At its June 2019 meeting, the SERS Board approved a reduction in the assumed investment rate of return from 7.25% to 7.125%. The next SERS actuarial experience review occurred in summer 2020 and will be used for its 2020 annual valuation.

The following methods and assumptions were used in the actuarial valuation for the December 31, 2019, measurement date.

- Entry age actuarial cost method.
- Investments amortized on a straight-line, closed-period basis over five years; assumption changes and noninvestment gains/losses amortized over the average expected remaining service lives of all employees who are provided benefits.
- Inflation of 2.60%.
- Investment return of 7.125%, net of manager fees and including inflation.
- Salary increases based on an average of 5.60%, with a range of 3.70% to 8.90%, including inflation.
- Asset valuation using fair (market) value.
- Mortality rates based on the projected RP-2000 Mortality Tables, adjusted for actual plan experience and future improvement.
- No cost of living adjustments.

The long-term expected real rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of manager fees and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in SERS' target asset allocation as of December 31, 2019, are summarized below.

Asset Class	Target Allocation	Long-Term Real Rate of Return
Private equity	16.0%	7.25%
Global public equity	48.0%	5.15%
Real estate	12.0%	5.26%
Multi-strategy	10.0%	4.44%
Fixed income	11.0%	1.26%
Cash	3.0%	-
	<u>100.0%</u>	

The discount rate used to measure the total SERS pension liability was 7.125%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable for each member and that employer contributions will be made based on rates determined by the actuary and as set by statute. Based on those assumptions, SERS' fiduciary net position was projected to be available to make all projected future benefit payments of current SERS members. The long-term expected rate of return on SERS' investments, therefore, was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the State System's proportionate share of the SERS net pension liability at June 30, 2020, calculated using the discount rate of 7.125%, as well as what the SERS net pension liability would be if it

were calculated using a discount rate that is one percentage point lower (6.125%) or one percentage point higher (8.125%) than the current rate.

Sensitivity of the State System's Proportionate Share of the SERS Net Pension Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 6.125%	Current Rate 7.125%	1% Increase 8.125%
\$1,102,515	\$867,669	\$666,612

The following presents what the State System's proportionate share of the SERS net pension liability was at June 30, 2019, calculated using the discount rate of 7.25%, as well as what the SERS net pension liability would have been if it had been calculated using a discount rate that was one percentage point lower (6.25%) or one percentage point higher (8.25%) than the rate used.

Sensitivity of the State System's Proportionate Share of the SERS Net Pension Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 6.25%	Current Rate 7.25%	1% Increase 8.25%
\$1,252,627	\$1,020,123	\$820,879

Proportionate Share

At June 30, 2020, the amount recognized as the State System's proportionate share of the SERS net pension liability, measured at December 31, 2019, was \$867,669. At June 30, 2019, the amount recognized as the State System's proportionate share of the SERS net pension liability, measured at December 31, 2018, was \$1,020,123.

The allocation percentage assigned to each participating employer is based on a projected contribution method. For the allocation of the December 2019 amounts, this methodology applies the most recently calculated contribution rates for fiscal year 2020/21, from the December 31, 2019, funding valuation, to the expected funding payroll. For the allocation of the December 2018 amounts, this methodology applies the most recently calculated contribution rates for fiscal year 2019/20, from the December 31, 2018, funding valuation, to the expected funding payroll. At the December 31, 2019, measurement date, the State System's proportion was 4.773%, a decrease of 0.124% from its proportion calculated as of the December 31, 2018 measurement date.

PSERS

Plan Description

PSERS is a governmental cost-sharing multiple-employer defined benefit pension plan that provides retirement, disability, and death benefits to public school employees of the Commonwealth. The members eligible to participate in PSERS include all full-time public school employees, part-time hourly public school employees who render at least 500 hours of service in the school year, and part-time per diem public school employees who render at least 80 days of service in the school year in any of the reporting entities in Pennsylvania. The Public School Employees' Retirement Code (Act No. 96 of October 2, 1975, as amended) (24 Pa. C.S. §§8101–8535) (the Code) is the authority by which PSERS benefits provisions and contribution requirements are established. The Commonwealth's General Assembly has the authority to amend the benefit terms by passing bills in the Senate and House of Representatives and sending them to the Governor for approval. The Code requires contributions by active members, the employer (State System), and the Commonwealth. PSERS is a component unit of the Commonwealth and is included in the Commonwealth's financial report as a pension trust fund.

On June 12, 2017, Commonwealth of Pennsylvania Act 5 of 2017 was signed into law. This legislation establishes a new hybrid defined benefit/defined contribution (DC) retirement benefit plan applicable to all school employees who become new members of PSERS on July 1, 2019 and thereafter. The three new plan

design options under Act 5 include two hybrid plans consisting of defined benefit and defined contribution components and a stand-alone defined contribution plan. A stand-alone defined benefit plan is no longer available to new members after June 30, 2019.

PSERS issues a comprehensive annual financial report that may be obtained at www.psers.state.pa.us.

Benefits Provided

Members who joined prior to July 1, 2011, are eligible for monthly retirement benefits upon reaching age 62 with at least one year of credited service, age 60 with 30 or more years of credited service, or any age with 35 or more years of service. Act 120 of 2010 preserved the benefits of members who joined prior to July 1, 2011, and introduced benefit reductions for individuals who become new members on or after July 1, 2011, through June 30, 2019, by creating two new membership classes: Class T-E and Class T-F. To qualify for normal retirement, Class T-E and Class T-F members must complete a minimum of 35 years of service with a combination of age and service that totals 92 or greater, or they must work until age 65 with a minimum of three years of service.

Depending upon membership class, benefits are generally 2% or 2.5% of the member's final average salary (as defined in the Code) multiplied by the number of years of credited service. Members who joined prior to July 1, 2011, vest after completion of five years of service and may elect early retirement benefits. Class T-E and Class T-F members vest after completion of 10 years of service.

Participants are eligible for disability retirement benefits after completion of five years of credited service. Such benefits are generally equal to 2% or 2.5%, depending upon membership class, of the member's final average salary (as defined in the Code) multiplied by the number of years of credited service, but not less than one-third of such salary nor greater than the benefit the member would have had at normal retirement age. Members over normal retirement age may apply for disability benefits.

Death benefits are payable upon the death of an active member who has reached age 62 with at least one year of credited service (age 65 with at least three years of credited service for Class T-E and Class T-F members) or has at least five years of credited service (10 years for Class T-E and Class T-F members). Such benefits are actuarially equivalent to the benefit that would have been effective if the member had retired on the day before death.

Member Contributions

Active members who joined PSERS prior to July 22, 1983, contribute at 5.25% (Class T-C members) or at 6.50% (Class T-D members) of the member's qualifying compensation. Members who joined PSERS on or after July 22, 1983, and who were active or inactive as of July 1, 2001, contribute at 6.25% (Class T-C) or at 7.5% (Class T-D) of the member's qualifying compensation. Members who joined PSERS after June 30, 2001, and before July 1, 2011, contribute at 7.5% (Class T-D). For these hires and for members who elected Class T-D, the 7.5% contribution rate began with service rendered on or after January 1, 2002. Members who joined PSERS after June 30, 2011, contribute at the rate of 7.5% (Class T-E) or 10.3% (Class T-F) of their qualifying compensation. Class T-E and Class T-F members are subject to a "shared risk" provision in Act 120 that could cause the rate in future years to fluctuate between 7.5% and 9.5% for Class T-E and 10.3% and 12.3% for Class T-F.

Employer Contributions

The State System's contractually required contribution rate for PSERS for fiscal year ended June 30, 2020, was 33.36% of covered payroll, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Per §8327 of the Code, the Commonwealth is required to contribute 50% of the contribution rate directly to PSERS on behalf of the State System, meaning that the amount that the State System actually contributed was 16.68% of covered payroll. The State System's contribution to PSERS for the year ending June 30, 2020, June 30, 2019, and June 30, 2018, was \$8,771,000, \$8,565,000, and \$7,880,000, respectively, equal to the required contractual contribution.

For the PSERS defined contribution plan, the State System is required to contribute at actuarially determined average rate 0.09% of active members' annual covered payroll for the year ending June 30, 2020, depending upon the plan chosen by the employee. Members were first eligible to choose the defined contribution plan on July 1, 2019. Therefore, the State System contributions for the year ended June 30, 2020 were immaterial.

Actuarial Assumptions

The State System records its PSERS pension liability annually utilizing a measurement date one year prior to its fiscal year end. The total PSERS pension liability, as of the June 30, 2019 measurement date, was determined by rolling forward PSERS' total pension liability at June 30, 2018, to June 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement.

- Valuation date - June 30, 2018
- Actuarial cost method is entry age normal, level percent of pay.
- Investment return of 7.25% with 2.75% inflation.
- Salary increases based on an effective average of 5.0%, which comprises a 2.75% allowance for inflation and 2.25% for real wage growth and merit or seniority increases.
- Mortality rates based on the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale.

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 real rates of return (expected returns, net of pension plan investment expense and inflation) 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 real rates of return by the target asset allocation percentage and by adding expected inflation.

PSERS' policy in regard to the allocation of invested plan assets is established and may be amended by the PSERS Board of Trustees. Plan assets are managed with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension. Following is the PSERS Board of Trustees' adopted asset allocation policy and best estimates of geometric real rates of return for each major asset class as of June 30, 2019.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global public equity	20.0%	5.6%
Fixed income	36.0%	1.9%
Commodities	8.0%	2.7%
Absolute return	10.0%	3.4%
Risk parity	10.0%	4.1%
Infrastructure/MLPs	8.0%	5.5%
Real estate	10.0%	4.1%
Alternative investments	15.0%	7.4%
Cash	3.0%	0.3%
Financing (LIBOR)	(20.0%)	0.7%
	<u>100.0%</u>	

The discount rate used to measure the total PSERS pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at contractually required rates, actuarially determined. Based on those assumptions, PSERS' fiduciary 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 PSERS' investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the State System's proportionate share of the PSERS net pension liability at June 30, 2020, calculated using the discount rate of 7.25%, as well as what the PSERS net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate.

Sensitivity of the State System's Proportionate Share of the PSERS Net Pension Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 6.25%	Current Rate 7.25%	1% Increase 8.25%
\$109,903	\$88,232	\$69,882

The following presents what the State System's proportionate share of the PSERS net pension liability was at June 30, 2019, calculated using the discount rate of 7.25%, as well as what the PSERS net pension liability would have been if it had been calculated using a discount rate that was one percentage point lower (6.25%) or one percentage point higher (8.25%) than the rate used.

Sensitivity of the State System's Proportionate Share of the PSERS Net Pension Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 6.25%	Current Rate 7.25%	1% Increase 8.25%
\$109,252	\$88,137	\$70,283

Proportionate Share

The amount recognized as the State System's proportionate share of the PSERS net pension liability, plus the related PSERS pension support provided by the Commonwealth, is as follows.

(in thousands)		
	2020	2019
Total PSERS net pension liability associated with the State System	\$176,464	\$176,274
Commonwealth's proportionate share of the PSERS net pension liability associated with the State System	(88,232)	(88,137)
State System's proportionate share of the PSERS net pension liability	\$88,232	\$88,137

PSERS measured the 2020 and 2019 net pension liabilities as of June 30, 2019, and June 30, 2018, respectively. PSERS calculated the employer's proportion of the net pension liability using the employer's one-year reported covered payroll in relation to all participating employers' one-year reported covered payroll. At June 30, 2019, the State System's proportion was 0.1886%, an increase of 0.0050% from its proportion calculated as of June 30, 2018.

ARP

The ARP is a defined contribution pension plan administered by the State System. Benefits equal amounts contributed to the plan plus investment earnings. Act 188 empowers the Board to establish and amend benefits provisions. The State Employees' Retirement Code establishes the employer contribution rate for the ARP, while the Board establishes the employee contribution rates. Active members contribute at a rate of 5% of their qualifying compensation. The State System recognizes annual pension expenditures equal to its contractually required contributions to the plan. The State System's contribution rate on June 30, 2020 and 2019, was 9.29% of qualifying compensation. The contributions to the ARP for the years ended June 30, 2020 and 2019, were

\$46,274,000 and \$46,085,000, respectively, from the State System; and \$24,905,000 and \$24,803,000, respectively, from active members. No liability is recognized for the ARP.

(9) OTHER POSTEMPLOYMENT BENEFITS (OPEB)

Other postemployment benefits (OPEB) are benefits such as healthcare benefits that are paid in the period after employment and that are provided separately from a pension plan. OPEB does not include termination benefits or termination payments for sick leave. (See note 7)

State System employees who retire after meeting specified service and age requirements are eligible to receive healthcare and tuition benefits in retirement. Employee members of the Association of Pennsylvania State College and University Faculties (APSCUF), the State College and University Professional Association (SCUPA), Security Police and Fire Professionals of America (SPFPA), Office and Professional Employees International Union (OPEIU), and nonrepresented employees participate in a defined benefit healthcare plan administered by the State System (System Plan). Employee members of the American Federation of State, County and Municipal Employees (AFSCME), Pennsylvania Doctors Alliance (PDA), and Pennsylvania Social Services Union (PSSU) participate in the Retired Employees Health Program (REHP), which is a defined benefit healthcare plan sponsored by the Commonwealth and administered by the Pennsylvania Employee Benefits Trust Fund (PEBTF). In addition to the above, any employee who participates in the Public School Employees' Retirement System (PSERS) pension plan is eligible to receive benefits from the PSERS Health Insurance Premium Assistance Program (Premium Assistance), a defined benefit plan, and all eligible retirees and their eligible dependents receive tuition waivers at any of the 14 State System universities.

Following is the total of the State System's OPEB liabilities, deferred outflows and inflows of resources related to OPEB, and the OPEB expense for the fiscal years ended June 30, 2020, and 2019.

(in thousands)

	System Plan		REHP		Premium Assistance		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
Net OPEB liabilities	\$1,279,239	\$1,314,607	\$455,091	\$658,214	\$4,011	\$3,828	\$1,738,341	\$1,976,649
Deferred outflows of resources:								
Differences between actual and expected experience	—	—	—	—	\$23	\$24	\$23	\$24
Net difference between projected and actual investment earnings on OPEB plan investments	N/A	N/A	—	—	7	6	7	6
Changes in assumptions	—	—	14,560	—	132	60	14,692	60
Changes in proportion	—	—	27,750	35,170	129	46	27,879	35,216
Contributions after the measurement date	36,250	37,137	19,567	25,787	220	217	56,037	63,141
Total deferred outflows of resources	\$36,250	\$37,137	\$61,877	\$60,957	\$511	\$353	\$98,638	\$98,447
Deferred inflows of resources:								
Differences between actual and expected experience	\$117,213	\$146,516	\$338,470	\$201,596	—	—	\$455,683	\$348,112
Net difference between projected and actual investment earnings on OPEB plan investments	N/A	N/A	806	1,006	—	—	806	1,006
Changes in assumptions	136,525	105,085	63,035	86,528	119	145	199,679	191,758
Changes in proportion	N/A	N/A	19,443	—	27	34	19,470	34
Total deferred inflows of resources	\$253,738	\$251,601	\$421,754	\$289,130	\$146	\$179	\$675,638	\$540,910
OPEB expense	\$3,905	\$24,488	(\$51,852)	(\$6,423)	\$425	\$354	(\$47,522)	\$18,419
Contributions recognized by OPEB plans	N/A	N/A	\$19,567	\$25,787	\$220	\$217	\$19,787	\$26,004

The State System will recognize the deferred outflows of resources resulting from contributions after the measurement date, totaling \$36,250,000 for the System Plan, \$19,567,000 for the REHP plan, and \$220,000 for the PSERS OPEB plan, as reductions of the respective net OPEB liabilities in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows.

