



CALU



CLARION  
UNIVERSITY



# Board of Governors Meeting

Boardroom, First Floor  
Administration Building  
Dixon University Center  
2986 North Second Street  
Harrisburg, PA 17110-1201

April 3-4, 2019

## Wednesday, April 3

- 2:00 p.m. University Success Committee (Boardroom)
- A. Capital Funding Information Session
  - B. Action Items
    - 1. Authorization to Issue Refunding Bonds (Page 3)
    - 2. Bond Issue (Page 6)
    - 3. Strategies for Affordability – Policy Revisions and Rescission (Page 19)
    - 4. Fiscal Year 2019/20 Educational and General Appropriation Allocation (Page 38)
- WORKSHOP: What is transformation?  
Facilitated by Chief Transformation Officer Sarah Bauder
- 5:30 p.m. Student Business Plan Competition Reception  
(awards ceremony to follow) (Conference Rooms A, B, C)

## Thursday, April 4

- 9:00 a.m. Board of Governors Meeting (Boardroom)
- 1. Call to Order / Roll Call of Board Members
  - 2. Pledge of Allegiance
  - 3. Approval of the Minutes from January 16, 2019, January 17, 2019, February 28, 2019, and March 18, 2019, meetings.

4. Public Comments
5. Chairwoman Shapira's Report
6. Chancellor Greenstein's Report
7. Student Recognitions (Ali's Zaidi, Biden Courage Award, and athletes)
  - Ali Zaidi winner – Erin Jones (Millersville University)
  - 2019 Biden Courage Award - Adrianna Marie Branin (Indiana University)
  - Christina Sather, diving champion (Clarion University)
  - Andrew Dunn Jr., wrestling champion (Kutztown University)
  - Shane Ruhnke, wrestling champion (Millersville University)
  - Sunflower Greene, shot put champion (Millersville University)
  - Field Hockey Team (Shippensburg University)
  - Nadia Mulder, diving champion (West Chester University)
  - Georgia Wright, swimming champion (West Chester University)
8. Report from PACT President Jeff Smith
9. System Redesign Update
10. Full Board Action Items
11. Resolutions
12. New Business
13. Adjournment

*(Executive session will be called as needed)*

**Board of Governors Meeting**

April 3-4, 2019

**SUBJECT:** Authorization to Issue Refunding Bonds (ACTION)

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**UNIVERSITIES AFFECTED:** All

**BACKGROUND:** In the current interest rate environment, opportunities arise to refund all or part of certain State System bond issues. The window of opportunity often opens and closes in a matter of days or weeks, and missing the window could cost the System millions of dollars in lost debt service savings. The Treasury staff monitors these market conditions and alerts the Board of Governors when the environment may provide debt service savings. The Internal Revenue Service requires the governing board to pass a resolution authorizing issuance of bonds. It is prudent management for the Board to authorize the chancellor to direct issuance of refunding bonds only when market conditions provide significant savings. It is common for this type of resolution to contain minimum savings limits and an expiration date so control of the bond issuance process is maintained. This Board action will authorize the Office of the Chancellor to issue refunding bonds during fiscal year 2019/20 based upon market conditions to maximize present value savings, provided that the net present value savings equal or exceed 4 percent, and will establish an expiration date for this authorization of June 30, 2020.

In keeping with the State System's practice of minimizing expense and risk, the bond issue will be competitively bid. Since the System does not possess statutory bonding authority, the bonds will be issued through the Pennsylvania Higher Educational Facilities Authority. The bonds will be a general obligation of the System.

Last year's authorization has allowed the System to currently take advantage of refunding opportunities, generating anticipated savings of between \$8 million and \$9 million.

**MOTION:** That the Board of Governors adopts the attached resolution to authorize future issuance of refunding bonds when market conditions permit and after the vice chancellor for administration and finance consults with the chair of the University Success Committee.

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**Supporting Documents Included:** Resolution Authorizing Issuance of Refunding Bonds by the Pennsylvania Higher Education Facilities Authority

**Other Supporting Documents Available:** N/A

**Reviewed by:** N/A

**Prepared by:** Sharon P. Minnich

**Telephone:** (717) 720-4100

**Resolution Authorizing Issuance of Refunding Bonds  
by the Pennsylvania Higher Educational Facilities Authority**

WHEREAS, the State System of Higher Education of the Commonwealth of Pennsylvania (the "System") desires that the Pennsylvania Higher Educational Facilities Authority (the "Authority") undertakes a project (the "Project") consisting of the issuance of bonds (the "Refunding Bonds") to refund all or a portion of various series of bonds issued by the Authority on behalf of the System (the "Prior Bonds"); and

WHEREAS, the Board of Governors of the System (the "Board") has determined that it is desirable to authorize the chancellor to proceed with the issuance of the Refunding Bonds when market conditions permit, as long as the net present value savings on the Refunding Bonds equal or exceed 4 percent, and that this authorization will expire June 30, 2020; and

WHEREAS, the Authority will lend the proceeds of the Refunding Bonds to the System to finance the costs of the Project and to pay expenses incidental to issuance of the Refunding Bonds; and

WHEREAS, the obligation of the System to repay the Refunding Bonds will be described in and evidenced by a Loan Agreement, as supplemented (the "Loan Agreement"), between the Authority, as lender, and the System, as borrower, pursuant to which the System will pledge the full faith and credit of the System as security for repayment of the obligation; and

WHEREAS, the Loan Agreement will be assigned by the Authority as security for the Refunding Bonds pursuant to a Trust Indenture, as supplemented (the "Indenture"), between the Authority and the accepted trustee; and

WHEREAS, the Authority will, by public invitation, solicit and receive competitive bids from underwriters for the purchase of the Refunding Bonds, which bids will contain, among other terms, proposed interest rates on the Refunding Bonds.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby authorizes the chancellor to proceed with issuance of the Refunding Bonds by the Authority when market conditions permit, provided that the net present value savings on the Refunding Bonds equal or exceed 4 percent, and that this authorization will expire June 30, 2020; and be it

RESOLVED, that the Board hereby delegates to the chancellor or vice chancellor for administration and finance the power to accept bids for purchase of the Refunding Bonds from underwriters and to determine the principal amount of the Refunding Bonds to be issued by the Authority, the rates of interest, dates of maturity, provisions for optional or mandatory redemption, and other details, such approval to be evidenced by acceptance of the bid for purchase of the Refunding Bonds by the Authority and the System; and be it

RESOLVED, that the Board hereby authorizes pledging the System's full faith and credit to repayment of the Refunding Bonds, as provided in the Loan Agreement, and hereby authorizes and directs the chancellor or vice chancellor for administration and finance to execute, acknowledge, and deliver, and any Responsible Officer, as defined in the Indenture, to attest such signature to a supplement to the Loan Agreement in such form as the officers executing it may approve, such approval to be conclusively evidenced by execution thereof; and be it

RESOLVED, that any Responsible Officer is hereby authorized and empowered to approve the content of the Preliminary Official Statement and the Official Statement of the Authority relating to issuance of the Refunding Bonds as to information concerning the System and its affairs; and be it

RESOLVED, that any Responsible Officer is hereby authorized and directed to take such further action and to execute and deliver such other instruments and documents as may, in his or her judgment or upon advice of counsel, be necessary or advisable to effect issuance of the Refunding Bonds by the Authority, the intent of this Resolution, and the transactions contemplated.