Fiscal Year Ended	Amortization		
	System Plan	REHP	Premium Assistance
June 30, 2021	\$66,540	\$95,396	\$17
June 30, 2022	66,540	95,396	17
June 30, 2023	66,540	90,380	16
June 30, 2024	42,672	68,463	15
June 30, 2025	11,446	29,644	51
Thereafter	0	165	29
Totals	\$253,738	\$379,444	\$145

System Plan

Plan Description

The System Plan is a single-employer defined benefit healthcare plan administered by the Office of the Chancellor. Act 188 empowers the Board to establish and amend benefit provisions and to require the Office of the Chancellor to pay OPEB as the benefits come due. The Office of the Chancellor discretely accounts for and accumulates all System Plan contributions that have been collected from the universities (employer) and retirees, but not yet been paid to the provider; however, the System Plan has no assets accumulated in a trust in which the employer contributions are irrevocable, are dedicated to providing OPEB to plan members, or are legally protected from creditors.

The System Plan provides eligible retirees and their eligible dependents with healthcare benefits, including hospital, medical/surgical, prescription drugs, and major medical coverage, as well as a Medicare supplement for individuals over age 65. Retirees receive varying coverages based on the benefits in effect when they retired, and benefits may continue for the retiree's lifetime. Spouse benefits cease upon the retiree's death, but the surviving spouse may continue coverage at full cost. Non-spouse dependents may be covered until age 19 or until age 25 if a certified full-time student. SCUPA, SPFPA, OPEIU, and nonrepresented employees whose retirement date is on or after January 1, 2016, and APSCUF employees whose retirement date is on or after July 1, 2017, receive the same pre-Medicare benefits as active employees, with benefits changing as active employee benefits change. All other pre-Medicare retirees continue to receive the same benefits to which they were entitled at retirement.

A total of 12,122 individuals are covered by the benefit terms (down from 12,511 in the prior actuarial valuation), including 7,235 active employees that may be entitled to receive benefit payments upon retirement, 47 retired participants entitled to but not yet receiving benefits, and 4,840 retired participants receiving benefits.

Effective January 16, 2016, the State System OPEB plan became closed to newly hired SCUPA, SPFPA, OPEIU, and nonrepresented employees, while newly hired APSCUF employees (faculty and coaches) continue to be eligible to participate in the plan.

Plan members receiving benefits contribute at various rates, depending upon when they retire, whether they are eligible for Medicare, the contribution rate in effect on the day of their retirement or the contribution rate for active employees, and applicable collective bargaining agreements. Following are the contribution rates of eligible plan members receiving benefits as of June 30, 2020.

- Plan members who retired prior to July 1, 2005, are not required to make contributions.
- Plan members, with the exception of nonfaculty coaches, who retired on or after July 1, 2005, and prior to July 1, 2008, and who are under age 65, pay the same dollar amount they paid as active employees on the day of retirement. When these plan members become eligible for Medicare, they pay 18% of the current cost of their Medicare coverage and current cost of coverage for covered dependents. The rate changes annually, and future adjustments will apply if contributions increase for active employees.
- Plan members, with the exception of nonfaculty coaches, who retire on or after July 1, 2008, pay 18% of the plan premium in effect for active employees on their retirement date. Future adjustments will apply if contributions increase for active employees.
- Nonfaculty coaches who retired on or after July 1, 2005, pay 3.0% of their final annual gross salary at the time of retirement.

Actuarial Assumptions and Other Inputs

The System performs actuarial valuations every two years for the System Plan and utilizes a measurement date that is the first day of its current fiscal year end. The actuarial valuation on which the total OPEB liability as of June 30, 2020 is based is dated July 1, 2018, which was rolled forward to the measurement date of July 1, 2019. The total OPEB liability was measured using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

- Healthcare cost trend rate of 6.0% in 2018 and 5.5% in 2019 through 2021, with rates gradually decreasing from 5.4% in 2022 to 3.8% in 2075 and later, based on the Society of Actuaries Long-Run Medical Cost Trend Model.
- Annual salary increase of 4%.
- 90% of employees eligible for a subsidy and 15% of employees not eligible for a subsidy are assumed to elect coverage. 75% of vested former members who have not yet reached age 65 are assumed to begin electing coverage at age 65.
- The per capita claims cost for medical and prescription drugs is based on the expected portion of the group's overall cost attributed to individuals in specified age and gender brackets.
- The cost due to the excise tax under the Patient Protection and Affordable Care Act beginning in 2022 is 40% of the projected premiums in excess of the annual limits, calculated using an inflation rate of 2%.
- The annual cost of living increase beginning in 2018 is assumed to be 2.2% per year.
- Retiree premium cost sharing is assumed to remain at 18% and increase at the same rate as the Health Care Cost Trend Rate.
- Mortality rates based on the PubG-2010 Mortality Table, including rates for contingent survivors, and which incorporates rates based on a generational projection using Scale MP-2018 to reflect mortality improvement.
- The discount rate increased from 2.98% to 3.36%, based on S&P Municipal Bond 20-Year High Grade Rate Index at July 1, 2019.
- Participant data is based on census information as of July 1, 2018.
- Experience assumptions for withdrawal and retirement, expected vs. actual, and election percentages were reviewed in 2019, and it was determined that the results were reasonable and did not warrant a further formal study.
- Costs have been loaded by 0.7% to account for tuition waiver benefits, which are offered to all eligible retirees, regardless of employee bargaining unit when active, and including those not represented when active, who meet years of service and/or age criteria.

The following presents the System Plan's net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (4.5% decreasing to 2.8%) or one percentage point higher (6.5% decreasing to 4.8%) than the current healthcare cost trend rates (5.5% decreasing to 3.8%).

Sensitivity of the System Plan's Net OPEB Liability to Changes in the Healthcare Cost Trend Rate		
<i>(in thousands)</i>		
1% Decrease (4.5% decreasing to 2.8%)	Healthcare Cost Trend Rates (5.5% decreasing to 3.8%)	1% Increase (6.5% decreasing to 4.8%)
\$1,066,956	\$1,279,239	\$1,554,143

The following presents what the System Plan's net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using healthcare cost trend rates that were one percentage point lower (4.5% decreasing to 2.8%) or one percentage point higher (6.5% decreasing to 4.8%) than the June 30, 2019, healthcare cost trend rates used (5.5% decreasing to 3.8%).

Sensitivity of the System Plan's Net OPEB Liability to Changes in the Healthcare Cost Trend Rate		
<i>(in thousands)</i>		
1% Decrease (4.5% decreasing to 2.8%)	Healthcare Cost Trend Rates (5.5% decreasing to 3.8%)	1% Increase (6.5% decreasing to 4.8%)
\$1,100,605	\$1,314,607	\$1,591,538

The following presents the State System's net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using a discount rate that is one percentage point lower (2.36%) or one percentage point higher (4.36%) than the current discount rate (3.36%).

Sensitivity of the System Plan's Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 2.36%	Current Rate 3.36%	1% Increase 4.36%
\$1,493,298	\$1,279,239	\$1,108,636

The following presents what the State System's net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using a discount rate that was one percentage point lower (1.98%) or one percentage point higher (3.98%) than the discount rate used (2.98%).

Sensitivity of the System Plan's Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 1.98%	Current Rate 2.98%	1% Increase 3.98%
\$1,542,936	\$1,314,607	\$1,133,474

System Plan OPEB Liability

The System Plan's total OPEB liability of \$1,279,239,000 was measured as of July 1, 2019 and was determined by an actuarial valuation as of July 1, 2018 that was rolled forward to July 1, 2019.

The System Plan's total OPEB liability of \$1,314,607,000 was measured as of July 1, 2018 and was determined by an actuarial valuation as of July 1, 2018.

Changes in the System Plan Total OPEB Liability (in thousands)		
	Fiscal Year Ending June 30, 2020	Fiscal Year Ending June 30, 2019
Balance beginning of year	\$1,314,607	\$1,460,042
Service cost	35,611	42,364
Interest	39,561	46,251
Changes of benefit terms	-	(1,018)
Differences between expected and actual experience	-	(175,819)
Changes of assumptions	(68,676)	(11,542)
Benefit payments	(41,864)	(45,671)
Net Changes	(35,368)	(145,435)
Balance end of year	\$1,279,239	\$1,314,607

REHP

Plan Description

The Retired Employees Health Program (REHP) is a single-employer defined benefit OPEB plan that includes Commonwealth agencies and some component units. The REHP is established as a trust equivalent arrangement. The REHP is administered by the Pennsylvania Employees Benefit Trust Fund (PEBTF), which acts as a third-party administrator under an agreement with the Commonwealth. The REHP is provided as part of collective bargaining agreements with most Commonwealth labor unions. All policy decisions and types and levels of benefits for the REHP fall under the purview of the Commonwealth's Executive Board and the

Secretary of Administration. The REHP does not have a governing board. The REHP neither issues a stand-alone financial report nor is it included in the report of a public employee retirement system or other entity, but is reported in the Commonwealth's Comprehensive Annual Financial Report (CAFR) as a Pension (and Other Employee Benefit) Trust. The REHP is reported using the economic resources measurement focus and the accrual basis of accounting. The CAFR is an audited financial statement and is available at www.budget.pa.us.

The REHP provides eligible retirees and their eligible dependents with subsidized healthcare for the retiree's lifetime. Benefits include healthcare, including hospital, medical/surgical, prescription drugs, and major medical coverage, as well as a Medicare supplement for individuals over age 65. Retirees receive varying coverages based on the plan they choose. Spouse benefits cease upon the retiree's death, but the surviving spouse may continue coverage at full cost. Non-spouse dependents may be covered until age 26.

Plan members receiving benefits contribute at various rates, depending upon when they retire, whether they are eligible for Medicare, and their salary at retirement. Following are the contribution rates of eligible plan members receiving benefits as of June 30, 2020.

- Plan members who retired prior to July 1, 2005, are not required to make contributions.
- Plan members who retired on or after July 1, 2005, and prior to July 1, 2007, pay 1% of their final annual salary.
- Plan members who retired on or after July 1, 2007, and prior to July 1, 2011, pay 3% of either final gross annual base salary or final average salary, whichever is less. Members eligible for Medicare pay 1.5% of either final gross annual base salary or final average salary, whichever is less.
- Plan members who retire on or after July 1, 2011, pay 3% of final average salary. Members eligible for Medicare pay 1.5% of final gross annual base salary.

Employer contribution requirements are established by the Commonwealth as provided by pertinent statutory authority. With the exception of certain employing agencies, employers contributed to the REHP Trust a retiree health assessment rate of \$300 for each current REHP eligible active employee during the fiscal year ended June 30, 2019. The rate during the period July 1, 2017, through June 30, 2018, also was \$300.

Actuarial Assumptions and Other Inputs

The State System records its REHP pension liability annually utilizing a measurement date one year prior to its fiscal year end. The Commonwealth's State Employees' Retirement System (SERS) performs experience studies periodically to determine reasonable and appropriate economic and demographic assumptions for purposes of valuing the defined benefit pension plan. The most recent SERS experience study covered the years 2011 through 2015 and was presented to the SERS Board in March 2016. The approved recommendations from that study were used to determine the assumptions in the REHP annual valuations, where applicable. The inflation assumption was selected by the SERS Board during an April 2017 meeting based on a review of actual plan experience and the prevalent economic outlook.

The total OPEB liability in the June 30, 2019 and 2018 actuarial valuations were determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

- Actuarial Cost Method is Entry Age Normal, which requires an estimate of the projected benefit payable at retirement to determine costs and liabilities.
- Inflation of 2.60%.
- Healthcare cost trend rate of 6.0%, with rates gradually decreasing to 4.1% in 2075 and later, based on the SOA-Getzen trend rate model version 2019_b.
- Average career salary growth of 2.65% per year and an assumed 2.90% general salary increase.
- Projected benefits based on estimates of future years of service and projected health benefit costs.
- Mortality rates based on the RP-2000 Male and Female Combined Healthy Mortality Tables or the RP-2000 Male and Female Disabled Retiree Mortality Tables, as appropriate, adjusted to ensure sufficient margin improvement in certain age ranges.

- Participant data based on census information as of December 31, 2018, for the June 30, 2019, measurement date; and as of December 31, 2017, for the June 30, 2018, measurement date.

The following assumptions were made with regard to the discount rate:

- Discount rate of 3.50% as of June 30, 2019, and 3.87% as of June 30, 2018.
- Since the REHP has insufficient assets to meet next year's projected benefit payments, the discount rate is based on the index rate for the 20-year tax-exempt general obligation municipal bond index with an average rating of AA/Aa or higher as of the measurement date. The Commonwealth elected to determine the discount rate using the Bond Buyer 20-Bond General Obligation Index.

The long-term expected rate of return on REHP plan investments is determined using a risk premium review. This review compares the current relationship between fixed income and equity and their relationship over long periods of time to come up with an expected rate of return. Other variables considered in the expected rates of return are a reversion to the mean for each asset class. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation are summarized as follows:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	47.0%	5.6%
International equity	20.0%	5.8%
Fixed income	25.0%	1.7%
Real estate	8.0%	4.6%
Cash and cash equivalents	0.0%	0.9%
Total	100.0%	

The Commonwealth calculated an allocated share of the REHP OPEB liability for each participating employer based upon their actual contributions made to the REHP. The State System's proportion of the collective net OPEB liability was 4.37% for the measurement date of June 30, 2019 and 4.57% for the measurement date of June 30, 2018.

The following presents the State System's share of the REHP net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (5.0% decreasing to 3.1%) or one percentage point higher (7.0% decreasing to 5.1%) than the current healthcare cost trend rates (6.0% decreasing to 4.1%).

Sensitivity of the REHP Net OPEB Liability to Changes in the Healthcare Cost Trend Rate (in thousands)		
1% Decrease (5.0% decreasing to 3.1%)	Healthcare Cost Trend Rates (6.0% decreasing to 4.1%)	1% Increase (7.0% decreasing to 5.1%)
\$395,330	\$455,091	\$528,601

The following presents what the State System's share of the REHP net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using healthcare cost trend rates that were one percentage point lower (5.2% decreasing to 3.1%) or one percentage point higher (7.2% decreasing to 5.1%) than the healthcare cost trend rates used (6.2% decreasing to 4.1%).

Sensitivity of the REHP Net OPEB Liability to Changes in the Healthcare Cost Trend Rate (in thousands)		
1% Decrease (5.2% decreasing to 3.1%)	Healthcare Cost Trend Rates (6.2% decreasing to 4.1%)	1% Increase (7.2% decreasing to 5.1%)
\$565,023	\$658,214	\$774,049

The following presents the State System's share of the REHP net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using a discount rate that is one percentage point lower (2.50%) or one percentage point higher (4.50%) than the current discount rate (3.50%).

Sensitivity of the REHP Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 2.50%	Current Rate 3.50%	1% Increase 4.50%
\$516,326	\$455,091	\$403,835

The following presents what the State System's share of the REHP net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using a discount rate that was one percentage point lower (2.87%) or one percentage point higher (4.87%) than the discount rate used (3.87%).

Sensitivity of the REHP Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 2.87%	Current Rate 3.87%	1% Increase 4.87%
\$754,090	\$658,214	\$579,224

The assets of the REHP are managed by the Commonwealth's Treasury in an investment pool. The REHP investments are made based upon an interagency agreement, dated June 17, 2008, and the prudent investor standard set forth in the Commonwealth of Pennsylvania's amendment to fiscal code 72 P.S. §30.1, the principles of Prudent Investors Standards.

Premium Assistance

Plan Description

The Health Insurance Premium Assistance Program (Premium Assistance) is a governmental cost sharing, multiple-employer OPEB plan administered by the administrative staff of PSERS. The members eligible to participate in the program include all full-time public school employees, part-time hourly public school employees who render at least 500 hours of service in the school year, and part-time per diem public school employees who render at least 80 days of service in the school year in any of the reporting entities in Pennsylvania. The control and management of PSERS, including the investment of its assets, is vested in the Board of Trustees (PSERS Board). The Commonwealth's General Assembly has the authority to amend the benefit terms of PSERS by passing bills in the Senate and House of Representatives and sending them to the Governor for approval. Additional plan information can be found in the PSERS Comprehensive Annual Financial Report at www.psers.pa.gov

Effective January 1, 2002, under the provisions of Act 9 of 2001, participating eligible retirees are entitled to receive premium assistance payments equal to the lesser of \$100 per month or their out-of-pocket monthly health insurance premium. To receive premium assistance, eligible retirees must obtain their health insurance through either their school employer or the PSERS Health Options Program. As of June 30, 2019, there were no assumed future benefit increases to participating eligible retirees. Plan members receiving benefits are not required to make contributions.