\_\_\_\_\_  
Secretary to the Board

\_\_\_\_\_  
Chair of the Board

\_\_\_\_\_  
Date

## Board of Governors Meeting

April 3-4, 2019

**SUBJECT:** Bond Issue (ACTION)

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**UNIVERSITIES AFFECTED:** All

**BACKGROUND:** In accordance with previous actions by the Board of Governors approving facilities projects and their financing, and based on requirements of the Internal Revenue Service, the Board must approve a resolution to authorize the issuance of bonds. The proposed bond issue will provide fixed-rate, tax-exempt financing for the items listed below. The total bond issue is not expected to exceed project cash borrowing of \$104.1 million, based on the following estimates.

### Tax-Exempt Bond Issue

Project	Type	Term (Years)	BOG Approved	Amount
Bloomsburg Kehr Union-HVAC replacement	Auxiliary	10	January 2019	\$3,000,000
West Chester (The Commons-Parking)	Auxiliary	25	July 2018	12,900,000
Current refunding of Series AJ and AK	Both	20	April 2009	86,600,000
Contingency and Issuance Costs at 1.50%				1,600,000
Total Tax-Exempt Debt Issue				\$104,100,000

In keeping with the State System's practice of minimizing expense and risk, the bond issue will be competitively bid. Because the System does not possess statutory bond authority, the bonds will be issued through the Pennsylvania Higher Educational Facilities Authority. The bonds will be a general obligation of the System. The attached *Pennsylvania's State System of Higher Education Taxable/Tax-Exempt Bond Issue History* outlines the System's bond issue financing history and plan for fiscal year 2019/20.

**MOTION:** That the Board of Governors adopts the attached resolution authorizing the issuance of bonds up to a maximum project cash of \$104.1 million.

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**Supporting Documents Included:** Resolution; *Pennsylvania's State System of Higher Education Taxable/Tax-Exempt Bond Issue History*

**Other Supporting Documents Available:** Board Materials from January 2019, July 2018, and April 2009

**Reviewed by:** N/A

**Prepared by:** Sharon P. Minnich

**Telephone:** (717) 720-4100

**Resolution Authorizing the Issuance of Bonds  
by the Pennsylvania Higher Educational Facilities Authority**

WHEREAS, the State System of Higher Education of the Commonwealth of Pennsylvania (the “System”) desires that the Pennsylvania Higher Educational Facilities Authority (the “Authority”) issues its State System Revenue Bonds in one or more series of taxable or tax-exempt bonds (the “Bonds”) to finance up to \$104.1 million of project cash to pay the costs of (1) replacement of the Kehr Union Building HVAC equipment at Bloomsburg University of Pennsylvania; (2) reimbursement to West Chester University of Pennsylvania of the cost of three parking garage acquisitions from the Borough of West Chester; (3) the current refunding of Series AJ and AK; and (4) contingency and issuance costs (the “Projects”); and

WHEREAS, the Authority will lend the proceeds of the Bonds to the System to finance the costs of the Projects and will pay the expenses incident to issuance of the Bonds; and

WHEREAS, the System may make expenditures relating to clauses (1) through (4) of the definition of the Projects contained above prior to issuance of the Bonds, and the System desires to preserve the ability to reimburse itself with proceeds of the Bonds for any amounts expended for the Projects; and

WHEREAS, the obligation of the System to repay the Bonds will be described in and evidenced by a Loan Agreement, as supplemented (the “Loan Agreement”), between the Authority, as lender, and the System, as borrower, pursuant to which the System will pledge the full faith and credit of the System as security for repayment of the obligation; and

WHEREAS, the Loan Agreement will be assigned by the Authority as security for the Bonds pursuant to a Trust Indenture, as supplemented (the “Indenture”), between the Authority and a trustee; and

WHEREAS, the Authority will, by public invitation, solicit and receive competitive bids from underwriters for the purchase of the Bonds, which bids will contain, among other terms, proposed interest rates on the Bonds.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Governors of the System (the “Board”) hereby approves the issuance of the Bonds by the Authority, in an amount in project cash not to exceed \$104.1 million for the Bonds, the proceeds of which will be used to undertake the Projects and pay the costs of issuance of the Bonds; and be it

RESOLVED, that the Board hereby delegates to the chancellor or vice chancellor for administration and finance the power to accept bids for purchase of the Bonds from underwriters and to determine the principal amount of the Bonds to be issued by the Authority, but not in excess of the amount described above, the rates of interest, dates of maturity, provisions for optional or mandatory redemption, and other details, such approval to be evidenced by acceptance of the bid for purchase of the Bonds by the Authority and the System; and be it

RESOLVED, that the Board hereby authorizes the pledging of the System’s full faith and credit to repayment of the Bonds, as provided in the Loan Agreement, and hereby authorizes and directs the chancellor or vice chancellor for administration and finance to execute, acknowledge, and deliver, and any Responsible Officer to attest such signature to a supplement to the Loan

Agreement in such form as the officers executing it may approve, such approval to be conclusively evidenced by execution thereof; and be it

RESOLVED, that any Responsible Officer is hereby authorized and empowered to approve the content of the Preliminary Official Statement and the Official Statement of the Authority relating to issuance of the Bonds as to information concerning the System and its affairs; and be it

RESOLVED, that any Responsible Officer is hereby authorized and directed to take such further action and to execute and deliver such other instruments and documents as may, in his or her judgment or upon advice of counsel, be necessary or advisable to effect issuance of the Bonds by the Authority, the intent of this Resolution, and the transactions contemplated.

\_\_\_\_\_  
Secretary to the Board

\_\_\_\_\_  
Chair of the Board

\_\_\_\_\_  
Date



**Pennsylvania's State System of Higher Education**  
**Taxable/Tax-Exempt Bond Issue History**

**April 2019**

## **Current Debt Structure Pennsylvania's State System of Higher Education Bond Issues**

The Series A bonds were issued July 23, 1985, for a par value of \$31.0 million to finance the Indiana University of Pennsylvania cogeneration plant. Scheduled amortization started in June 1988, and was to run through June 1994. Serial interest rates ranged from 6.50 percent to 8.20 percent.

The Series B bonds were issued June 25, 1986, for a par value of \$26.0 million to finance 47 capital projects System-wide. Scheduled amortization started in June 1987 and concluded in June 1994. Serial interest rates ranged from 4.60 percent to 7.10 percent. Series B bonds called for a debt service reserve fund of \$3.9 million to be used to pay the last principal and interest payment. This fund earned an interest rate higher than the cost of borrowing, resulting in realized investment income of \$1 million. Universities with projects that participated in the bond issue received a prorated share of the debt service reserve fund investment income. The Series B issue allowed refinancing of existing capital leases for a savings of \$1.2 million. Also, by financing capital projects, the universities could invest the operating capital in the Short-Term Investment Fund at an interest rate higher than the financing cost, providing investment income and flexibility.

The Series C bonds were issued July 29, 1987, for a par value of \$38.2 million to finance residence halls at Bloomsburg and Kutztown Universities of Pennsylvania and to refund the Series A bonds. Serial interest rates ranged from 4.40 percent to 7.60 percent.