Employer contribution rates for Premium Assistance are established to provide reserves in the Health Insurance Account that are sufficient for the payment of Premium Assistance benefits for each succeeding year. The

contribution policy is governed by applicable provisions of the Retirement Code. The contractually required employer contribution rate was 0.83% of covered payroll for the fiscal years ended June 30, 2020 and 2019. Per §8327 of the Code, the Commonwealth is required to contribute 50% of the contribution rate directly to PSERS on behalf of the State System, meaning that the amount that the State System actually contributed was 0.415% of covered payroll.

Actuarial Assumptions and Other Inputs

The State System records its PSERS OPEB liability annually utilizing a measurement date one year prior to its fiscal year end. The total OPEB liability, as of the June 30, 2019 measurement date, was determined by rolling forward the PSERS total OPEB liability as of June 30, 2018, to June 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

- Valuation Date - June 30, 2018
- Actuarial cost method was entry age normal, level percent of pay.
- Effective average salary growth of 5.0%, comprising 2.75% for inflation and 2.25% for real wage growth and for merit and seniority increases.
- Premium Assistance reimbursement benefits capped at \$1,200 per year.
- Assumed healthcare cost trends were applied to retirees with less than \$1,200 in premium assistance per year.
- Mortality rates were based on the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale.
- Eligible retirees pre-age 65 are assumed to participate at 50%, while eligible retirees post-age 65 are assumed to participate at 70%.

The following assumptions were used to determine the contribution rate:

- The results of the actuarial valuation as of June 30, 2017, determined the employer contribution rate for fiscal year 2018/19.
- Cost method was developed using the amount necessary to assure solvency of Premium Assistance through the third fiscal year after the valuation date.
- Asset valuation method was market value.
- Participation rate assumed that 63% of eligible retirees will elect premium assistance.
- Mortality rates and retirement ages were based on the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale.

The following assumptions were made with regard to the discount rate:

- The discount rate used to measure the total OPEB liability was 2.79% at June 30, 2019, and 2.98% at June 30, 2018.
- Under the plan's funding policy, contributions are structured for short-term funding of Premium Assistance. The funding policy sets contribution rates necessary to assure solvency of Premium Assistance through the third fiscal year after the actuarial valuation date.
- The Premium Assistance account is funded to establish reserves that are sufficient for the payment of Premium Assistance benefits for each succeeding year. Due to the short-term funding policy, the OPEB plan's fiduciary net position was not projected to be sufficient to meet projected future benefit payments; therefore, the plan is considered to be a pay-as-you-go plan. A discount rate of 2.79%, which represents the S&P 20-year Municipal Bond Rate at June 30, 2019, was applied to all projected benefit payments to measure the total OPEB liability.
- Investments consist primarily of short-term assets designed to protect the principal of the plan assets. The OPEB plan's policy with regard to the allocation of invested plan assets is established and may be amended by the PSERS Board. Under the program, as defined in the retirement code, employer contribution rates for Premium Assistance are established to provide reserves in the health insurance account that are sufficient for the payment of premium assistance benefits for each succeeding year. Following is the PSERS Board's

adopted asset allocation policy and best estimates of geometric real rates of return for each major asset class, as of June 30, 2019.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Cash	13.2%	0.2%
US Core Fixed Income	83.1%	1.0%
Non-US Developed Fixed	3.7%	0.0%
	<u>100.0%</u>	

The net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by rolling forward the total OPEB liability as of June 30, 2018, to June 30, 2019. An employer's proportion is calculated utilizing the employer's one-year reported covered payroll as a percentage of total one-year reported covered payroll. The State System's proportion of the collective net OPEB liability was 0.1886% and 0.1836% for the measurement dates of June 30, 2019 and 2018, respectively.

The following presents the State System's share of the Premium Assistance net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (between 4% and 6.50%) or one percentage point higher (between 6% and 8.50%) than the current healthcare cost trend rates (between 5% and 7.50%).

Sensitivity of the Premium Assistance Net OPEB Liability to Changes in the Healthcare Cost Trend Rate (in thousands)		
1% Decrease (between 4% and 6.50%)	Healthcare Cost Trend Rates (between 5% and 7.50%)	1% Increase (between 6% and 8.50%)
\$4,011	\$4,011	\$4,012

The following presents what the State System's share of the Premium Assistance net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using healthcare cost trend rates that were one percentage point lower (between 4% and 6.75%) or one percentage point higher (between 6% and 8.75%) than the healthcare cost trend rates used (between 5% and 7.75%).

Sensitivity of the Premium Assistance Net OPEB Liability to Changes in the Healthcare Cost Trend Rate (in thousands)		
1% Decrease (between 4% and 6.75%)	Healthcare Cost Trend Rates (between 5% and 7.75%)	1% Increase (between 6% and 8.75%)
\$3,827	\$3,828	\$3,829

The following presents the State System's share of the Premium Assistance net OPEB liability at June 30, 2020, as well as what the liability would be if it were calculated using a discount rate that is one percentage point lower (1.79%) or one percentage point higher (3.79%) than the current healthcare cost trend rates (2.79%).

Sensitivity of the Premium Assistance Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 1.79%	Current Rate 2.79%	1% Increase 3.79%
\$4,570	\$4,011	\$3,548

The following presents what the State System's share of the Premium Assistance net OPEB liability was at June 30, 2019, as well as what the liability would have been if it had been calculated using a discount rate that was one percentage point lower (1.98%) or one percentage point higher (3.98%) than the discount rate used (2.98%).

Sensitivity of the Premium Assistance Net OPEB Liability to Changes in the Discount Rate (in thousands)		
1% Decrease 1.98%	Current Rate 2.98%	1% Increase 3.98%
\$4,353	\$3,828	\$3,392

(10) LEASES

Total rent expense for the State System operating leases amounted to \$12,504,000 and \$13,488,000 for the years ended June 30, 2020 and 2019, respectively.

During fiscal year 2020, the State System, on behalf of Clarion University, entered into a master lease agreement with the Clarion University Foundation, Inc. (a component unit of Clarion), to lease certain student housing facilities. The lease agreement will allow Clarion the flexibility to direct students to what it believes is the appropriate facility at the appropriate fee. In connection with the master lease, the Foundation entered into an assignment of rents, pursuant to which it assigned its rights to receive the lease payments to a collateral agent as security for certain outstanding debt of the Foundation, that was used to construct the housing facilities. The terms of the lease coincide with either the ground leases related to the facilities constructed on System-owned land or the final payment of debt for facilities that were constructed on Foundation-owned land. Ownership of the leased facilities reverts to the State System at the end of the master lease term. The State System recorded this master lease as a capital lease with capital assets and a lease obligation of \$93.8 million at the inception of the lease. The amounts are included in the capital lease activity shown below.

Capital assets acquired through leases that have been capitalized are as follows.

(in thousands)		
	June 30, 2020	June 30, 2019
Cost:		
Buildings	\$148,137	\$54,336
Equipment	8,432	7,726
Total	<u>\$156,569</u>	<u>\$62,062</u>
Accumulated Depreciation:		
Buildings	\$46,002	\$42,490
Equipment	2,511	1,210
Total	<u>\$48,513</u>	<u>\$43,700</u>

Future minimum payments, by year and in the aggregate, under capital and noncancelable operating leases, with initial or remaining terms of one year or more, are as follows

<i>(in thousands)</i>		
	Operating Leases	Capital Leases
2021	\$6,369	\$11,654
2022	5,142	11,402
2023	4,416	11,095
2024	2,185	11,023
2025	1,621	10,154
Thereafter	32,156	122,123
Total minimum lease payments	<u>\$51,889</u>	<u>\$177,451</u>
Amount representing interest on capital leases		<u>56,946</u>
Present value of net minimum capital lease payments		<u>\$120,505</u>

Changes in the liability for capital leases in fiscal years 2019 and 2020 follow.

<i>(in thousands)</i>				
Year	Beginning Balance	Capital Lease Additions	Capital Lease Payments	Ending Balance
2019	\$43,248	\$4,116	\$16,507	\$30,857
2020	\$30,857	\$94,993	\$5,345	\$120,505

(11) BONDS PAYABLE

Bonds payable on June 30, 2020, 2019 and 2018, consisted of several outstanding tax-exempt revenue bond series issued by the Pennsylvania Higher Educational Facilities Authority (PHEFA). In connection with the bond issuance, the State System entered into a loan agreement with PHEFA under which the State System has pledged its full faith and credit for the repayment of the bonds. The loan constitutes an unsecured general obligation of the State System. The bonds were issued to provide funds to undertake various capital projects at the universities or to advance refund certain previously issued bonds.

Activity for the various bond series for the years ended June 30, 2020 and 2019, was as follows.

Bonds Payable June 30, 2020, 2019 and 2018 <i>(in thousands)</i>										
Description	Original Issuance	Weighted Average Interest Rate	Balance June 30, 2018	2019 Bonds Issued	2019 Bonds Redeemed/ Refunded	Balance June 30, 2019	2020 Bonds Issued	2020 Bonds Redeemed/ Refunded	Balance June 30, 2020	Current Portion
Series AG issued March 2008, final maturity June 2024	\$101,335	4.52%	\$24,965	-	\$24,965	-	-	-	-	-
Series AH issued July 2008, final maturity June 2038	140,760	4.70%	8,160	-	390	\$7,770	-	\$410	\$7,360	\$430
Series AI issued August 2008, final maturity June 2025	32,115	4.41%	13,910	-	13,720	190	-	30	160	30
Series AJ issued July 2009, final maturity June 2039	123,985	4.85%	83,440	-	6,570	76,870	-	74,510	2,360	120
Series AK issued Sept. 2009, final maturity June 2024	47,310	4.00%	16,235	-	4,405	11,830	-	11,830	-	-
Series AL issued July 2010, final maturity June 2035	135,410	5.00%	60,465	-	6,525	53,940	-	18,645	35,295	5,755
Series AM issued July 2011, final maturity June 2036	119,085	4.61%	89,995	-	4,955	85,040	-	5,215	79,825	5,495
Series AN issued March 2012, final maturity June 2023	76,810	5.00%	43,995	-	14,400	29,595	-	21,530	8,065	2,825
Series AO issued July 2013, final maturity June 2038	30,915	4.50%	25,645	-	1,170	24,475	-	1,210	23,265	1,255
Series AP issued May 2014, final maturity June 2024	46,110	4.77%	38,045	-	1,275	36,770	-	6,775	29,995	7,030
Series AQ issued May 2015, final maturity June 2036	94,975	4.56%	78,930	-	7,855	71,075	-	8,250	62,825	7,965
Series AR issued Sept. 2015, final maturity June 2040	102,365	3.89%	95,475	-	2,725	92,750	-	2,860	89,890	3,000
Series AS issued June 2016, final maturity June 2037	47,280	4.13%	44,295	-	3,060	41,235	-	3,115	38,120	3,175
Series AT issued Sept. 2016, final maturity June 2055	298,110	3.45%	286,110	-	7,425	278,685	-	7,765	270,920	8,140
Series AU issued Sept. 2017, final maturity June 2042	128,260	3.52%	125,905	-	5,200	120,705	-	6,165	114,540	7,525
Series AV issued Sept. 2018, final maturity June 2045	236,945	4.22%	-	\$236,945	13,215	223,730	-	6,170	217,560	10,520
Series AW issued Sept. 2019, final maturity June 2044	84,980	3.11%	-	-	-	-	\$84,980	370	84,610	3,330
Total	\$1,846,750		\$1,035,570	\$236,945	\$117,855	\$1,154,660	\$84,980	\$174,850	\$1,064,790	\$66,595

Principal and interest requirements to maturity are as follows.

<i>(in thousands)</i>			
	Principal	Interest	Total
2021	\$66,595	\$45,255	\$111,850
2022	71,395	42,228	113,623
2023	72,650	38,793	111,443
2024	78,445	35,277	113,722
2025	55,495	31,477	86,972
2026–2030	254,330	120,920	375,250
2031–2035	206,740	70,711	277,451
2036–2040	166,910	34,471	201,381
2041–2045	85,710	9,596	95,306
2046–2050	3,025	1,342	4,367
2051–2055	3,495	506	4,001
Total	\$1,064,790	\$430,576	\$1,495,366

The State System's outstanding bonds contain a provision that in an event of default, PHEFA may declare the outstanding principal plus accrued interest to be immediately due and payable. An event of default occurs if the State System fails to make a required payment when due, if the State System fails to perform any of its other covenants or obligations, or if a State System bankruptcy is instituted or commenced.

(12) DEBT REFUNDING

In September 2019, \$85 million of the net proceeds from the Series AW tax-exempt revenue bonds were used to current refund portions of the Series AJ and Series AK bonds. The refunding resulted in an accounting gain of approximately \$1,500,000 and was performed to reduce the debt service by approximately \$14,000,000 and an economic gain (difference between the present values of the old and new debt service payments) of approximately \$13,700,000. The accounting gain, or deferred gain on refunding, is reported as a deferred inflow of resources that will be amortized over the remaining life of the old bond or the life of the new bond, whichever is shorter.

In September 2018, \$36.2 million of the net proceeds from the Series AV-1 tax-exempt revenue bonds were used to current refund Series AG and a portion of Series AI bonds. The refunding resulted in an accounting gain of approximately \$144,000 and was performed to reduce debt service by approximately \$2,700,000, resulting in an economic gain (difference between the present values of the old and new debt service payments) of approximately \$2,400,000. The accounting gain, or deferred gain on refunding, is reported as a deferred inflow of resources that will be amortized over the remaining life of the old bond or the life of the new bond, whichever is shorter.

(13) RATING ACTIONS

In June 2020, Moody's Investors Service, Inc., maintained the State System's bond rating of Aa3 with an outlook of *stable*. In June 2020, Fitch Ratings affirmed the State System's rating of A+ with an outlook of *stable*.

(14) DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

The classifications of deferred outflows of resources and deferred inflows of resources at June 30, 2020 and 2019, follow.

<i>(in thousands)</i>		
	June 30, 2020	June 30, 2019
Deferred Outflows of Resources		
Pension related (see note 8)	\$120,020	\$224,749
OPEB related (see note 9)	98,638	98,447
Unamortized loss on refunding of debt	5,979	7,297
Total Deferred Outflows of Resources	<u>\$224,637</u>	<u>\$330,493</u>
Deferred Inflows of Resources		
Pension related (see note 8)	\$96,231	\$26,866
OPEB related (see note 9)	675,638	540,910
Unamortized gain on refunding of debt	1,839	661
Split-interest agreements	9	10
Total Deferred Inflows of Resources	<u>\$773,717</u>	<u>\$568,447</u>

(15) CONTINGENCIES AND COMMITMENTS

Contingencies

The nature of the educational industry is such that, from time to time, the State System is exposed to various risks of loss related to torts; alleged negligence; acts of discrimination; breach of contract; labor disputes; disagreements arising from the interpretation of laws or regulations; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. While some of these claims may be for substantial amounts, they are not unusual in the ordinary course of providing educational services in a higher education system.

The State System receives support from federal and Commonwealth grant programs, primarily for student financial assistance, including federal CARES funding in 2019/20. Entitlement to the resources requires compliance with terms of the grant agreements and applicable regulations, including the expenditure of the resources for eligible purposes. Substantially all grants are subject to financial and compliance audits by the grantors. As of June 30, 2020, the State System estimates that adjustments, if any, as a result of such audits would not have a material adverse effect on the accompanying financial statements.

Covid-19 Pandemic

Covid-19 may impact various parts of the operations and financial results of the Universities and component units, including method of educational delivery, athletics, housing and food service. Management believes that the Universities and component units are taking appropriate actions to mitigate the negative impact. The full impact of COVID-19 is unknown and cannot be reasonably estimated at June 30, 2020.

Cheyney University of Pennsylvania

In August 2015, Cheyney University voluntarily self-reported to the U.S. Department of Education (ED) that \$29.6 million of federal student financial aid was improperly administered and delivered in fiscal years 2011/12, 2012/13, and 2013/14, covering almost 4,400 student records. Subsequently ED initiated a Program Review of Cheyney's financial aid functions and Cheyney responded to the Program Review report, making every effort to comply with ED's requirements.

In January 2016, the U.S. Department of Justice (DOJ) notified the State System that it was investigating the application and use of federal student financial aid by Cheyney University and the oversight of the university by the State System. The DOJ requested that the university and State System preserve and produce certain documents. The State System has fully complied and continues to comply with the DOJ's requests. No determination has yet been conveyed by the DOJ, and the possible resulting outcomes from the investigation are uncertain.

On August 8, 2019, Cheyney University received a letter from ED relating to its proposed resolution of its Program Review of Cheyney (the "Program Review"), asserting that Cheyney's overall response to the Program Review did not fully address ED's findings or accurately document the federal student aid funds disbursed during the periods under review. The ED letter stated further that under normal circumstances ED would assess Cheyney full Federal Pell Grant and Federal Direct Loan liabilities in the amount of \$57.5 million for the award years reviewed. However, ED acknowledged that Cheyney had undertaken significant steps to accurately document its administration of federal student aid funds despite being limited in its ability to do so by the past deficiencies and, accordingly, expressed a willingness to presume that significant amounts of the financial aid funds were provided to, and earned by, the students and to conclude the Program Review in consideration of Cheyney's (1) payment of \$14,308,377, (2) waiver of its rights to any administrative appeal, and (3) entry into an acceptable repayment agreement with ED. In February 2020, a settlement agreement was executed between ED and Cheyney and a payment schedule was established for the \$14.3 million settlement amount. Cheyney made the first required payment of \$500,000 in fiscal year 2019/20.

As a result of the self-reported compliance issues noted above, in September 2015, the ED placed the university on Heightened Cash Monitoring 2 (HCM2) status, meaning that the university does not receive federal student financial aid funds in advance, but must use its own cash to grant federal financial aid to its students and then request reimbursement from the ED. The university is still on HCM2 status as of June 30, 2020, and as such is awaiting receipt of \$13.7 million in federal student financial aid funds. Of the \$13.7 million outstanding federal financial aid receivables, approximately \$6.0 million is associated with 2019/20 federal aid awards; the remainder is associated with federal aid awards made during fiscal years 2016/17 through 2018/19.

The delay in receipt of ED funds contributes to the university's severe cash shortage. Over the course of the past several years, the State System has provided lines of credit, System notes and other support to Cheyney University to meet its cash needs. On November 13, 2019, Governor Wolf pledged support to the System through a letter to Cheyney's President assuring that "Cheyney's obligation to other PASSHE institutions and the Office of the Chancellor, totaling \$40,264,814, is eliminated." On January 15, 2020, an additional \$45 million of Commonwealth Public Improvement Project Capital Funding (PIP) was allocated to the State System, over and above the System's annual PIP funding for fiscal years 2019/20, 2020/21, and 2021/22. These funds will be provided to the System on a reimbursement basis in approximately \$15 million increments in each of fiscal years 2019/20, 2020/21, and 2021/22.

The Office of the Chancellor continues to monitor the university's level of debt and payables and its ability to generate revenue and cash. Securing removal from HCM2 status and obtaining reimbursement of past financial aid awards is a priority. The university continues to look for program and operating efficiencies, has launched a new fundraising campaign, and is seeking ways to develop income-producing strategies using campus assets and strategic alliances with third parties.

In November 2015 Cheyney was placed on probation by the Middle States Commission on Higher Education (Middle States) accreditation organization. Over the next four years, Cheyney continued to make improvements to resolve the non-compliance issues noted by Middle States and on November 22, 2019, Middle States

informed Cheyney University of its "...reaffirm[ed] accreditation because the institution is now in compliance with Standard VI (Planning, Resources, and Institutional Improvement) and Requirement of Affiliation 11", noting that the Commonwealth of Pennsylvania, Office of the Governor, has provided written assurance of the elimination of Cheyney University's debt to the Pennsylvania State System of Higher Education (PASSHE) and the Office of the Chancellor.

Insurance

The State System is self-insured for workers' compensation up to stated limits (note 6). For all other risks of loss, the State System pays annual premiums to the Commonwealth to participate in its Risk Management Program. The State System does not participate in any public entity risk pools and does not retain risk related to any aforementioned exposure, except for those amounts incurred relative to policy deductibles that are not significant. The State System has not significantly reduced any of its insurance coverage from the prior year. Settled claims have not significantly exceeded the State System's insurance coverage in any of the past three years. It is not expected that the resolution of any outstanding claims and litigation will have a material adverse effect on the accompanying financial statements.

Construction Commitments

Authorized expenditures for construction projects unexpended as of June 30, 2020 and 2019, were approximately \$107,068,000 and \$151,248,000, respectively.

Labor Concentration

Approximately 86% of PASSHE's employees are covered by nine collective bargaining agreements. Seven of the agreements were renegotiated during the past fiscal year; most of which are effective through fiscal year 2022/23. The only exceptions are two minor unions: the agreement for police supervisors and security officers with the International Union, Security, Police, and Fire Professionals of America (SPFPA), which expired on August 31, 2020, and the Professional Doctors Association (PDA). A tentative agreement was reached with SPFPA in September 2020. The terms of the prior contracts remain in effect until a successor agreement is achieved.

(16) SUBSEQUENT EVENTS

In July 2020, PHEFA issued Series AX tax-exempt revenue bonds in the amount of \$94,985,000. The net proceeds from the Series AX revenue bonds were used to acquire certain student housing facilities at East Stroudsburg University, as well as to current refund Series AH, Series AJ and Series AL revenue bonds. The refunding was performed to reduce debt service by approximately \$10 million and resulted in an economic gain (difference between the present values of the old and new debt service payments) of \$9 million. In connection with the bond issuance, the State System entered into a loan agreement with PHEFA under which the State System pledged its full faith and credit for repayment of the bonds.

In September 2020, PHEFA accepted bids for Series AY taxable revenue bonds, in the amount of \$78,925,000, which will close on October 1, 2020. The purpose of this issue is to advance refund a portion of Series AM revenue bonds and will result in a reduction of debt service of approximately \$11.2 million and an economic gain of \$10.2 million. The State System will enter into a loan agreement with PHEFA under which the State System will pledge its full faith and credit for repayment of the bonds.

On July 1, 2020 the State System, on behalf of Indiana University, entered into master lease agreements with Residential Revival Indiana (RRI), a component unit of Indiana. Under the terms of the agreements, the State System agreed to make monthly rent payments to RRI and pay operating expenses and insurance as defined in RRI's previously executed loan agreements, in exchange for the right to use, operate and collect all payments from RRI's Phase I and Phase IV housing facilities. The master leases expire concurrently with RRI's ground leases with the State System.

REQUIRED SUPPLEMENTARY INFORMATION

Years Ended June 30, 2020 and 2019
(Unaudited)

Schedule of Proportionate Share of SERS Net Pension Liability (NPL)

Determined as of SERS' December 31 measurement dates
(in thousands)

Fiscal Year	State System's Proportion	State System's Proportionate Share	State System's Covered-Employee Payroll	State System's Proportionate Share of NPL as a Percentage of Covered-Employee Payroll	SERS Fiduciary Net Position as a Percentage of Total Pension Liability
2014/15	4.901%	\$728,094	\$296,967	245%	64.8%
2015/16	4.721%	\$858,417	\$297,714	288%	58.9%
2016/17	4.837%	\$931,620	\$300,803	310%	57.8%
2017/18	4.906%	\$848,315	\$309,084	275%	63.0%
2018/19	4.897%	\$1,020,123	\$318,501	320%	56.4%
2019/20	4.773%	\$867,669	\$315,000	276%	63.1%

SERS Schedule of Contributions

Determined as of State System's June 30 fiscal year end dates
(in thousands)

Fiscal Year	Contractually Required Contributions	Contributions Recognized by SERS	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2014/15	\$57,234	\$57,234	\$0	\$293,506	19.50%
2015/16	\$69,021	\$69,021	\$0	\$291,594	23.67%
2016/17	\$83,754	\$83,754	\$0	\$301,828	27.75%
2017/18	\$94,727	\$94,727	\$0	\$304,575	31.10%
2018/19	\$97,467	\$97,467	\$0	\$315,369	30.90%
2019/20	\$97,074	\$97,074	\$0	\$305,074	31.82%

Schedule of Proportionate Share of PSERS Net Pension Liability (NPL)

*Determined as of PSERS' June 30 measurement dates
(in thousands)*

Fiscal Year	PSERS Net Pension Liability				State System's Covered-Employee Payroll	State System's Proportionate Share of NPL as a Percentage of Covered-Employee Payroll	PSERS Fiduciary Net Position as a Percentage of Total Pension Liability
	State System's Proportion	State System's Proportionate Share	Commonwealth's Proportionate Share	Total			
2014/15	.1785%	\$70,650	\$70,650	\$141,350	\$45,552	155%	57.2%
2015/16	.1852%	\$80,220	\$80,220	\$160,440	\$47,670	168%	54.4%
2016/17	.1833%	\$90,838	\$90,838	\$181,676	\$47,485	191%	50.1%
2017/18	.1811%	\$89,442	\$89,442	\$178,884	\$48,236	185%	51.8%
2018/19	.1836%	\$88,137	\$88,137	\$176,274	\$49,437	178%	54.0%
2019/20	.1836%	\$88,232	\$88,232	\$176,464	\$52,020	200%	55.7%

PSERS Pension Schedule of Contributions

*Determined as of State System's June 30 fiscal year end dates
(in thousands)*

Fiscal Year	Contractually Required Contributions	Contributions Recognized by PSERS	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2014/15	\$5,236	\$5,236	\$0	\$51,086	10.25%
2015/16	\$6,012	\$6,012	\$0	\$48,419	12.41%
2016/17	\$7,107	\$7,107	\$0	\$49,518	14.35%
2017/18	\$7,880	\$7,880	\$0	\$50,586	15.58%
2018/19	\$8,565	\$8,565	\$0	\$53,394	16.04%
2019/20	\$8,771	\$8,771	\$0	\$53,324	16.45%

State System Plan OPEB Liability
Determined as of the July 1 measurement dates
(in thousands)

	Fiscal Year June 30, 2020	Fiscal Year June 30, 2019	Fiscal Year June 30, 2018
Changes in the System Plan Total OPEB Liability			
Total OPEB Liability – Beginning Balance	\$1,314,607	\$1,460,042	\$1,559,134
Service cost	35,611	42,364	48,636
Interest	39,561	46,251	39,441
Changes of benefit terms		(1,018)	
Differences between expected and actual experience		(175,819)	
Changes of assumptions	(68,676)	(11,542)	(143,201)
Benefit payments	(41,864)	(45,671)	(43,968)
Net Changes	(35,368)	(145,435)	(99,092)
Total OPEB Liability—Ending Balance	\$1,279,239	\$1,314,607	\$1,460,042
Covered Employee Payroll	\$582,841	\$582,841	\$592,245
OPEB Liability as a Percent of Covered Payroll	219.48%	225.55%	246.53%

Note to Schedule: The System Plan has no assets accumulated in a trust in which the employer contributions are irrevocable, are dedicated to providing OPEB to plan members, or are legally protected from creditors.

Schedule of Proportionate Share of the REHP Net OPEB Liability
Determined as of REHP's June 30 measurement dates
(in thousands)

Fiscal Year	State System's Proportion	State System's Proportionate Share	State System's Covered-Employee Payroll	State System's Proportionate Share of Net OPEB Liability as a Percentage of Covered-Employee Payroll	REHP's Fiduciary Net Position as a Percentage of Total OPEB Liability
2017/18	4.374%	\$860,881	\$117,366	733.5%	1.4%
2018/19	4.573%	\$658,214	\$117,400	560.7%	2.2%
2019/20	4.370%	\$455,091	\$116,857	389.4%	3.8%

REHP Schedule of Contributions
Determined as of State System's June 30 fiscal year end dates
(in thousands)

Fiscal Year	Contractually Required Contributions	Contributions Recognized by SERS	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2017/18	\$21,441	\$21,441	\$0	\$141,268	15.18%
2018/19	\$25,787	\$25,787	\$0	\$144,385	17.86%
2019/20	\$19,567	\$19,567	\$0	\$139,418	14.03%

Schedule of Proportionate Share of PSERS Net OPEB Liability

*Determined as of PSERS' June 30 measurement dates
(in thousands)*

Fiscal Year	PSERS Net OPEB Liability				State System's Covered-Employee Payroll	State System's Proportionate Share of Net OPEB Liability as a Percentage of Covered-Employee Payroll	PSERS Fiduciary Net Position as a Percentage of Total OPEB Liability
	State System's Proportion	State System's Proportionate Share	Commonwealth's Proportionate Share	Total			
2017/18	.1811%	\$3,690	\$3,690	\$7,380	\$48,236	7.65%	5.73%
2018/19	.1836%	\$3,828	\$3,828	\$7,656	\$49,437	7.74%	5.56%
2019/20	.1886%	\$4,011	\$4,011	\$8,022	\$52,020	7.71%	5.56%

PSERS OPEB Schedule of Contributions

*Determined as of State System's June 30 fiscal year end dates
(in thousands)*

Fiscal Year	Contractually Required Contributions	Contributions Recognized by PSERS	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2017/18	\$204	\$204	\$0	\$50,586	0.40%
2018/19	\$217	\$217	\$0	\$53,394	0.40%
2019/20	\$220	\$220	\$0	\$53,324	0.41%

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Appendix III: Summary of Legal Documents

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DEFINITIONS OF CERTAIN TERMS

The following definitions apply to the summaries of the PHEFA Indenture, the PEDFA Indenture and the Loan Agreement and to terms not otherwise defined in the Official Statement.

“Act” shall mean the Pennsylvania Higher Educational Facilities Authority Act of 1967, Act of December 6, 1967, P.L. 678, as from time to time amended or supplemented.

“Additional PEDFA Bonds” shall mean PEDFA Bonds duly executed, authenticated and delivered pursuant to the provisions of the PEDFA Indenture, but shall not refer to or apply to any bonds issued under any other indenture or resolution of the Authority.

“Additional PHEFA Bonds” shall mean PHEFA Bonds duly executed, authenticated and delivered pursuant to the provisions of the PHEFA Indenture, but shall not refer to or apply to any bonds issued under any other indenture or resolution of the Authority.

“Administrative Expenses” shall mean those expenses reasonably and properly incurred by the Authority in carrying out its responsibilities and duties, or in providing its services and facilities to the State System, under the Act or the PHEFA Indenture or pursuant to the Loan Agreement or by the Authority in protecting its rights to indemnification pursuant to the PHEFA Indenture and shall include the fees and expenses of the Trustee with respect to its duties under the PHEFA Indenture.

“Annual Administrative Fee” shall mean the annual fee for the general administrative services of the Authority.

“Authority” shall mean the Pennsylvania Higher Educational Facilities Authority. “Authority Board” shall mean the governing body of the Authority.

“Authorized Officer” of the Authority or the State System shall mean a “Responsible Officer.”

“Bond Proceeds Fund” shall mean the special account so designated which is established and created pursuant to the PHEFA Indenture.

“Bondowner”, “owner” or “registered owner” or words of similar import, when used with reference to a PHEFA Bonds or a PEDFA Bond, shall mean any person who shall from time to time be the registered owner of any Outstanding PHEFA Bond or PEDFA Bond.