The Series D bonds were issued July 28, 1990, for a par value of \$58.8 million to finance student unions at Clarion, Lock Haven, and Shippensburg Universities of Pennsylvania, and a residence hall at West Chester University of Pennsylvania. This bond issue also provided refinancing of State System internal loans for interest savings of \$1.3 million. The Series D bonds launched the Reimbursement Program, which provided \$17.7 million of capital financing. Serial interest rates ranged from 5.90 percent to 7.15 percent.

The Series E bonds were issued June 27, 1991, for a par value of \$54.8 million to finance student unions at Bloomsburg, California, Clarion, East Stroudsburg, Edinboro, Kutztown, Lock Haven, Millersville, and Shippensburg Universities of Pennsylvania, and a residence hall at West Chester University of Pennsylvania. This bond issue included \$12.3 million of capital reimbursement bonds. Serial interest rates ranged from 4.70 percent to 7.10 percent.

The Series F bonds were issued December 15, 1992, for a par value of \$35.2 million to finance student unions, energy conservation equipment, and the renovation of dining halls at various State System universities. This bond issue provided \$19 million of capital reimbursement bonds. Serial interest rates ranged from 2.70 percent to 6.15 percent.

The Series G bonds were issued December 15, 1992, for a par value of \$14.2 million to refund the Series C bonds maturing on and after September 1, 1996. This refunding issue provided present value savings of \$825,000 to Bloomsburg and Kutztown Universities of Pennsylvania for their student housing projects. Serial interest rates ranged from 2.70 percent to 6.15 percent.

The Series H bonds were issued May 18, 1993, for a par value of \$15.9 million to finance a computer purchase and energy conservation equipment at various State System universities.

This bond issue provided \$13.6 million of capital reimbursement bonds. Serial interest rates ranged from 2.70 percent to 5.80 percent.

The Series I bonds were issued May 18, 1993, for a par value of \$61.4 million to refund the Series D bonds maturing on and after June 15, 1993. This refunding issue provided present value savings of \$2.4 million to various State System universities. Serial interest rates ranged from 2.70 percent to 5.80 percent.

The Series J bonds were issued March 16, 1994, for a par value of \$28.3 million to finance a recreation center, a fiber-optic network, a smokestack and engine retrofit, and student unions at various State System universities. This bond issue provided \$14.4 million of capital reimbursement bonds. Serial interest rates ranged from 3.35 percent to 5.75 percent.

The Series K bonds were issued March 16, 1994, for a par value of \$55.4 million to refund the Series E bonds maturing on and after June 15, 1994. This refunding issue provided present value savings of \$1.8 million to various State System universities. Serial interest rates ranged from 2.95 percent to 5.70 percent.

The Series L bonds were issued July 14, 1994, for a par value of \$45.9 million to finance a recreation center, computer equipment, student housing, and student unions at various State System universities. This bond issue provided \$26.8 million of capital reimbursement bonds. Serial interest rates ranged from 3.75 percent to 6.30 percent.

The Series M bonds were issued March 14, 1995, for a par value of \$35.4 million to finance instructional equipment purchased at Clarion University of Pennsylvania, energy conservation measures at two universities, and renovations to various residence halls and dining facilities at Indiana University of Pennsylvania. This bond issue provided \$29.3 million of capital reimbursement bonds. Serial interest rates ranged from 4.50 percent to 5.98 percent.

The Series N bonds were issued April 2, 1996, for a par value of \$44.5 million to finance construction of a recreation center at Mansfield University of Pennsylvania, renovation of a residence hall at Kutztown University of Pennsylvania and a dining hall at Indiana University of Pennsylvania, installation of a campus-wide fiber-optic network at California University of Pennsylvania, and installation of a PBX phone system at Millersville University of Pennsylvania. This bond issue provided \$30.5 million of capital reimbursement bonds. Serial interest rates ranged from 3.65 percent to 5.85 percent.

The Series O bonds were issued June 25, 1997, for a par value of \$46.7 million to finance construction of a recreation center and student housing at Slippery Rock University of Pennsylvania; road and site utilities development at Indiana University of Pennsylvania; various computer and telecommunication purchases at Clarion, Kutztown, and Millersville Universities of Pennsylvania; and a property acquisition at West Chester University of Pennsylvania. This bond issue provided \$17.7 million of capital reimbursement bonds. Serial interest rates ranged from 3.77 percent to 5.35 percent.

The Series P bonds were issued February 25, 1998, for a par value of \$72.9 million to refund a portion of the Series F bonds and a portion of the Series L bonds maturing on and after December 15, 2002, and June 15, 2004, respectively. This refunding issue provided present value savings of \$3.9 million to the State System. Serial interest rates ranged from 3.50 percent to 4.40 percent.

The Series Q bonds were issued June 30, 1998, for a par value of \$22.7 million to finance construction of a recreation center at Clarion University of Pennsylvania; a dining hall addition at Millersville University of Pennsylvania; a comprehensive electrical upgrade at Shippensburg University of Pennsylvania; various computer and telecommunication purchases at Millersville, Indiana, and Shippensburg Universities of Pennsylvania; and facilities renovations and the acquisition of equipment and furnishings by various State System universities. Serial interest rates ranged from 3.82 percent to 5.05 percent.

The Series R bonds were issued June 17, 1999, for a par value of \$31.1 million to finance an addition to the student center at California University of Pennsylvania, renovation of and addition to the dining facilities at Kutztown University of Pennsylvania, renovation of a library to a student union at Mansfield University of Pennsylvania, purchase and installation of computer and telecommunications equipment at Shippensburg and Clarion Universities of Pennsylvania, purchase and installation of fiber-optic wiring at Clarion University of Pennsylvania, purchase of a building to be used by the Culinary School at Indiana University of Pennsylvania, and facilities renovations at various State System universities. Serial interest rates ranged from 3.40 percent to 5.24 percent.

The Series S bonds were issued June 21, 2000, for a par value of \$51.7 million to finance the design and construction of on-campus apartments at Bloomsburg University of Pennsylvania; design and construction of renovations and additions to the dining accommodations and student union facilities at Kutztown University of Pennsylvania; renovations of student union facilities at California University of Pennsylvania; design and renovation of academic facilities at System universities; purchase and installation of computer and telecommunications equipment at Bloomsburg, Edinboro, and Slippery Rock Universities of Pennsylvania; and purchase of lab equipment at Mansfield University of Pennsylvania. Serial interest rates ranged from 4.54 percent to 5.81 percent.

The Series T bonds were issued July 12, 2001, for a par value of \$69.6 million to finance the design and construction of recreation centers at East Stroudsburg and Lock Haven Universities of Pennsylvania; installation of a central chiller at Indiana University of Pennsylvania; renovation and maintenance of facilities at California University of Pennsylvania; construction of student housing at Bloomsburg University of Pennsylvania; technology initiatives at Clarion, Edinboro, and West Chester Universities of Pennsylvania; installation of residence hall sprinklers; design and renovation of academic facilities at System universities; and a shared administrative computer system. Serial interest rates ranged from 2.50 percent to 5.09 percent.

The Series U bonds were issued August 8, 2002, for a par value of \$14.4 million to finance the Academic Facilities Renovation Program; renovation and maintenance of facilities at Bloomsburg, California, Edinboro, and Mansfield Universities of Pennsylvania; expansion of the fire detection system at Indiana University of Pennsylvania; and design and renovation of a recreation center at East Stroudsburg University of Pennsylvania. Serial interest rates ranged from 1.61 percent to 4.92 percent.

The Series V bonds were issued August 8, 2002, for a par value of \$25.2 million to finance the acquisition and installation of residence hall sprinklers at all of the universities and the continued implementation of the shared administrative computer system. This was the System's first variable rate issue, with terms of 20 years for the sprinklers and 7 years for the shared administrative computer system. Weekly resets of interest rates and monthly payments of interest were established for this issue.

The Series W bonds were issued October 15, 2002, for a par value of \$69.1 million to refund the Series H bonds, the Series J bonds, and the Series M bonds. This refunding issue provided present value savings of \$3.8 million to the State System. Serial interest rates ranged from 1.70 percent to 4.41 percent.

The Series X bonds were issued May 29, 2003, for a par value of \$80.9 million to refund the Series G bonds and the Series I bonds. The refunding issue provided a present value savings of \$6.2 million to the State System. The Series X bonds also issued new money for auxiliary facilities renovations and construction at Bloomsburg, California, Indiana, Kutztown, Mansfield, Millersville, and Shippensburg Universities of Pennsylvania; academic facilities renovation and general campus improvements at Bloomsburg and California Universities of Pennsylvania; installation of fire alarm systems at Indiana University of Pennsylvania; and property acquisitions at East Stroudsburg University of Pennsylvania. Serial interest rates ranged from 0.99 percent to 4.33 percent.

The Series Y bonds were issued June 19, 2003, for a par value of \$25.4 million to finance the acquisition and installation of residence hall sprinklers at all of the universities and the continued implementation of the shared administrative computer system. This was the System's second variable rate issue, with terms of 20 years for the sprinklers and 7 years for the shared administrative computer system. Weekly resets of interest rates and monthly interest payments were established for this issue.

The Series Z bonds were issued March 17, 2004, for a par value of \$71.8 million to refund the Series K bonds and the Series N bonds. The refunding issue provided a present value savings of \$6.6 million to the State System. Serial interest rates ranged from 1.00 percent to 4.43 percent.

The Series AA bonds were issued July 8, 2004, for a par value of \$28.8 million to finance auxiliary facilities renovations and construction at Bloomsburg, California, Indiana, Kutztown, Mansfield, Millersville, and Shippensburg Universities of Pennsylvania; academic facilities renovations and general campus improvements at Bloomsburg, California, and Kutztown Universities of Pennsylvania; energy savings improvements at Shippensburg University of Pennsylvania; installation of fire alarm systems at Indiana University of Pennsylvania; and property acquisitions at East Stroudsburg University of Pennsylvania. Serial interest rates ranged from 1.66 percent to 5.00 percent.

The Series AB bonds were issued July 8, 2004, for a par value of \$21.0 million to finance the acquisition and installation of residence hall sprinklers at all of the universities and the continued implementation of the shared administrative computer system. This was the System's third variable rate issue, with terms of 20 years for the sprinklers and 7 years for the shared administrative computer system. Weekly resets of interest rates and monthly interest payments were established for this issue.

The Series AC bonds were issued July 7, 2005, for a par value of \$52.7 million to finance auxiliary facilities renovations and construction at Bloomsburg, Cheyney, Edinboro, Indiana, Kutztown, Millersville, and Shippensburg Universities of Pennsylvania; academic facilities renovations and general campus improvements at California, Cheyney, Indiana, Kutztown, Shippensburg, and Slippery Rock Universities of Pennsylvania; network equipment upgrade at Clarion University of Pennsylvania; continued installation of fire alarm systems at Indiana University of Pennsylvania; and property acquisitions at East Stroudsburg University of Pennsylvania. Serial interest rates ranged from 2.66 percent to 4.50 percent.

The Series AD bonds were issued July 7, 2005, for a par value of \$7.3 million to finance the acquisition and installation of residence hall sprinklers at all of the universities. This was the System's fourth variable rate issue, with a term of 20 years for the sprinklers. Weekly resets of interest rates and monthly interest payments were established for this issue.

The Series AE bonds were issued July 6, 2006, for a par value of \$103.3 million to finance auxiliary facilities renovations and construction at Bloomsburg, Cheyney, East Stroudsburg, Edinboro, Kutztown, Lock Haven, Millersville, and Shippensburg Universities of Pennsylvania; academic facilities renovations and general campus improvements at East Stroudsburg, Kutztown, and Millersville Universities of Pennsylvania; and energy savings improvements at Edinboro and West Chester Universities of Pennsylvania. Serial interest rates ranged from 3.70 percent to 4.82 percent.

The Series AF bonds were issued July 10, 2007, for a par value of \$68.2 million to finance auxiliary facilities renovations and construction at California, Clarion, East Stroudsburg, Kutztown, Shippensburg, and West Chester Universities of Pennsylvania; Academic Facilities Renovation Program and other academic facilities at East Stroudsburg, Indiana, and Kutztown Universities of Pennsylvania; and energy savings improvements at East Stroudsburg and West Chester Universities of Pennsylvania. Serial interest rates ranged from 3.80 percent to 4.60 percent.

The Series AG bonds were issued March 27, 2008, for a par value of \$101.3 million to refund the Series O bonds, the Series P bonds, and the Series Q bonds. The refunding issue provided a present value savings of \$6.9 million to the State System. Serial interest rates ranged from 2.10 percent to 4.70 percent.

The Series AH bonds were issued July 17, 2008, for a par value of \$140.8 million to finance auxiliary facilities renovations and construction at Bloomsburg, California, Kutztown, Millersville, Shippensburg, Slippery Rock, and West Chester Universities of Pennsylvania; academic facilities at California, East Stroudsburg, Kutztown, and Millersville Universities of Pennsylvania; and energy savings improvements at Bloomsburg, Cheyney, Lock Haven, Mansfield, Millersville, and Slippery Rock Universities of Pennsylvania. Serial interest rates range from 1.75 percent to 4.77 percent.

The Series AI bonds were issued August 7, 2008, for a par value of \$32.1 million to refund the System's variable rate bonds: the Series V bonds, the Series Y bonds, the Series AB bonds, and the Series AD bonds. Serial interest rates range from 2.00 percent to 4.66 percent.

The Series AJ bonds were issued July 9, 2009, for a par value of \$124.0 million to finance auxiliary facilities renovations and construction at Bloomsburg, California, Kutztown, Millersville, Shippensburg, Slippery Rock, and West Chester Universities of Pennsylvania; academic facilities at California, East Stroudsburg, Kutztown, and Millersville Universities of Pennsylvania; and energy savings improvements at Bloomsburg, Cheyney, Lock Haven, Mansfield, Millersville, and Slippery Rock Universities of Pennsylvania. Serial interest rates range from 0.49 percent to 5.17 percent.

The Series AK bonds were issued September 3, 2009, for a par value of \$47.3 million to refund the Series R bonds and the Series S bonds. The refunding issue provided a present value savings of \$4.8 million to the State System. Serial interest rates range from 0.70 percent to 4.00 percent.

The Series AL bonds were issued July 8, 2010, for a par value of \$135.4 million to finance auxiliary facilities renovation and construction at Bloomsburg, Mansfield, Millersville, Shippensburg, Slippery Rock, and West Chester Universities of Pennsylvania; academic facilities renovation and construction at California, East Stroudsburg, Edinboro, Indiana, Kutztown, Millersville, and Shippensburg Universities of Pennsylvania; and student information systems purchase and implementation at California, Clarion, East Stroudsburg, Shippensburg, and Slippery Rock Universities of Pennsylvania. Serial interest rates range from 0.40 percent to 4.50 percent.