“Business Day” shall mean a date when the Trustee and the Authority are open for business.

“Certificate” shall mean (i) a signed document either attesting to or acknowledging the circumstances, representations or other matters therein stated or setting forth matters to be determined pursuant to the PHEFA Indenture or (ii) the report of an accountant as to audit or other procedures called for by the PHEFA Indenture.

“Certified Resolution” of the Authority or the State System shall mean a copy of one or more resolutions certified by the Secretary or Assistant Secretary of the Authority or the State

System, as the case may be, under its seal to have been duly adopted by the Board of the Authority or the State System board, as the case may be, and to be in effect on the date of such certification.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and the regulations promulgated thereunder.

“Commonwealth” shall mean the Commonwealth of Pennsylvania.

“Cost” or “Costs” in connection with any Project, shall mean all expenses which are properly chargeable thereto under Generally Accepted Accounting Principles or which are incidental to the financing, acquisition and construction of such Project, including, but without limiting the generality of the foregoing:

- amounts payable to contractors and costs incident to the award of contracts;
- costs for labor, facilities and services furnished by or for the State System or an institution thereof or the Authority and their employees or others, materials and supplies purchased by the State System or an institution thereof or the Authority or others, and permits and licenses obtained by the State System, an institution thereof, the Authority or others;
- engineering, legal, accounting and other professional and advisory fees;
- premiums for surety bonds and insurance during construction and costs on account of personal injuries and property damage in the course of construction and insurance against the same;
- interest during construction;
- the Authority’s initial fee and the Annual Administrative Fee and Administrative Expenses during the period prior to completion of any Project;
- Costs of issuance of the PHEFA Bonds;
- fees and expenses in connection with the acquisition of real and personal property or rights therein, including premiums for title insurance;
- costs of equipment purchased by the State System or an institution thereof and necessary for the completion and proper operation of any Project or property in question;
- amounts required to repay temporary loans or advances from other funds of the State System or an institution thereof made to finance the Costs of any Project;
- Costs of acquisition of real estate, construction and prior construction and/or site costs and improvements performed by the State System or any institution thereof in anticipation of any Project; and
- moneys necessary to fund the Funds created under the PHEFA Indenture.

“Debt Service” shall mean, with respect to any particular calendar year or Fiscal Year, an amount equal to the sum of (i) all interest payable on the Outstanding PHEFA Bonds during such calendar year or Fiscal Year, respectively, plus (ii) the principal due on such PHEFA Bonds during such calendar year or Fiscal Year, respectively.

“Debt Service Payment” shall mean with respect to any Interest Payment Date, the amount of interest and principal due.

“Depository” shall mean any bank, trust company, national banking association, savings bank or savings and loan association, the unsecured debt obligations of which are rated at least an “A+” rating with the Rating Agency, selected by the Authority or the Trustee as a depository of moneys or securities held under the provisions of the PHEFA Indenture and permitted by law to be a depository of Authority funds, and may include the Trustee, provided that all amounts held by the Depository shall be in the name of the Trustee.

“Educational Facility” shall have the same meaning as used in the Act.

“Event of Default” shall mean any of the events specified in the PHEFA Indenture or the Loan Agreement.

“Fiscal Year” shall mean a twelve-month period commencing on the first day of July of any year or any other twelve-month period as the Authority may by resolution determine from time to time, and shall include such shorter or longer period as the Authority shall deem advisable for transitional purposes.

“Forty-Eight Supplemental Indenture” shall mean the Forty-Eighth Supplemental Indenture of Trust dated as of June 1, 2021, between the Authority and the Trustee and under which the Series AZ Bonds will be issued.

“Forty-Eighth Supplemental Loan Agreement” shall mean the Forty-Eighth Supplemental Loan and Security Agreement dated as of June 1, 2021, between the Authority and the State System.

“Fund” shall mean one of the special funds created pursuant to the PHEFA Indenture.

“Generally Accepted Accounting Principles” shall mean those accounting principles, not contrary to those promulgated by a nationally recognized financial standards body, applicable to the preparation of financial statements of institutions of higher learning or public authorities, as appropriate.

“Interest Payment Date” shall mean any date upon which interest on PHEFA Bonds is due and payable in accordance with their terms.

“Investment Securities” shall mean and include any of the following obligations, to the extent the same are at the time legal for investment of funds of the Authority under the Act, including amendments thereto hereafter made, or under other applicable law:

- direct obligations of or obligations guaranteed by the United States of America;

- any bond, debenture, note, participation certificate or other similar obligation issued by any of the following agencies: Government National Mortgage Association, Federal Land Bank, Federal Home Loan Banks, Federal Intermediate Credit Banks, Federal Farm Credit Banks Consolidated Statewide, Tennessee Valley Authority, United States Postal Service, Farmers Home Administration, Export-Import Bank and Federal National Mortgage Association;

- any other obligation of the United States of America or any federal agency to the payment of the principal of and interest on which the full faith and credit of the United States of America is pledged which may then be purchased with Authority funds or which are legal investments for savings banks, savings associations, or savings and loan associations in the Commonwealth but only if such investments are rated “AA” or better by the Rating Agency, or, upon the discontinuance of such service, another nationally recognized rating service;

- tax-exempt obligations of any state or any instrumentality, agency or political subdivision thereof which are fully secured as to principal and interest by direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America, and which are rated in the highest rating category by the Rating Agency and which are not by their terms subject to redemption prior to the date on which they are needed for the purposes for which they have been deposited;

- direct and general obligations of any state of the United States, to the payment of which the full faith and credit of such state are pledged, but only if such obligations are rated “AA” or better by the Rating Agency, or, upon the discontinuance of such service, another nationally recognized rating service;

- deposits in interest-bearing time or demand deposits, or certificates of deposit, with an institution the unsecured deposits of which are rated “AA” or better by the Rating Agency at the time of purchase, or, upon discontinuance of such service, another nationally recognized rating service;

- repurchase agreements with an institution rated “A+” or better by the Rating Agency, or, upon discontinuance of such service, another nationally recognized rating service;

- commercial paper (except that of the Authority or an affiliate) or finance company paper rated “A-1” by Standard & Poor’s Corporation;

- investment agreements with an entity whose unsecured debt obligations are rated not less than “AA” by the Rating Agency;

- interest bearing time deposits or certificates of deposit (such deposits or certificates of deposit may be in or issued by the Trustee), or other similar banking arrangements with the Trustee or a member bank or banks of the Federal Reserve System or a bank, the deposits of which are insured by the Federal Deposit Insurance Corporation or its successor, or a savings and loan association, the deposits of which are insured by the Federal Savings and Loan Insurance Corporation or its successor. Each such interest

bearing time deposit or certificate shall be fully insured by the United States of America or the federal corporations enumerated above;

- certificates of participation, lease and sublease obligations or other similar instruments evidencing the leasing or subleasing of capital assets to any state of the United States whose general obligation bonds are rated “AA” or better by the Rating Agency at the time of purchase, or, upon discontinuance of such service, another nationally recognized rating service; or

- shares or certificates in any short-term investment fund, which short-term investment fund invests not less than 98% of its assets in obligations described in subparagraphs (1) through (11) above, including, without limitation, any mutual fund 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 (i) the Trustee or an affiliate of the Trustee receives fees from such funds for services rendered, (ii) the Trustee charges and collects fees for services rendered pursuant to the PHEFA Indenture, which fees are separate from the fees received from such funds, and (iii) services performed for such funds and pursuant to the PHEFA Indenture may at times duplicate those provided to such funds by the Trustee or its affiliates.

“Loan Agreement” shall mean the Loan and Security Agreement dated as of June 1, 1985, between the Authority, as lender, and the State System, as borrower, as previously amended and supplemented and as further supplemented by the Forty-Eighth Supplemental Loan Agreement.

“Outstanding” when used with reference to PHEFA Bonds, shall mean, as of any date, all PHEFA Bonds theretofore or thereupon being authenticated and delivered under the PHEFA Indenture except:

- any PHEFA Bond canceled by the Trustee or the Authority at or prior to such date;

- any PHEFA Bond (or portion of a PHEFA Bond) for the payment or redemption of which there shall be held in trust and set aside either:

- (a) moneys in an amount sufficient to effect payment when due of the principal or the applicable Redemption Price thereof, together with all accrued interest, or

- (b) Investment Securities as described in clauses (1), (2) and (4) of the definition of Investment Securities above in such principal amounts, of such maturities, bearing such interest, and otherwise having such terms and qualifications, as shall be necessary to provide moneys (whether as principal or interest) in an amount sufficient to effect payment when due of the principal or applicable Redemption Price thereof, together with all accrued interest, or

- (c) any combination of (a) and (b) above,

and, if such PHEFA Bond or portion of a PHEFA Bond is to be redeemed, for which notice of redemption shall have been given or provision satisfactory to the Trustee shall have been made for the giving of such notice;

- any PHEFA Bond in lieu of or in substitution for which other PHEFA Bonds shall have been authenticated and delivered pursuant to the PHEFA Indenture; and

- any PHEFA Bond deemed to have been paid as provided in the PHEFA Indenture.

“PEDFA Bond” or “PEDFA Bonds” shall mean one of the notes or bonds or all of the notes or bonds, as the case may be, to be authenticated and delivered pursuant to the PEDFA Indenture, including any PEDFA Bond issued in lieu of or in exchange for such PEDFA Bond.

“PHEFA Bond” or “PHEFA Bonds” shall mean one of the notes or bonds or all of the notes or bonds, as the case may be, to be authenticated and delivered pursuant to the PHEFA Indenture, including any PHEFA Bond issued in lieu of or in exchange for such PHEFA Bond.

“PEDFA Indenture” shall mean the Trust Indenture dated as of April 1, 2021, between the Pennsylvania Economic Development Financing Agency and The Bank of New York Mellon Trust Company, N.A., Philadelphia, Pennsylvania, as amended.

“PHEFA Indenture” shall mean the Indenture of Trust dated as of June 1, 1985, between the Authority and the Trustee, as previously amended and supplemented, and as further supplemented by the Forty- Eighth Supplemental Indenture.

“Pledged Revenues” shall mean all amounts payable by the State System to the Authority under the Loan Agreement (except those representing the Annual Administrative Fee and Administrative Expenses of the Authority).

“Project” shall mean each individual Educational Facility financed under the PHEFA Indenture and shall include acquiring, holding, constructing, improvement, maintaining and operating by the State System or an institution thereof, of grounds, premises, buildings, and other property constituting “educational facilities” as defined in the Act and used or useful in providing construction, housing, recreation, or other services related to higher education and related activities, including the financing of the Costs thereof by the Authority and the refinancing by the Authority of the Cost of Educational Facilities previously financed. Project shall also include refunding or redeeming any Outstanding PHEFA Bonds.

“Rating Agency” shall mean Standard & Poor’s Corporation or Moody’s Investors Service, Inc. or Fitch Ratings or any successor thereto.

“Record Date” shall mean, with respect to fixed rate issues, the close of business on the fifteenth day of the calendar month preceding an Interest Payment Date if the Interest Payment Date is on the first day of the month and the first day of the month when an Interest Payment Date is on the fifteenth day of a month, and shall mean with respect to variable rate issues, the close of business on the last Business Day preceding an Interest Payment Date, unless a Special Record Date is otherwise defined and provided for in any Supplemental Indenture.

“Redemption Date” shall mean the date upon which any PHEFA Bond is to be called for redemption pursuant to the PHEFA Indenture.

“Redemption Fund” shall mean the special fund so designated which is established and created pursuant to the PHEFA Indenture.

“Redemption Price” shall mean, with respect to any PHEFA Bond or portion thereof, the amount payable upon redemption thereof, not including interest, if any, accrued to the Redemption Date.

“Resolution” shall mean the resolution or resolutions of the Authority authorizing the issuance of PHEFA Bonds and the execution and delivery of the PHEFA Indenture.

“Responsible Officer” shall mean (i) when used with respect to the Authority, the President, any Vice President, the Secretary, any Assistant Secretary, the Treasurer, any Assistant Treasurer, the Controller, the Assistant Controller, the Executive Director or any Assistant Executive Director, (ii) when used with respect to the State System, the Chancellor, Vice Chancellor, President, Chairperson, Vice Chairperson or any person designated as an Administrative Officer by Certificate of the State System, and (iii) when used with respect to either the State System or the Authority, as the case may be, any other person designated by certified resolution of the Board of the Authority or the State System to act for any of the foregoing, either generally or with respect to the execution of any particular document or other specific matter, a certified copy of which resolution shall be on file with the Trustee.

“Revenues” shall mean all unrestricted receipts, revenues, income, gains and all other moneys received by the State System from any source, including without limitation, tuition and fee revenues, Commonwealth appropriations and other operating and non-operating revenues required to be recorded as revenue under Generally Accepted Accounting Principles, exclusive of net assets released from restriction, gifts, grants, bequests and donations which are designated by the donor at the time of making as being for specific purposes.

“Revenue Fund” shall mean the special fund so designated which is established and created pursuant to the PHEFA Indenture.

“Series AI Bonds” shall mean the Authority’s Refunding Revenue Bonds, State System of Higher Education, Series AI, issued under the PHEFA Indenture.

“Series AM Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AM, issued under the PHEFA Indenture.

“Series AN Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AN, issued under the PHEFA Indenture.

“Series AO Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AO, issued under the PHEFA Indenture.

“Series AP Bonds” shall mean the Authority’s Refunding Revenue Bonds, State System of Higher Education, Series AP, issued under the PHEFA Indenture.

“Series AQ Bonds” shall mean the Authority’s Refunding Revenue Bonds, State System of Higher Education, Series AQ, issued under the PHEFA Indenture.

“Series AR Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AR, issued under the PHEFA Indenture.

“Series AS Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AS, issued under the PHEFA Indenture.

“Series AT Bond Insurer” shall mean Assured Guaranty Municipal Corp.

“Series AT Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AT, issued under the PHEFA Indenture.

“Series AU Bonds” shall mean the Authority’s Revenue and Refunding Revenue Bonds, State System of Higher Education, Series AU, issued under the PHEFA Indenture.

“Series AV Bond Insurer” shall mean Build America Mutual Assurance Company.

“Series AV Bonds” shall mean the Authority’s Revenue and Refunding Revenue Bonds, State System of Higher Education, Series AV, issued under the PHEFA Indenture.

“Series AW Bonds” shall mean the Authority’s Revenue and Refunding Revenue Bonds, State System of Higher Education, Series AW, issued under the PHEFA Indenture.

“Series AX Bond Insurer” shall mean Assured Guaranty Municipal Corp.

“Series AX Bonds” shall mean the Authority’s Revenue and Revenue Refunding Bonds, State System of Higher Education, Series AX, issued under the PHEFA Indenture.

“Series AY Bond Insurer” shall mean Build America Mutual Assurance Company.

“Series AY Bonds” shall mean the Authority’s Refunding Revenue Bonds, State System of Higher Education, Series AZ, issued under the PHEFA Indenture.

“Series AZ Bond Insurer” shall mean Assured Guaranty Municipal Corp.

“Series AZ Bonds” shall mean the Authority’s Revenue Bonds, State System of Higher Education, Series AZ, issued under the PHEFA Indenture.

“Series AZ Project” shall mean the issuance of the Authority’s Series AZ Bonds and the application of the proceeds to the costs included in the “Series AZ Project” as defined in and described in the forepart of this Official Statement.

“Sinking Fund Payment” shall mean, as of any particular date of calculation, the amount required to be paid in all events on a single future date for the retirement of Outstanding Bonds which mature after said future date, but does not include any amount payable by reason of the maturity of a PHEFA Bond.

“State System of Higher Education” or “State System” or “System” shall mean the State System of Higher Education, a body corporate and politic constituting a public corporation and governmental instrumentality consisting of institutions of higher education recognized by the Board of Education of the Commonwealth.

“Supplemental Indenture” shall mean any indenture supplemental to or amendatory of the PHEFA Indenture, executed and delivered by the Authority and effective in accordance with the PHEFA Indenture.