The Series AM bonds were issued July 12, 2011, for a par value of \$119.1 million to finance auxiliary facilities renovation and construction at Bloomsburg, Indiana, Lock Haven, Millersville, Shippensburg, Slippery Rock, and West Chester Universities of Pennsylvania; academic facilities renovation and construction at California, East Stroudsburg, and Millersville Universities of Pennsylvania; and student information systems purchase and implementation at East Stroudsburg University of Pennsylvania. Serial interest rates range from 0.27 percent to 4.64 percent.

The Series AN bonds were issued March 20, 2012, for a par value of \$76.8 million to refund the Series U bonds, the Series W bonds, and the Series X bonds. The refunding issue provided a present value savings of \$13.8 million to the State System. Serial interest rates range from 0.25 percent to 2.22 percent.

The Series AO bonds were issued July 8, 2013, for a par value of \$30.9 million to finance (taxable) auxiliary facilities renovation and construction at Indiana University of Pennsylvania, and (tax-exempt) academic facilities renovation and construction at California and Mansfield Universities of Pennsylvania. Taxable serial interest rates range from 0.80 percent to 5.20 percent, and tax-exempt serial interest rates range from 0.28 percent to 4.66 percent.

The Series AP bonds were issued May 7, 2014, for a par value of \$46.1 million to refund the Series Z bonds and the Series AA bonds. The refunding provided a present value savings of \$5.8 million to the State System. Serial interest rates range from 0.30 percent to 2.65 percent.

The Series AQ bonds were issued on May 7, 2015, for a par value of \$95.0 million to current refund, the Series AC bonds and advance refund the Series AE bonds. The refunding provided a present value savings of \$9.1 million to the State System. Serial interest rates range from 0.45 percent to 3.84 percent.

The Series AR bonds were issued September 10, 2015, for a par value of \$102.4 million to finance auxiliary facilities renovation and construction at Bloomsburg, California, and Millersville Universities of Pennsylvania; upgrade of a steam plant at Bloomsburg University of Pennsylvania; and the purchase by California University of Pennsylvania of on-campus student housing from Student Association, Incorporated.

The Series AS bonds were issued June 7, 2016, for a par value of \$47.3 million to advance refund the Series AF bonds. The refunding provided a present value savings of \$7.5 million to the State System. Serial interest rates range from 0.70 percent to 3.22 percent.

The Series AT bonds were issued September 7, 2016, for a par value of \$298.1 million to finance (taxable) auxiliary facilities renovation and construction at Indiana University of Pennsylvania, and (tax-exempt) renovation of an academic facility at Slippery Rock University of Pennsylvania, upgrade of information technology infrastructure at Slippery Rock University of Pennsylvania, upgrade of the steam plant at Bloomsburg University of Pennsylvania,

construction of student housing facilities at Bloomsburg University of Pennsylvania, acquisition of student housing at Lock Haven University of Pennsylvania from Lock Haven University Foundation, acquisition of student housing at Edinboro University of Pennsylvania from Edinboro University Foundation, and acquisition of student housing at Mansfield University of Pennsylvania from Mansfield Auxiliary Corporation.

The Series AU bonds were issued September 14, 2017, for a total par value of \$128.3 million to finance the renovation of academic and athletic facilities at Indiana University of Pennsylvania, renovation of academic facilities at Slippery Rock University of Pennsylvania, construction of a guaranteed energy savings act (“GESA”) project at Slippery Rock University of Pennsylvania, and construction of a parking structure at West Chester University of Pennsylvania. Also included were funds to advance refund most of the Series AH bonds (\$91.6 million) using both tax-exempt and taxable bonds. The refunding provided a present value savings of \$10.8 million and \$1.2 million to the State System, respectively. Serial interest rates range from 0.95 percent to 3.32 percent for the tax-exempt portion and 1.48 percent to 2.92 percent for the taxable portion.

The Series AV bonds were issued September 6, 2018, for a total par value of \$236.9 million to finance the construction of a mixed-use facility at West Chester University of Pennsylvania, the current refunding of Series AG and of most of Series AI, and the acquisition of student housing at Shippensburg University of Pennsylvania from Shippensburg University Student Services, Inc. (SUSSI) using taxable bonds. The refunding provided a present value savings of \$2.4 million or 6.3 percent net present value. Serial interest rates range from 1.63 percent to 3.90 percent for the refunding and new money portion and 2.75 percent to 4.30 percent for the taxable portion.

Of the original \$3.2 billion principal amount issued, through principal repayment and refunding of bond issues, approximately \$1.2 billion is outstanding as of March 1, 2019.



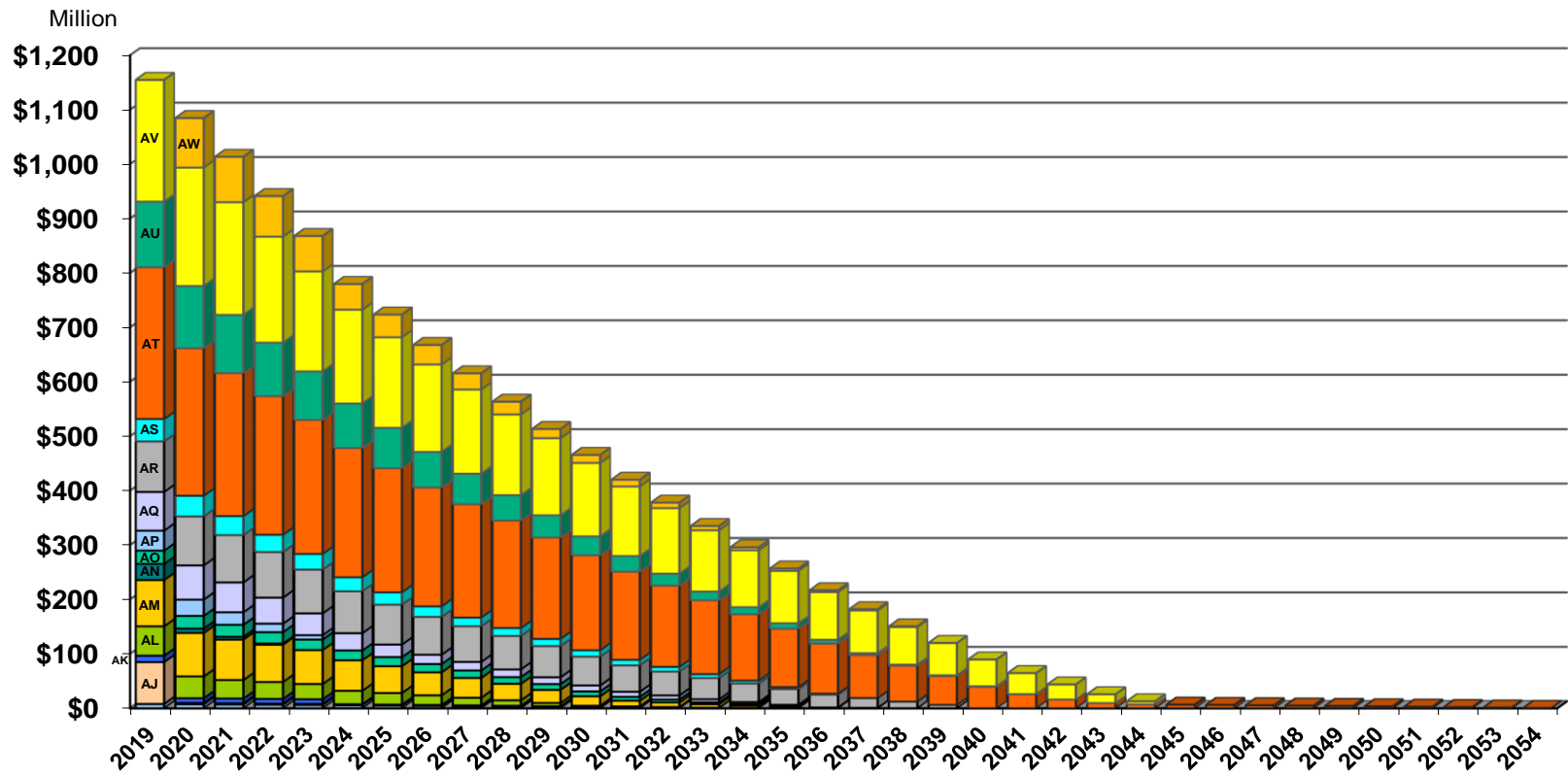
## Pennsylvania's State System of Higher Education Bond Issue History

Issue	True Interest Cost	Originally Issued	Original BP Issue	Principal Paid Through 3/1/19	Balance Remaining on State System Books 3/1/19
Series A	7.99%	July 23, 1985	\$31,000,000	\$31,000,000	\$0
Series B	6.67%	June 25, 1986	25,990,000	25,990,000	0
Series C	6.78%	July 29, 1987	38,240,000	38,240,000	0
Series D	7.19%	July 28, 1990	58,800,000	58,800,000	0
Series E	6.93%	June 27, 1991	54,845,000	54,845,000	0
Series F	5.97%	December 15, 1992	35,210,000	35,210,000	0
Series G	5.97%	December 15, 1992	14,170,000	14,170,000	0
Series H	5.54%	May 18, 1993	15,940,000	15,940,000	0
Series I	5.54%	May 18, 1993	61,425,000	61,425,000	0
Series J	5.49%	March 16, 1994	28,285,000	28,285,000	0
Series K	5.49%	March 16, 1994	55,430,000	55,430,000	0
Series L	6.20%	July 14, 1994	45,855,000	45,855,000	0
Series M	5.93%	March 14, 1995	35,395,000	35,395,000	0
Series N	5.86%	April 2, 1996	44,455,000	44,455,000	0
Series O	5.37%	June 25, 1997	46,745,000	46,745,000	0
Series P	4.97%	February 25, 1998	72,880,000	72,880,000	0
Series Q	4.76%	June 30, 1998	22,675,000	22,675,000	0
Series R	5.01%	June 17, 1999	31,050,000	31,050,000	0
Series S	5.49%	June 21, 2000	51,720,000	51,720,000	0
Series T	4.66%	July 12, 2001	69,555,000	69,555,000	0
Series U	4.30%	August 8, 2002	14,400,000	14,400,000	0
Series V	Variable	August 8, 2002	25,200,000	25,200,000	0
Series W	4.31%	October 15, 2002	69,105,000	69,105,000	0
Series X	3.32%	May 29, 2003	80,910,000	80,910,000	0
Series Y	Variable	June 19, 2003	25,350,000	25,350,000	0
Series Z	3.88%	March 17, 2004	71,760,000	71,760,000	0
Series AA	4.45%	July 8, 2004	28,750,000	28,750,000	0
Series AB	Variable	July 8, 2004	20,970,000	20,970,000	0
Series AC	4.14%	July 7, 2005	52,650,000	52,650,000	0
Series AD	Variable	July 7, 2005	7,310,000	7,310,000	0
Series AE	4.57%	July 6, 2006	103,290,000	103,290,000	0
Series AF	4.66%	July 10, 2007	68,230,000	68,230,000	0
Series AG	3.97%	March 27, 2008	101,335,000	101,335,000	0
Series AH	4.43%	July 17, 2008	140,760,000	132,600,000	8,160,000
Series AI	4.13%	August 7, 2008	32,115,000	31,900,000	215,000
Series AJ	4.37%	July 9, 2009	123,985,000	40,545,000	83,440,000
Series AK	3.15%	September 3, 2009	47,310,000	31,075,000	16,235,000
Series AL	3.72%	July 8, 2010	135,410,000	74,945,000	60,465,000
Series AM	4.00%	July 12, 2011	119,085,000	29,090,000	89,995,000
Series AN	1.54%	March 20, 2012	76,810,000	32,815,000	43,995,000
Series AO-1 (Tax-Exempt)	4.20%	July 8, 2013	12,340,000	1,840,000	10,500,000
Series AO-2 (Taxable)	4.73%	July 8, 2013	18,575,000	3,430,000	15,145,000
Series AP	2.34%	May 7, 2014	46,110,000	8,065,000	38,045,000
Series AQ	2.88%	May 7, 2015	94,975,000	16,045,000	78,930,000
Series AR	3.71%	September 10, 2015	102,365,000	6,890,000	95,475,000
Series AS	2.63%	June 7, 2016	47,280,000	2,985,000	44,295,000
Series AT (Tax-Exempt)	3.00%	September 7, 2016	279,050,000	10,615,000	268,435,000
Series AT (Taxable)	3.03%	September 7, 2016	19,060,000	1,385,000	17,675,000
Series AU (New Money)	2.89%	September 14, 2017	36,625,000	1,005,000	35,620,000
Series AU (Tax-Exempt Refund)	2.58%	September 14, 2017	76,490,000	1,095,000	75,395,000
Series AU (Taxable Refund)	2.62%	September 14, 2017	15,145,000	255,000	14,890,000
Series AV (Tax-Exempt New Money/Refund)	3.50%	September 6, 2018	102,345,000	0	102,345,000
Series AV (Taxable)	4.23%	September 6, 2018	134,600,000	0	134,600,000
			<b>\$3,169,360,000</b>	<b>\$1,935,505,000</b>	<b>\$1,233,855,000</b>

# System Debt Outstanding by Bond Issue

## Fiscal Years Ending 2019–2054

Including Proposed Series AW



**Bond Series Indicated by Letter**  
 AH, AI are too small to be represented by a color

**Board of Governors Meeting**  
April 3-4, 2019

**SUBJECT:** Strategies for Affordability—Policy Revision and Rescission (ACTION)

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**UNIVERSITIES AFFECTED:** All

**BACKGROUND:** As part of its System Redesign effort, the Board of Governors established “leveraging university strengths” as one of its three key strategic priorities. Leveraging university strengths requires flexibility to recognize regional differences in cost and price of delivery of academic programs and more collaborative funding mechanisms. The Collaborative Pricing and Regional Affordability Task Group, established in December 2017, developed recommendations for flexibility to align and achieve regional affordability through strategic pricing efforts. Updates on the work of this task group were shared with the Board at its January, April, July, and October 2018 meetings.