“Trustee” shall mean The Bank of New York Mellon Trust Company, N.A., or its successor or successors, as successor trustee under the PHEFA Indenture.

“Trust Estate” shall mean the security for the PHEFA Bonds granted to the Trustee by the Authority in the granting clauses under the PHEFA Indenture.

SUMMARY OF LEGAL DOCUMENTS

The following are summaries of certain provisions of the Loan Agreement and the PHEFA Indenture. The summaries should not be regarded as full statements of the documents themselves or of the portions summarized. For complete statements of the provisions thereof, reference is made to the documents in their entireties, copies of which will be available for inspection at the principal corporate trust office of the Trustee.

THE LOAN AGREEMENT

The Loan Agreement, as previously supplemented and as further supplemented by the Forty-Eighth Supplemental Loan Agreement, was entered into between the Authority, as lender, and the State System, as borrower.

(i) The Projects

The State System shall use the proceeds of the PHEFA Bonds in accordance with the Loan Agreement to undertake the Projects, including the Series AZ Project, from time to time authorized thereunder and under the PHEFA Indenture.

(ii) Agreement to Lend; Use of PHEFA Bond Proceeds

Under the Loan Agreement, the Authority agrees to make, solely from the proceeds of PHEFA Bonds, and the State System agrees to accept, the loans of PHEFA Bond proceeds to

finance the Costs of Projects. The State System agrees to accept disbursement of the proceeds of such loans to be used in the manner provided in the PHEFA Indenture, including the acquisition, construction and/or renovation, improvement and installation of the Projects and the making of all payments required by the Loan Agreement as and when the same shall become due.

(iii) Loan Repayments and Additional Sums

The Loan Agreement is a general obligation of the State System and the full faith and credit of the State System is pledged to the payment of all sums due thereunder. The State System shall pay to the Trustee, as assignee of the Authority, for deposit in the Revenue Fund created under the PHEFA Indenture, the following amounts in immediately available funds: (a) with respect to fixed rate issues, fifteen days prior to an Interest Payment Date, and with respect to variable rate issues, no later than one day prior to an Interest Payment Date, an amount which is sufficient to pay interest on the PHEFA Bonds to be paid on the next Interest Payment Date (taking into account as a credit against such installments, any amounts representing accrued and capitalized interest on deposit in any account of the Bond Proceeds Fund and moneys on deposit in the Revenue Fund for such purpose) and (b) principal of the PHEFA Bonds due (at stated maturity or through sinking fund redemption) and (c) in each year, the State System shall pay directly to the Authority its Annual Administrative Fees and, when due, the Authority's Administrative Expenses incurred from time to time in connection with the Projects, as provided in the PHEFA Indenture.

In lieu of the portion of the loan repayments payable with respect to principal of the PHEFA Bonds becoming due (at stated maturity or through sinking fund redemption) on the next following principal or sinking fund payment date, the State System, or at its direction, the Authority, may purchase, on the open market, PHEFA Bonds of the maturity becoming due and present such PHEFA Bonds to the Trustee for cancellation. The PHEFA Bonds so presented to the Trustee shall be credited to the principal amount of the next payment due thereunder at 100% of the principal amount of such PHEFA Bonds.

The State System may make advance payments as required or permitted by the Loan Agreement. So long as any of the PHEFA Bonds remain Outstanding, the obligation of the State System to pay sums due under the Loan Agreement shall be absolute and unconditional and shall not be suspended, abated, reduced, abrogated, waived, diminished or otherwise modified in any manner or to any extent whatsoever, regardless of any rights of setoff, recoupment or counterclaim that the State System might otherwise have against the Authority or the Trustee or any other party or parties and regardless of any contingency, act of God, event or cause whatsoever and notwithstanding any circumstances or occurrence that may arise or take place after the date of the Loan Agreement.

(iv) Concerning the Projects

The State System will undertake and proceed to complete any Projects financed by the Authority under the Loan Agreement with all reasonable dispatch and will use its best efforts to complete or cause the completion of such component parts to take place on or before the dates specified in the PHEFA Indenture or as soon thereafter as may be practicable, except for delays incident to strikes, riots, acts of God or the public enemy or any delay beyond the reasonable control of the State System; but if for any reason the State System's undertakings with respect to

any Project shall not be completed by such dates there shall be no resulting diminution in or postponement of the loan repayments required to be made by the State System under the Loan Agreement.

The State System shall enforce any construction contracts and purchase orders relating to a Project and will cause the State System's undertakings with respect to such Project to be completed substantially in accordance with any plans and specifications which may have been prepared therefor.

The State System agrees to obtain, or cause to be obtained, in connection with the construction of any Project, a surety bond or bonds covering performance of contracts and payment for labor and materials. Such bonds shall be executed by responsible surety companies and shall be in amounts aggregating not less than 100% of the contract price. The State System shall have the exclusive right to receive the proceeds of such bonds.

The State System will not do or refrain from doing any act whereby any surety on any bond may be released in whole or in part from any obligations assumed by it or from any agreement to be performed by it under any surety bond and the State System will comply with all present and future laws, acts, rules, regulations, orders, and requirements lawfully made relating to any acquisition or construction undertaken in accordance with the Loan Agreement.

The State System may amend the plans and specifications, if any, at any time prior to the completion date thereof, including amendments which change the proposed allocation of moneys in the account established for the State System in the Bond Proceeds Fund among components of such Project or which delete components of its undertakings under the Loan Agreement with respect to the Project. No such changes shall be made, and no amendment shall be made to the plans and specifications, if any, which shall so modify the State System's undertakings with respect to a Project that they fail to qualify as Educational Facilities eligible for assistance by the Authority under the Act.

The State System is also required to maintain builder's risk insurance (or equivalent coverage) upon work done or materials furnished (except excavations, foundations and other structures not customarily covered), worker's compensation insurance, employer's liability insurance and public liability, comprehensive automobile liability insurance and property insurance with respect to construction of new facilities.

(v) Costs of Projects

The State System shall direct to the Trustee requisitions for payment of proper Costs with respect to the Projects in accordance with the procedures established in the PHEFA Indenture; provided, however, that the State System shall not submit any requisition which, if paid, would result in the proceeds of the PHEFA Bonds being used other than to pay the Costs of the State System's undertakings with respect to a Project.

(vi) Completion of Projects

Under the Loan Agreement, the State System is obligated to complete its undertakings with respect to Projects at its own expense regardless of the adequacy of the moneys allocated to the

State System in any particular account established in the Bond Proceeds Fund under the PHEFA Indenture or the adequacy of other moneys made available to the State System by the Authority. The Authority makes no warranty, either express or implied, that the amounts to be deposited pursuant to the PHEFA Indenture in any account established for the State System in the Bond Proceeds Fund will be sufficient to complete payment of the Costs of any Projects. The State System agrees that if, after exhaustion of the moneys allocated to the State System in the account established for the State System in the Bond Proceeds Fund and any other moneys made available by the Authority, the State System should pay any portion of the Costs of a Project, it shall not be entitled to any reimbursement therefor from the Authority, the Trustee or the Bondowners any of the PHEFA Bonds, nor shall it be entitled to any diminution in or postponement of the amounts payable under the Loan Agreement.

(vii) Additional Projects

In the event that the State System should wish to undertake an additional Project with unused balances in the account established for the State System in the Bond Proceeds Fund (whether because of the deletion of a component of the State System's undertakings with respect to the Project or otherwise), the State System may provide for the payment of the Costs of such additional Project from the unused balances in such account in the Bond Proceeds Fund, provided that it shall comply with the foregoing requirements with respect to changes in a Project, and provided further that both an Officer's Certificate of the Authority to the effect that the additional Project is duly authorized under the Act and applicable Authority resolutions shall have been delivered.

(viii) Assignment to Trustee

The Authority shall assign the Loan Agreement and all sums payable under the Loan Agreement (other than amounts representing payments of the Authority's Annual Administrative Fees and Administrative Expenses and amounts representing the Authority's rights to indemnification pursuant to the Loan Agreement), to the Trustee, in trust, to be held and applied pursuant to the provisions of the PHEFA Indenture. The State System (1) consents to the assignment to the Trustee and accepts notice thereof; (2) agrees to pay directly to the Trustee all such sums without any defense, set-off or counterclaim arising out of any default on the part of the Authority under the Loan Agreement or any transaction between the State System and the Authority; and (3) agrees that the Trustee may exercise all rights granted the Authority thereunder.

(ix) Additional Authority Financing

If the State System shall deem it necessary or advisable that additional Projects be undertaken, or if it is deemed necessary by the State System to refund Outstanding PHEFA Bonds or obtain additional financing for the completion of a Project, the State System may request the Authority to provide a loan for all or part of Costs thereof. Upon receipt of a request of the State System, the Authority shall use its best efforts to provide such money from available sources under the PHEFA Indenture or through the issuance of Additional PHEFA Bonds or other evidences of indebtedness of the Authority.

(x) Certain Additional Covenants of the State System

The State System represents and covenants in the Loan Agreement that it is (i) a body corporate and politic constituting a public corporation and governmental instrumentality; (ii) organized and operated exclusively for educational purposes; and (iii) not for pecuniary profit. The State System agrees that it shall not perform any act nor enter into any agreement which shall change such status.

The State System covenants that it will preserve and maintain its existence as a public corporation under the laws of the Commonwealth, and to the extent permitted by law at any given time, remain free from Federal, state and local income, property, franchise and other taxes, and preserve and maintain its authority to operate the Projects.

The State System covenants that it will maintain the necessary accreditation to enable it to maintain its authority to operate its constituent educational institutions as institutions of higher education in the Commonwealth within the meaning of the Act.

The State System covenants that throughout the term of the Loan Agreement:

(A) it will take whatever actions are necessary to continue to be organized and operated in a manner which will preserve and maintain the exemption from federal income taxation of the State System; and

(B) it will not perform any acts nor enter into any agreements which shall cause any revocation or adverse modification of such federal income tax status of the State System; and

(C) it will not carry on or permit to be carried on in any Project (or with PHEFA Bond proceeds or the proceeds of any loan refinanced with PHEFA Bond proceeds) any trade or business the conduct of which would cause the interest paid by the Authority on the PHEFA Bonds to be subject to Federal income tax in the hands of the Bondowners thereof; and

(D) it will not take any action or permit any action to be taken on its behalf, or cause or permit any circumstances within its control to arise or continue, if such action or circumstances would cause the interest paid by the Authority on the PHEFA Bonds to be subject to Federal income tax in the hands of the Bondowners thereof if such PHEFA Bonds were issued on a federally tax-exempt basis; and

(E) neither it nor any person related to it within the meaning of the Code, pursuant to an arrangement, formal or informal, will purchase the PHEFA Bonds in an amount related to the total amount payable under and secured by the Loan Agreement.

The State System covenants that it shall not pledge more than twenty percent (20%) of its Revenues to secure any indebtedness it may incur or guaranties it may undertake without simultaneously granting such a lien for the benefit of the PHEFA Bonds.

The State System further covenants that:

(1) during the term of the Loan Agreement it will not initiate any proceedings or take any action whatsoever to dissolve or liquidate or to terminate its existence as a public corporation or otherwise dispose of all or substantially all of its assets, or the Projects, either in a single transaction or in a series of related transactions, except as provided in the Loan Agreement.

(2) it shall pay or cause to be paid to the public officers charged with the collection thereof, promptly as the same become due, all taxes (or contributions or payments in lieu thereof).

(3) it will, at its own expense, keep and maintain or cause to be kept and maintained the Projects in good order, repair and operating condition.

(4) all actions taken by the State System to acquire and carry out the Projects, including the making of contracts or the entering into of purchase orders, have been and will be in full compliance with all pertinent laws, ordinances, rules, regulations and orders applicable to the State System.

(5) it will keep accurate records and books of account with respect to the revenues and expenses of the State System in accordance with generally accepted accounting principles and, within 150 days after the end of each Fiscal Year during the term of the Loan Agreement, provide a statement of revenue and expenses to the Authority and the Trustee.

(6) the Authority, by its duly authorized representatives, at reasonable times, and for purposes of determining compliance with the Loan Agreement and confirming the progress and completion of a Project, may inspect any part of a Project.

(xi) Events of Default and Remedies

“Events of Default” as defined in the Loan Agreement include the State System’s failure:

(1) to make payments required under Section 4.01 thereof relating to payment of the principal of and interest on The PHEFA Bonds when the same shall become due and payable;

(2) to make any other payment required thereunder and such failure continues for 10 days after the Authority or the Trustee gives notice that such other payment is due and unpaid; or

(3) to perform any of its other covenants or to perform any of its obligations under the Loan Agreement and such failure continues for 60 days after the Authority gives the State System notice thereof; provided, however, that if such performance requires work to be done, actions to be taken, or conditions remedied, which by their nature cannot reasonably be done, taken or remedied, as the case may be, within such 60-day period, no Event of Default shall be deemed to have occurred or to exist if, and so long as, the State System shall commence such performance within such 60-day period and shall diligently and continuously prosecute the same to completion.

An “Event of Default” also occurs if the State System shall become insolvent or unable to pay its debts as they mature, or shall file a voluntary petition seeking reorganization or to effect a plan or other arrangement with creditors, or shall file an answer admitting the jurisdiction of the court and the material allegations of an involuntary petition, pursuant to any act relating to bankruptcy or to any act purporting to be amendatory thereof, or shall be adjudicated bankrupt or insolvent, or shall make an assignment for the benefit of creditors or to an agent authorized to liquidate any substantial amount of its assets, or shall apply for or consent to or suffer the appointment of any receiver or trustee for it or a substantial part of its property or assets; or a proceeding shall be instituted, without the application, approval or consent of the State System pursuant to any act relating to bankruptcy or to any act purporting to be amendatory thereof, seeking (i) adjudication of the State System as bankrupt or insolvent, (ii) reorganization of, or an order appointing any receiver or trustee for a substantial part of the property or assets of the State System, or (iii) issuance of a writ of attachment or any similar process against a substantial part of the property or assets of the State System and any such proceeding shall result in the entry of an order for relief or any such adjudication or appointment shall continue undismissed, or pending and unstayed, for any period of 30 consecutive days.

If any of the foregoing Events of Default shall happen, then and at any time thereafter while such Event of Default is continuing, the Authority may, in addition to its other remedies at law or equity or provided for in the Loan Agreement, if the Trustee shall have declared the principal of any PHEFA Bonds then Outstanding to be immediately due and payable pursuant to the PHEFA Indenture, with the prior written consent of the Trustee, declare amounts payable under the Loan Agreement to be immediately due and payable; then there shall become due and payable under the Loan Agreement as then current damages an amount equal to the principal of all PHEFA Bonds so declared to be immediately due and payable plus accrued interest to the date of payment of such PHEFA Bonds and all other amounts then due and payable under the Loan Agreement to the Authority. Until said amounts are paid by the State System, the Authority shall continue to have all of the rights, powers and remedies herein set forth, and the State System’s obligations thereunder shall continue in full force and effect.

(xii) Amendment of Loan Agreement

The Authority and the State System may execute an appropriate supplement or amendment to the Loan Agreement in connection with the issuance of Additional PHEFA Bonds as contemplated by the PHEFA Indenture. In addition, the Authority and the State System may enter into any written amendments to the Loan Agreement as shall not adversely affect the rights of or the security of the Bondowners of the PHEFA Bonds, only for the following purposes:

- (1) to cure any ambiguity, defect, or inconsistency or omission in the Loan Agreement or any amendment thereto;
- (2) to grant to or confer upon the Authority any additional rights, remedies, powers, authority or security that lawfully may be granted to or conferred upon it;
- (3) to reflect a change in applicable law; or

(4) to provide terms not inconsistent with the PHEFA Indenture or the Loan Agreement; provided, however, that the Loan Agreement as so amended or supplemented shall provide at least the same security for Bondowners of PHEFA Bonds issued under the PHEFA Indenture as the Loan Agreement prior to such amendment.