The task group created a concept paper, *Pricing Strategies for Affordability*, which was reviewed by System leadership and posted to the System Redesign website on May 16, 2018, for review and comment by all stakeholders. The concepts in the paper informed the subsequent proposed revisions to Policy 1999-02-A: *Tuition*, which also was posted to the System Redesign website and shared widely for stakeholder review and comment.

The recommended revisions for the System’s tuition policy are based on the concept that State System universities will serve more Pennsylvanians if their pricing strategies are flexible and student-centered, recognizing differences in each university’s region, program offerings, and characteristics of the individual student—especially the student’s ability to pay. It recognizes the wide variety of pricing practices used across the nation in public higher education, including:

- Net price strategies to minimize financial barriers to student access and success
- Net revenue strategies to serve the needs and best interests of each individual university and its region
- Multiyear and timely pricing strategies to provide greater predictability for students’ financial planning and to better equip prospective students in their enrollment decisions.

This recommendation, proposed to be effective for fall 2020, provides greater local responsibility and requires greater accountability in strategic pricing decisions. Upon acceptance of the recommended revisions to Policy 1999-02-A: *Tuition*, the following two Board policies will no longer be necessary and are recommended for rescission: 1984-08-A: *Board of Governors Scholars Program*; and 1996-01-A: *Sources of Funding for University Scholarships*.

**MOTION:** That the Board of Governors approves the following, effective for fall 2020:

- a. Amendments to Policy 1999-02-A: *Tuition*, as attached.
- b. Rescission of Policy 1984-08-A: *Board of Governors Scholars Program*.
- c. Rescission of Policy 1996-01-A: *Sources of Funding for University Scholarships*.

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**Supporting Documents Included:** Policy 1999-02-A: *Tuition* (with proposed revisions, marked-up version and original version); 1984-08-A: *Board of Governors Scholars Program*; 1996-01-A: *Sources of Funding for University Scholarships*

**Other Supporting Documents Available:** *Pricing Strategies for Affordability Conceptual Framework* at <http://systemredesign.passhe.edu/>; materials from all Board meetings held in 2018

**Reviewed by:** Collaborative Pricing and Regional Affordability Task Group, university leadership, various constituency groups, all stakeholders through the System Redesign webpage; University Success Committee on July 2, 2018; Board of Governors on July 12 and October 11, 2018

**Prepared by:** Sharon P. Minnich

**Telephone:** (717) 720-4100



# PA State System of Higher Education Board of Governors

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## ***POLICY 1999-02-A: TUITION***

**See Also:**

**Adopted:** April 8, 1999

**Amended:** October 10, 2002, July 14, 2005, October 11, 2007, July 17, 2008, January 20, 2011, January 26, 2017, [and April xx, 2019](#)

### **A. Purpose**

The Board of Governors (Board) has statutory authority to set tuition for Pennsylvania's State System of Higher Education (State System). This policy articulates the basic philosophy, objectives, and guidelines of the State System's tuition structure, providing a common understanding of the basis for establishing tuition for the State System.

This policy is intended to:

- Provide students access to high-value, relevant educational experiences that prepare them for pathways to successful lives and careers.
- Allow State System universities to plan, budget, and allocate resources over multiple years, ensuring their long-term stability and success.
- Keep tuition predictable, enabling students to plan for their educational expenses.
- Provide access to State System universities for a range of qualified students from all socioeconomic backgrounds.
- Recognize and support individual university missions, scope, and program array.

### **B. Philosophy and Objectives**

The State System is responsible for and committed to ensuring that qualified Pennsylvania residents have access to State System universities and quality education at affordable prices. Because the students benefit from the education they receive, they have a responsibility to pay a reasonable share of the costs through tuition. Because Pennsylvania benefits from having an educated citizenry, the state also has a responsibility to bear a substantial portion of the costs through taxpayer support. The State System also has a responsibility to maximize the efficiency of its operations to minimize the cost to taxpayers and students.

Affordability has a different meaning for each individual based on their available financial resources and ability to pay. Student-centered tuition policies must include affordability strategies that focus on the student's ability to pay and net price to the student, with a result of aligning enrollment, aid to students, and net revenue. University-based pricing strategies recognize regional economic differences in costs, household income, cost of living, and average buying power within the region. Such approaches allow each university the flexibility to become unique in its marketplace, ensuring an appropriate array of high-value academic programs, while reducing competition among State System universities.

Affordability strategies allow universities to maximize their specific strengths and regional opportunities to better serve the citizenry of the Commonwealth.

### C. Definitions

- **Basic Tuition Rate**—A tuition rate approved by the Board that is charged to students at universities that do not have a separately approved pricing strategy.
- **Graduate Student**—A student who holds at least a bachelor's or first professional degree and is enrolled at the graduate level, including nondegree students in graduate courses who may or may not be admitted to a graduate degree or certificate program.
- **In-State Student**—A student who is legally domiciled in Pennsylvania, as defined in Board of Governors Policy 1985-03, *Student Domicile Regulations*.
- **Institutional Aid**—University-funded financial assistance to a student for the purpose of undertaking for-credit course work, not to exceed the full cost of attendance less other grant awards. Sources include university restricted and unrestricted gifts, revenue from university endowments, and the university's general (or foregone) revenues; but exclude federal or state grant aid, private scholarships, affiliate scholarships, institutional matches for externally funded student aid grants, loans, tuition waivers as articulated in Board of Governors Policy 1983-18-A: *Waiver of Tuition and/or Fees*, tuition benefits for university employees or their spouses/dependents, or tuition exchange programs.
- **Net Price**—From the perspective of the student, the price the student must pay to the university. Net price is calculated as the student's tuition, fees, room and board, less institutional aid and all other grants, scholarships, and waivers received by the student.
- **Net Revenue**—Gross tuition and fee revenue less total institutional aid.
- **Out-of-State Student**—A student who is not legally domiciled in Pennsylvania, as defined in Board of Governors Policy 1985-03, *Student Domicile Regulations*.
- **Technology Tuition Fee**—A separate tuition fee established by the Board for rendering technology resources and services to enhance student learning experiences.
- **Tuition**—The basic fee established by the Board for rendering educational services, as enumerated in Act 188 of 1982. The technology tuition fee is a form of tuition.
- **Undergraduate Student**—A student in a bachelor's degree program, an associate's degree program, a vocational, technical, or certificate program below the baccalaureate level; or a nondegree-seeking student matriculated in a lower or upper division course.

### D. Guidelines

To aid in recruiting and providing students and families with meaningful information on the cost of attending a State System university before the student needs to commit, both the Board, for tuition, and councils of trustees, for fees, shall approve rates as early as possible. Tuition rates will be set annually no later than April 30 for the upcoming two academic years. The tuition rate for the second year, based on the most current three-year average increase in the State System's basic tuition rate, will be set as tentative, with the opportunity to be adjusted no later than April 30 prior to the start of that academic year. This does not preclude the Board from adjusting rates at a later date due to unforeseen circumstances.