All other amendments to the Loan Agreement must be approved by the Trustee and, if the PHEFA Indenture must be amended with the Bondowners' consent, by the Bondowners also, in the same manner and to the same extent as is set forth in the PHEFA Indenture.

THE PHEFA INDENTURE

The Series AZ Bonds are being issued under and subject to the provisions of the PHEFA Indenture to which reference must be made for complete details of the terms of the Series AZ Bonds as well as the Series AI Bonds, the Series AM Bonds, the Series AN Bonds, the Series AO Bonds, the Series AP Bonds, the Series AQ Bonds, the Series AR Bonds, the Series AS Bonds, the Series AT Bonds, the Series AU Bonds, the Series AV Bonds, the Series AW Bonds, the Series AX Bonds, the Series AY Bonds and any other Additional PHEFA Bonds which may be issued under the PHEFA Indenture.

(xiii) Pledge and Assignment

The PHEFA Bonds are limited obligations of the Authority payable under the PHEFA Indenture solely from the Trust Estate. Under the PHEFA Indenture, the Pledged Revenues payable to the Authority from the State System under the Loan Agreement and all income and receipts earned on funds held by the Trustee under the PHEFA Indenture have been pledged to the Trustee for the equal and ratable benefit (except as set forth in the PHEFA Indenture) of the Bondowners of all PHEFA Bonds Outstanding under the PHEFA Indenture. The rights of the Authority under the Loan Agreement (other than the rights to receive payment of its Annual Administrative Fees and Administrative Expenses and the Authority's right to receive indemnification pursuant to the Loan Agreement) have been assigned to the Trustee to secure the payment of the PHEFA Bonds and the performance and observance of the covenants in the PHEFA Indenture.

(xiv) Disposition of the Proceeds of the Sale of the Series AZ Bonds

Upon the issuance and delivery of the Series AZ Bonds, the Authority shall forthwith transfer the proceeds to the Trustee and the Trustee shall deposit the same in the Settlement Account of the Bond Proceeds Fund established under the PHEFA Indenture and the Forty-Eighth Supplemental Indenture to be transferred and applied upon the order of the Authority and approved by the State System. From the proceeds of the Series AZ Bonds, the Trustee shall make the following transfers or expenditures from the Settlement Account: (1) amounts representing accrued interest on the Series AZ Bonds shall be transferred to an account established in the Revenue Fund and applied to the payment of interest on the Series AZ Bonds on the first Interest Payment Date following issuance thereof, (2) payment of the costs of issuance of the Series AZ Bonds shall be paid, and (3) the balance remaining shall be transferred to the Series AZ Account of the Revenue Fund for application to the payment of the Series AZ Project in accordance with the procedures established in the PHEFA Indenture.

(xv) Additional PHEFA Bonds

Under the PHEFA Indenture, the Authority is authorized to issue, at the request of the State System under the Loan Agreement, Additional PHEFA Bonds for the purpose of undertaking any additional Projects on behalf of the State System or to refund any prior series of PHEFA Bonds Outstanding under the PHEFA Indenture. Such Additional PHEFA Bonds, if issued, will be equally and ratably secured under the PHEFA Indenture with Series AI Bonds, the Series AN Bonds, the Series AO Bonds, the Series AP Bonds, the Series AQ Bonds, the Series AR Bonds, the Series AS Bonds, the Series AT Bonds, the Series AU Bonds, the Series AV Bonds, the Series AW Bonds, the Series AX Bonds and the Series AY Bonds except to the extent expressly limited under the PHEFA Indenture.

(xvi) Establishment of Funds

The “Bond Proceeds Fund” established under the PHEFA Indenture shall contain funds deposited therein pursuant to the PHEFA Indenture and shall be expended only (i) to pay the cost of financing a Project, (ii) to pay Costs of issuance, and (iii) to pay accrued and capitalized interest on PHEFA Bonds. Under the PHEFA Indenture, the Trustee is directed to establish separate accounts in which to deposit proceeds of the various series of PHEFA Bonds. Amounts in the Bond Proceeds Fund or any account established therein shall be held for the benefit of all PHEFA Bonds Outstanding under the PHEFA Indenture (other than with respect to any capitalized interest account created for a specific series of PHEFA Bonds which shall be held and applied solely for the particular specified PHEFA Bonds).

Payments shall be made from any account of the Bond Proceeds Fund to pay Costs of each Project, but only upon receipt by the Trustee of the requisitions and certifications required by the PHEFA Indenture. Upon the completion of each Project, evidenced in the manner provided in the PHEFA Indenture, amounts in the applicable account of the Bond Proceeds Fund may, at the option of the Authority upon the direction of the State System, be transferred to the Revenue Fund to be applied to the payment of Debt Service on the applicable series of PHEFA Bonds or to the redemption of PHEFA Bonds or to any other account of the Bond Proceeds Fund to be used to pay costs of additional Projects.

The “Revenue Fund” established under the PHEFA Indenture shall contain Pledged Revenues of the Authority received by the Trustee under the Loan Agreement. Under the PHEFA Indenture, the Trustee is directed to establish separate accounts within the Revenue Fund in connection with each series of PHEFA Bonds. Moneys in the Revenue Fund are pledged for the equal and ratable benefit of all PHEFA Bonds Outstanding under the PHEFA Indenture, except as expressly limited by the PHEFA Indenture.

The Trustee shall pay out of the Revenue Fund the following amounts in the following order, on the dates specified, for the following purposes (i) on each Interest Payment Date, the amounts required, taking into consideration the amounts otherwise available, for the payment of principal, Sinking Fund Payments, Redemption Price, if any, and interest due on the Outstanding PHEFA Bonds on such date; (ii) on the Redemption Date or date of purchase of PHEFA Bonds the amounts required for the payment of accrued interest on PHEFA Bonds redeemed or purchased for retirement, unless the payment of such accrued interest shall be otherwise provided for; (iii)

upon the written direction of the Authority on each Interest Payment Date to the payment of certain fees and expenses of the Trustee, including costs of redemption of PHEFA Bonds; and (iv) all remaining amounts shall be transferred to the Redemption Fund upon the written direction of the Authority at the request of the State System.

The "Redemption Fund" shall contain amounts which are required to be deposited therein pursuant to the PHEFA Indenture and any other amounts available therefor and determined by the State System pursuant to the Loan Agreement to be deposited therein subject to the provisions of the PHEFA Indenture, and the Trustee shall apply all amounts so deposited to the redemption of PHEFA Bonds. At any time prior to the date upon which notice is given that PHEFA Bonds are to be redeemed from such amounts, the Trustee shall apply any amounts in the Redemption Fund to the purchase of any of PHEFA Bonds which may be redeemed by application of such amounts upon the direction of the Authority at the written direction of the State System. The Trustee shall purchase PHEFA Bonds at such times, for such prices, in such amounts and in such manner as the Authority upon written direction of the State System shall from time to time direct.

(xvii) Deposits

In order to permit any amount to be available for use at the time when needed, amounts held under the PHEFA Indenture by the Trustee or any Depositary, as such, may if and as directed by the State System, be deposited in the commercial banking department of the Trustee or Depositary which may honor checks and drafts on such deposit with the same force and effect as if it were not such Trustee or Depositary. The Trustee or Depositary shall allow and credit on such amounts at least such interest, if any, as it customarily allows upon similar funds of similar size and under similar conditions or as required by law.

All amounts deposited by the Trustee or Depositary shall be continuously and fully secured (a) by lodging with the Trustee, as custodian, as collateral security, Investment Securities having a market value (exclusive of accrued interest) not less than the amount of such deposit, and (b) in such manner as may then be required by applicable federal or state laws and regulations regarding security for the deposit of public funds provided that in no event shall such security be in an amount less than such deposit. It shall not be necessary, unless required by applicable law, for the Trustee to give security for the deposit of any amounts to the extent that such deposit is insured by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation, or their respective successors, or which are held in trust and set aside by them for the payment of the principal or Redemption Price of or interest on any PHEFA Bonds, or for the Trustee or any Depositary to give security for any moneys which shall be represented by obligations or certificates of deposit purchased as an investment of such moneys.

All amounts so deposited by the Trustee or Depositary shall be credited to the particular Fund from which such amounts were derived.

(xviii) Investment of Funds

Moneys in any Fund shall be continuously invested and reinvested and/or deposited and redeposited by the Trustee, as permitted in the PHEFA Indenture, as the State System shall direct the Trustee in writing. The State System shall consult with the Trustee from time to time as to the

investment of amounts in the Funds and Accounts established or confirmed by the PHEFA Indenture. Except as otherwise provided herein, the State System shall give written directions to the Trustee to invest and reinvest the moneys in said Funds and Accounts in Investment Securities so that the maturity date or date of redemption at the option of the holder thereof shall coincide as nearly as practicable with the times at which moneys are needed by the Authority to be so expended. The Investment Securities purchased shall be held by the Trustee and shall be deemed at all times to be part of such Fund or Account, and the Trustee shall keep the Authority and the State System advised as to the details of all such investments.

Except as otherwise provided therein, Investment Securities purchased as an investment of moneys in any Fund held by the Trustee under the provisions of the PHEFA Indenture shall be deemed at all times to be a part of such Fund, but the income or interest earned and gains realized in excess of losses suffered by a Fund due to the investment thereof may be deposited in the Bond Proceeds Fund during the construction period of any Project and thereafter shall be deposited in the Revenue Fund as Pledged Revenues or shall be credited to the Revenue Fund from time to time as Pledged Revenues and reinvested.

Except as otherwise provided herein, the Trustee shall sell at the best price obtainable with reasonable diligence, or present for redemption or exchange, any Investment Security purchased by it pursuant to the PHEFA Indenture whenever it shall be necessary in order to provide moneys to meet any payment or transfer from the fund for which such investment was made. The Trustee shall advise the Authority and the State System in writing, on or before the twentieth day of each calendar month, or as soon as practicable thereafter of all investments held for the credit of each Fund in its custody under the provisions of the PHEFA Indenture as of the last business day of the preceding month.

(xix) Valuation of Funds

In computing the amount in any Fund, obligations purchased as an investment of moneys therein shall be valued at the lower of cost or fair market value.

(xx) Covenants of the Authority

The Authority shall, among other things, promptly pay solely from the Trust Estate the principal or Redemption Price, if any, of every PHEFA Bond and all interest thereon. The Authority shall preserve and protect the pledge of the Trust Estate, Pledged Revenues and other assets and revenues.

The Authority shall at all times do and perform all acts and things necessary in order to assure that interest paid on PHEFA Bonds shall, for the purposes of federal income taxation, be and remain excludable from the gross income of the recipients thereof and be and remain exempt from such taxation.

The Authority shall not permit at any time or times any of the proceeds of PHEFA Bonds or any other funds of the Authority to be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any PHEFA Bond to be an "arbitrage bond" as defined in the Code. The Authority shall not permit at any time or times any proceeds of any PHEFA Bonds or any other funds of the Authority to be used, directly or indirectly, in a manner

which would result in the exclusion of any PHEFA Bond from the treatment afforded by subsection (a) of Section 103 of the Code.

Notwithstanding any terms, provisions or covenants to the contrary contained in the PHEFA Indenture, the Authority shall not be prohibited from issuing obligations not exempt from federal income taxation so long as the tax-exempt status of any PHEFA Bonds Outstanding immediately prior to the issuance of such taxable obligations shall not be adversely affected thereby.

(xxi) Additional Obligations

The Authority shall not create or permit the creation of or issue any obligations or create any additional indebtedness which will be secured by a superior or equal charge and lien on the revenues and assets pledged under the PHEFA Indenture, except that (i) Additional PHEFA Bonds may be issued from time to time pursuant to a Supplemental Indenture of the Authority subsequent to the issuance of the initial issue of PHEFA Bonds under the PHEFA Indenture on a parity with the PHEFA Bonds of such initial issue of PHEFA Bonds and secured by an equal charge and lien on the revenues and assets pledged under the PHEFA Indenture and payable equally therefrom (except for certain funds held under the PHEFA Indenture); and (ii) Additional PEDFA Bonds may be issued from time to time pursuant to the PEDFA Indenture payable on a parity with the PHEFA Bonds (except for certain funds held under the PEDFA Indenture).

(xxii) Supplements and Amendments

For any one or more of the following purposes and at any time or from time to time, a Supplemental Indenture of the Authority may be executed and delivered which, upon the filing with the Trustee of a copy thereof certified by an Authorized Officer of the Authority, shall be fully effective in accordance with its terms:

to close the PHEFA Indenture against, or to provide limitations and restrictions in addition to the limitations and restrictions contained in the PHEFA Indenture on, the authentication and delivery of PHEFA Bonds; or

to add to the covenants and agreements of the Authority in the PHEFA Indenture other covenants and agreements to be observed by the Authority which are not contrary to or inconsistent with the PHEFA Indenture as theretofore in effect; or

to add to the limitations and restrictions in the PHEFA Indenture other limitations and restrictions to be observed by the Authority which are not contrary to or inconsistent with the PHEFA Indenture as theretofore in effect; or

to surrender any right, power or privilege reserved to or conferred upon the Authority by the terms of the PHEFA Indenture, but only if the surrender of such right, power or privilege is not contrary to or inconsistent with the covenants and agreements of the Authority contained in the PHEFA Indenture; or

to confirm, as further assurance, any pledge under, and the subjection to any lien or pledge created or to be created by, the PHEFA Indenture, of the Pledged Revenues or of any other revenues or assets; or

to modify any of the provisions of the PHEFA Indenture in accordance therewith; or

to provide for the issuance of Additional PHEFA Bonds pursuant to the PHEFA Indenture.

For any one or more of the following purposes and at any time or from time to time, a Supplemental Indenture may be entered into, which, upon (i) the filing with the Trustee of a copy thereof certified by an Authorized Officer, and (ii) the filing with the Trustee and the Authority of an instrument in writing made by the Trustee consenting thereto, shall be fully effective in accordance with its terms:

to cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the PHEFA Indenture; or

to insert such provisions clarifying matters or questions arising under the PHEFA Indenture as are necessary or desirable and are not contrary to or inconsistent with the PHEFA Indenture as theretofore in effect; or

to provide for additional duties of the Trustee.

Any other modification of or amendment to the PHEFA Indenture and of the rights and obligations of the Authority and of the Bondowners of the PHEFA Bonds may be made by a Supplemental Indenture, but only with the written consent of the Bondowners at least two-thirds in principal amount of the PHEFA Bonds Outstanding at the time such consent is given. In case the modification or amendment changes the terms of any Sinking Fund Payment, the written consent of Bondowners at least two-thirds in principal amount of each of the PHEFA Bonds entitled to such Sinking Fund Payment is required. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding PHEFA Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or in the rate of interest thereon without the consent of the Bondowner of such PHEFA Bond, or shall reduce the percentages or otherwise affect the classes of PHEFA Bonds the consent of the Bondowners 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.

Upon the written consent of the Bondowners all the PHEFA Bonds then Outstanding, the terms and provisions of the PHEFA Indenture and the rights and obligations of the Authority and the Bondowners the PHEFA Bonds may be modified or amended in any respect. However, any provision of the PHEFA Indenture expressly recognizing or granting rights in or to a bond insurer may not be amended in any manner which affects its rights under the PHEFA Indenture without the insurer's prior written consent.

(xxiii) Defaults and Remedies

Events of Default, as defined in the PHEFA Indenture, include, among other things, the following:

the Authority shall default in the payment of the principal of or Redemption Price, if any, on any PHEFA Bond when and as the same shall become due, whether at maturity or upon call for redemption or otherwise; or

payment of any installment of interest on any of the PHEFA Bonds shall not be made as the same shall become due; or

the Authority shall file a petition in bankruptcy or seek a composition of its indebtedness; or

an Event of Default (as defined in the Loan Agreement) under the Loan Agreement; or

the Authority shall fail or refuse to comply with the other provisions of the PHEFA Indenture, or shall default in the performance or observance of any of the other covenants, agreements, or conditions on its part contained in the PHEFA Indenture or the PHEFA Bonds, and such failure, refusal or default shall continue for a period of forty-five days after written notice thereof by the Trustee or the Bondowners not less than twenty-five percent (25%) in principal amount of the Outstanding PHEFA Bonds.

Upon the happening and continuance of any Event of Default specified in paragraphs (1) through (3) above, the Trustee shall proceed, or upon the happening and continuance of any Event of Default specified in paragraphs (4) and (5) above, the Trustee may proceed and, upon the written request of the Bondowners not less than twenty-five percent (25%) in principal amount of the Outstanding PHEFA Bonds, shall proceed, in its own name to protect and enforce the rights of the Bondowners by such of the following remedies, as the Trustee, being advised by counsel, shall deem most effectual to protect and enforce such rights:

by mandamus or other suit, action or proceeding at law or in equity, to enforce all rights of the Bondowners, including the right to require the Authority to receive and collect revenues, including Pledged Revenues, adequate to carry out the covenants and agreements as to, and to require the Authority to carry out any other covenants or agreements with Bondowners and to perform its duties under the Act;

by bringing suit upon the PHEFA Bond;

by action or suit in equity, to require the Authority to account as if it were the trustee of an express trust for the Bondowners of the PHEFA Bonds;

by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the Bondowners of the PHEFA Bonds; or

by declaring all PHEFA Bonds due and payable and, if all defaults shall be cured, then with the written consent of the Bondowners not less than sixty-six and two-thirds percent (66-2/3%) in principal amount of the Outstanding PHEFA Bonds, by annulling such declaration and its consequences.

Anything in the PHEFA Indenture to the contrary notwithstanding, upon the happening and continuance of an Event of Default with respect to a particular series of PHEFA Bonds, if such PHEFA Bonds are insured by a municipal bond insurance policy, the insurer thereunder shall be entitled to control and direct the enforcement of all rights and remedies granted to the Bondowners of such series of PHEFA Bonds or the Trustee for the benefit of the Bondowners of such series of PHEFA Bonds under the PHEFA Indenture.

In the enforcement of any rights and remedies under the PHEFA Indenture, 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 and unpaid from the Authority for principal, Redemption Price, interest or otherwise, under any provisions of the PHEFA Indenture or a Supplemental Indenture or of the PHEFA Bonds, with interest on overdue payments at the rate of interest specified in such PHEFA Bonds, together with any and all costs and expenses of collection and of all proceedings thereunder and under such PHEFA Bonds, without prejudice to any other right or remedy of the Trustee or of the Bondowners, and to recover and enforce a judgment or decree against the Authority for any portion of such amounts remaining unpaid, with interest, costs and expenses, and to collect from any moneys available for such purpose, in any manner provided by law, the moneys adjudged or decreed to be payable.

Upon the occurrence of any Event of Default and upon the filing of a suit or commencement of other judicial proceedings to enforce the rights of the Bondowners under the PHEFA Indenture, the Trustee shall be entitled, as a matter of right, to the appointment of a receiver or receivers for the Authority, but only with respect to the Trust Estate, pending such proceedings, with such powers as the court making such appointment shall confer.

(xxiv) Limitation on Actions by Bondowners

Bondowners shall have no right to pursue any remedy under the PHEFA Indenture unless (a) the Trustee shall have given written notice of an Event of Default, (b) the Bondowners at least 25% in principal amount of the PHEFA Bonds then Outstanding shall have requested the Trustee, in writing, to exercise the powers granted under the PHEFA Indenture or to pursue such remedy, and (c) the Trustee shall have been offered indemnity satisfactory to it against costs, expenses and liabilities.

(xxv) Removal of Trustee

The Trustee shall be removed by the Authority if at any time so requested by an instrument or concurrent instruments in writing, filed with the Trustee and the Authority and signed by the Bondowners a majority in principal amount of the PHEFA Bonds then Outstanding or their attorney-in-fact duly authorized. The Authority may remove the Trustee at any time, except during the existence of an Event of Default under the PHEFA Indenture, for such cause as shall be determined in the sole discretion of the Authority.

(xxvi) Defeasance

If the Authority shall pay or cause to be paid to the Bondowners of the PHEFA Bonds, the principal or Redemption Price and interest to become due thereon and make all other payments under the PHEFA Indenture then the pledge of any revenues and assets hereby pledged and all other rights granted thereby shall be discharged and satisfied. In such event, the Trustee shall, upon the request of the Authority, execute and deliver to the Authority all such instruments as may be desirable to evidence such discharge and satisfaction and the Trustee shall pay over and deliver to the Authority all moneys or securities held by it pursuant to the PHEFA Indenture which are not required for the payment or redemption of PHEFA Bonds not theretofore surrendered for such payment or redemption.

All Outstanding PHEFA Bonds and all interest installments appertaining to such PHEFA Bonds shall, prior to the maturity or Redemption Date thereof, be deemed to have been paid if (i) in case any of said PHEFA Bonds are to be redeemed on any date prior to their maturity, the Authority shall have given to the Trustee in form satisfactory to it irrevocable instructions to publish notice of redemption on said date of such PHEFA Bonds; (ii) there shall have been deposited with the Trustee either moneys in an amount which shall be sufficient, or Investment Securities the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with the Trustee at the same time, shall be sufficient, to pay when due the principal or Redemption Price, if any, and interest due and to become due on said PHEFA Bonds on and prior to the redemption Date or maturity date thereof, as the case may be, and (iii) in the event said PHEFA Bonds are not by their terms subject to redemption within the next succeeding sixty days, the Authority shall have given the Trustee irrevocable instructions to mail notice to the Bondowners of such PHEFA Bonds that the deposit required by (ii) above has been made with the Trustee and that said PHEFA Bonds are deemed to have been paid and stating such maturity or Redemption Date upon which moneys are to be available for the payment of the principal or Redemption Price, if any, on said PHEFA Bonds. For purposes of defeasance, Investment Securities shall mean and only such obligations as are described in clauses (1), (2) and (4) of the definition of Investment Securities (to the extent such securities are guaranteed or otherwise secured by the United States of America), or deposits in interest-bearing time or demand deposits or certificates of deposit secured by obligations of the types described in paragraphs (1) and (2) of the definition of Investment Securities.

Notwithstanding anything to the contrary, in the event that the principal and/or interest due on an outstanding series of PHEFA Bonds shall be paid pursuant to a municipal bond insurance policy, such series of PHEFA Bonds shall remain Outstanding for all purposes, not be defeased or otherwise satisfied and not be considered paid by the Authority, and the assignment and pledge of the Trust Estate and all covenants, agreements and other obligations of the Authority to the Bondowners continue to exist and shall run to the benefit of the insurer under such municipal bond insurance policy who shall also be subrogated to the rights of such registered Bondowners.

THE PEDFA INDENTURE

(i) Issuance of Prior PEDFA Bonds

The Authority issued one series of PEDFA Bonds pursuant to the PEDFA Indenture. From time to time hereafter, upon the authorization and execution by the Authority of a series of Additional PEDFA Bonds and delivery thereof to the trustee under the PEDFA Indenture, and without any further action on the part of the Authority, the Authority may deliver such Additional PEDFA Bonds on the terms and in the aggregate principal amount set forth in the supplement to the PEDFA Indenture related thereto.

(ii) Additional PEDFA Bonds

Conditioned upon the receipt by the trustee under the PEDFA Indenture of the documents and other items required by the PEDFA Indenture, the Authority may delivery Additional PEDFA Bonds from time to time to finance or refinance the Project and Costs of Issuance, to the extent permitted under the PEDFA Indenture and the Funding Agreement, so long as no Event of Default shall have occurred and be continuing under the PEDFA Indenture (as all the preceding terms are defined in the PEDFA Indenture). Each series of Additional PEDFA Bonds shall be delivered pursuant to and evidenced by a supplement to the PEDFA Indenture. Except as otherwise provided in a supplement to the PEDFA Indenture, each series of Additional PEDFA Bonds shall be a on a parity and equally and ratably secured under the PEDFA Indenture as to the Pledged Revenues (as defined in the PEDFA Indenture) with the PEDFA Bonds previously delivered, without preference, priority or distinction of any Additional PEDFA Bonds over any other Additional PEDFA Bonds. All such Additional PEDFA Bonds shall be in substantially the same form as set forth in the PEDFA Indenture, with such changes as are specified in any supplement to the PEDFA Indenture permitted by the PEDFA Indenture.

(iii) Additional and Permitted Indebtedness

Additional PEDFA Bonds may be issued for the purposes described in the PEDFA Indenture. The Authority shall not issue any Additional PEDFA Bonds unless at or prior to the issuance of such Additional PEDFA Bonds there shall be filed with the trustee under the PEDFA Indenture the documents required pursuant to the PEDFA Indenture. Upon receipt of a request of the State System, accompanied by required document, the Authority may, but shall have no obligation to, provide all or any part of the amounts requested by issuance and sale of Additional PEDFA Bonds.

Nothing in the loan agreement executed in connection with the PEDFA Indenture will preclude the State System from incurring Short-Term Indebtedness, Long-Term Indebtedness (other than to the extent set forth below), or Subordinated Indebtedness (as such terms are defined in the PEDFA Indenture).

(1) The State System will not incur any additional indebtedness (including Additional PEDFA Bonds and Additional PHEFA Bonds) for which the State System

pledges more than twenty percent (20%) of its Revenues (as defined in the PEDFA Indenture) as security therefor without simultaneously granting an equal or superior lien on such Revenues to the Authority to be assigned to the trustee under the PEDFA Indenture in order to additionally secure the PEDFA Bonds.

(2) In the event that the State System shall grant such a pledge as described in subsection (1) above, the State System will agree to enter into an intercreditor agreement in connection therewith and will agree to file any required UCC-1 Financing Statements in connection therewith as provided in the loan agreement associated with the PEDFA Indenture.

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Appendix IV: Form of Opinion of Bond Counsel

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June 24, 2021

Pennsylvania Higher Educational
Facilities Authority
1035 Mumma Road
Harrisburg, Pennsylvania 17043

State System of Higher Education
Dixon University Center
2986 North 2nd Street
Harrisburg, Pennsylvania 17110

The Bank of New York Mellon Trust Company,
N.A., as Trustee
1735 Market Street, Sixth Floor
Philadelphia, Pennsylvania 19103

Robert W. Baird & Co. Inc.
777 E. Wisconsin Ave.
Milwaukee, WI 53202

Assured Guaranty Municipal Corp.
1633 Broadway
New York, New York 10019

Re: \$142,710,000 Pennsylvania Higher Educational Facilities Authority, State System of Higher
Education Revenue Bonds, Series AZ (Federally Taxable)

Dear Recipients:

We have acted as Bond Counsel to the Pennsylvania Higher Educational Facilities Authority (the "Authority") in connection with the issuance of \$142,710,000 principal amount of its State System of Higher Education Revenue Bonds, Series AZ (Federally Taxable) (the "Bonds") pursuant to the Indenture of Trust dated as of June 1, 1985, as supplemented from time to time (the "Indenture"), including by a Forty-Eighth Supplemental Indenture of Trust dated as of June 1, 2021 (the "Forty-Eighth Supplemental Indenture"), between the Authority and The Bank of New York Mellon Trust Company, N.A., as Trustee (the "Trustee").

We have examined (i) an executed copy of the Indenture, (ii) an executed copy of the Loan and Security Agreement dated as of June 1, 1985, as supplemented from time to time (the "Loan Agreement"), between the Authority and the State System of Higher Education (the "System"), and each amending supplement thereto, including the Forty-Eighth Supplemental Loan and Security Agreement dated as of June 1, 2021 (the "Forty-Eighth Supplemental Agreement") between the Authority and the System pursuant to which the System unconditionally agrees to pay the principal of, and interest on, the Bonds when and as the same shall become due, subject to the terms and conditions of the Loan Agreement and the Indenture, (iv) the form of Bonds, and (iv) such constitutional and statutory provisions and such other resolutions, certificates, instruments and documents as we have deemed necessary or appropriate in order to enable us to render an informed opinion as to matters set forth herein.

In rendering this opinion we have assumed the genuineness of all signatures on all documents and certificates that we examined, the legal capacity and authority of all persons executing such documents, the authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies and the authenticity of the originals of said copies. As to questions of fact material to our opinion, we have relied upon the representations of the Authority and the System contained in the Indenture and the Loan Agreement and in certified proceedings, other certifications of public officials and others, and opinions of counsel to the Authority and the System furnished to us, without undertaking to verify the same by independent investigation.

We express no opinion herein relating to the accuracy, completeness or sufficiency of the Preliminary Official Statement or Official Statement pertaining to the Bonds or any other offering material relating to the Bonds and make no representation that we have independently verified the contents of any such offering material, including the appendices thereto.

Based upon the foregoing, it is our opinion, under existing law and as of the date hereof, subject to the qualifications and limitations set forth herein, that:

1. The Authority is a body corporate and politic constituting a public corporation and a government instrumentality organized and existing under the Pennsylvania Higher Educational Facilities Authority Act of December 6, 1967, P.L. 678, No. 318, as amended (the "Act"), of the Commonwealth of Pennsylvania and has the power to enter into the transactions contemplated by the Indenture and the Loan Agreement and to carry out its obligations thereunder.
2. The Forty-Eighth Supplemental Indenture and the Forty-Eighth Supplemental Loan Agreement have been duly authorized, executed and delivered by the Authority and constitute the valid and binding obligations of the Authority enforceable against it in accordance with their respective terms.
3. The Bonds have been duly and validly authorized, executed, issued and delivered by the Authority and constitute the valid and binding limited obligations of the Authority enforceable against it in accordance with their terms, payable from the sources provided therefor in the Indenture.
4. All right, title and interest of the Authority in and to the installment payments due under the Loan Agreement have been duly assigned to the Trustee (except for the fees and expenses payable to the Authority and the Authority's right to indemnification).
5. Under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date of issuance of the Bonds, the interest on the Bonds is exempt from the Commonwealth personal income tax and the Commonwealth corporate net income tax.
6. Interest (including original issue discount) on the Bonds is not excludable from gross income for purposes of federal income. We express no opinion regarding other federal tax consequences of ownership or disposition of, or the accrual or receipt of interest on, the Bonds.
7. Original issue premium on a Bond issued at an issue price that exceeds its principal amount is amortizable periodically over the term of a Bond through reductions in the holder's tax basis for the Bond for determining taxable gain or loss from sale or from redemption prior to maturity. Amortization of premium does not create a deductible expense or loss.

The rights of any owner of the Bonds and the enforceability of the Bonds, the Indenture, and the Loan Agreement are subject to: (a) the exercise of judicial discretion in accordance with general principles of equity (whether applied by a court of law or a court of equity), including judicial limitations on rights to specific performance; (b) the valid exercise of the constitutional powers of the United States of America and of the sovereign police and taxing powers of state or other governmental units having jurisdiction; and (c) bankruptcy, insolvency, reorganization, moratorium or other similar laws heretofore or hereafter in effect affecting creditors' rights, to the extent constitutionally applicable.

This opinion letter is rendered on the basis of federal law and the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof. We undertake no obligation to update or supplement this letter under any circumstance including if, after the date hereof, facts or events come to our

attention or changes in law occur which could affect the opinions expressed herein. We express no opinion herein as to any matter not set forth in the numbered sections above.

Attention is called to the facts that the Bonds are limited obligations of the Authority, payable only out of the revenues of the Authority pledged under the Indenture and certain other moneys available therefor as provided in the Indenture; that the Bonds do not pledge the credit or taxing power of the Commonwealth of Pennsylvania or any political subdivision thereof; and that the Authority has no taxing power.

Very truly yours,

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Appendix V: Specimen Municipal Bond Insurance

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MUNICIPAL BOND INSURANCE POLICY

ISSUER:

BONDS: \$ in aggregate principal amount of

Policy No: -N

Effective Date:

Premium: \$

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By _____
Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc.
1633 Broadway, New York, N.Y. 10019
(212) 974-0100