## 1. In-State Tuition

### a. Undergraduate

- 1) The president, in consultation with the council of trustees, and upon concurrence of the chancellor, shall recommend multiyear university tuition strategies for approval by the Board.
  - i. A president's recommendations must include tuition rate(s), rate structure(s), and net price strategies proposed for their university. University tuition strategies may incorporate the wide variety of practices used across the nation in public higher education, but all must include net price strategies to minimize financial barriers to student access and success and net revenue strategies to serve the needs and best interests of the university and the System. The president must develop university procedures for establishing, maintaining, administering, and assessing the university's strategic pricing programs.
  - ii. The chancellor, in consultation with the presidents, will establish the expectations and framework for sharing information in support of university strategic pricing proposals. The framework must include a description of the proposed multiyear pricing strategy, supported by proven strategies founded in research; an analysis of the cost, benefit, and risk to the university based on a range of possible outcomes; and demonstration of adequate administrative capacity, as well as administrative and financial capability.
  - iii. The president will provide to the chancellor periodically an assessment of any in-state tuition strategies that have been approved by the Board. The assessment must address, at a minimum, enrollment, total and net revenue, student access, student affordability, and student success.
- 2) The Board shall approve a basic tuition rate for those universities that do not have an approved pricing strategy. Undergraduate students enrolled in 12–18 credits in a fall or spring semester will be charged a full-time tuition rate, unless otherwise approved by the Board [see section D.1.a.1)]. The full-time rate is equal to the per-credit rate for 12 credits per semester. Undergraduate students enrolled in a fall or spring semester for more than 18 credits will be charged a full-time tuition rate for the first 18 credits and the appropriate per-credit rate for all remaining credits.
- 3) The president may adjust tuition rate(s) to allow the university to establish partnerships with other institutions in collaborative/consortial arrangements. The chancellor, in consultation with the presidents, may adjust tuition rate(s) to allow the State System to establish partnerships with other institutions or entities in collaborative/consortial arrangements.

### b. Graduate

- 1) The Board will establish annually basic graduate in-state tuition rate(s) on a per-credit basis that recognizes the higher cost of providing graduate education.

- 2) The president may set alternate graduate tuition rate(s), based upon such factors as the cost of instruction, the level of service provided to the student, market demand, and the level of tuition necessary for the university to offer programs.

## **2. Out-of-State Tuition**

Students from other states and countries who enroll at State System universities add a richness of experience and diversity that benefits all students and their universities. However, those students must pay an additional amount of tuition, which offsets the Commonwealth's contribution intended to subsidize the education of Pennsylvanians. The president will establish annually out-of-state tuition rate(s) in accordance with the statutory requirement for a price differential between in-state and out-of-state tuition.

## **3. Technology Tuition Fee**

- a. The Board will establish annually the technology tuition fee in a manner that is proportional to enrollment and domicile status (in-state/out-of-state).
- b. Technology tuition fee revenues shall be expended on instructional technology. These revenues shall be used for the direct benefit of students to help them achieve the learning objectives of their academic programs.

## **4. Implementation**

The chancellor shall promulgate procedures and standards as necessary to ensure proper implementation of this policy. Amendments approved April 4, 2019 are effective for fall 2020.



# PA State System of Higher Education Board of Governors

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## ***POLICY 1999-02-A: TUITION***

**See Also:**

**Adopted:** April 8, 1999  
**Amended:** October 10, 2002, July 14, 2005, October 11, 2007, July 17, 2008,  
January 20, 2011, ~~and~~ January 26, 2017, and April xx, 2019

### **E. Purpose**

The Board of Governors ([Board](#)) has statutory authority to set tuition for Pennsylvania's State System of Higher Education ([State System](#)). This policy articulates the basic philosophy, objectives, and guidelines of the [State System](#)'s tuition structure, providing a common understanding of the basis for establishing tuition for the State System.

This policy is intended to:

- Provide students access to high-value, relevant educational experiences that prepare them for pathways to successful lives and careers.
- Allow State System universities to plan, budget, and allocate resources over multiple years, ensuring their long-term stability and success.
- Keep tuition predictable, enabling students to plan for their educational expenses.
- Provide access to State System universities for a range of qualified students from all socioeconomic backgrounds.
- Recognize and support individual university missions, scope, and program array.

### **F. Philosophy and Objectives**

The State System is responsible for and committed to ensuring that qualified Pennsylvania residents have access to State System universities and quality education at affordable prices. Since the students benefit from the education they receive, they have a responsibility to pay a reasonable share of the costs through tuition. Since Pennsylvania benefits from having an educated citizenry, the state also has a responsibility to bear a substantial portion of the costs through taxpayer support. The State System also has a responsibility to maximize the efficiency of its operations to minimize the cost to taxpayers and students.

Affordability has a different meaning for each individual based on their available financial resources and ability to pay. Student-centered tuition policies must include affordability strategies that focus on the student's ability to pay and net price to the student, with a result of aligning enrollment, aid to students, and net revenue. University-based pricing strategies recognize regional economic differences in costs, household income, cost of living, and average buying power within the region. Such approaches allow each university the flexibility to become unique in its marketplace, ensuring an appropriate array of high-value



academic programs, while reducing competition among State System universities. Affordability strategies allow universities to maximize their specific strengths and regional opportunities to better serve the citizenry of the Commonwealth.

## **B. Definitions**

- **Capacity**—The optimum academic year full-time equivalent student enrollment at each university that most efficiently utilizes its facilities and faculty.
- **Cohort**—A specific group of students established for tracking purposes; commonly used in reference to the group of new students enrolling at a university in an academic year.
- **Distance Education**—An educational process in which the instruction occurs with the instructor and student in different locations. Distance education makes use of one or more technologies, including web-conference, to deliver 80 percent or more of the instruction for the course to students who are separated from the instructor and to support interaction between the students and the instructor synchronously or asynchronously.
- **Full-Time Tuition**—The tuition rate charged to undergraduate students enrolled in 12 or more semester credits.
- **Graduate Student**—A student who holds at least a bachelor's or first professional degree and is enrolled at the post-baccalaureate level, including nondegree students in graduate courses who may or may not be admitted to a graduate program.
- **Out-of-State Student**—A student who is not legally domiciled in Pennsylvania, as defined in Board of Governors' Policy 1985-03, *Student Domicile Regulations*.
- **In-State Student**—A student who is legally domiciled in Pennsylvania, as defined in Board of Governors' Policy 1985-03, *Student Domicile Regulations*.
- **Technology Tuition Fee**—A separate tuition fee established by the Board of Governors for rendering technology resources and services to enhance student learning experiences.
- **Tuition**—The basic fee established by the Board of Governors for rendering educational services, as enumerated in Act 188 of 1982. The technology tuition fee is a form of tuition.
- **Undergraduate Student**—A student in a bachelor's degree program, an associate's degree program, a vocational or technical program below the baccalaureate level; or a nondegree-seeking student matriculated in a lower or upper division course.

## **G. Definitions**

- **Basic Tuition Rate**—A tuition rate approved by the Board that is charged to students at universities that do not have a separately approved pricing strategy.
- **Graduate Student**—A student who holds at least a bachelor's or first professional degree and is enrolled at the graduate level, including nondegree students in graduate courses who may or may not be admitted to a graduate degree or certificate program.

- **In-State Student**—A student who is legally domiciled in Pennsylvania, as defined in Board of Governors Policy 1985-03, *Student Domicile Regulations*.
- **Institutional Aid**—University-funded financial assistance to a student for the purpose of undertaking for-credit course work, not to exceed the full cost of attendance less other grant awards. Sources include university restricted and unrestricted gifts, revenue from university endowments, and the university’s general (or foregone) revenues; but exclude federal or state grant aid, private scholarships, affiliate scholarships, institutional matches for externally funded student aid grants, loans, tuition waivers as articulated in Board of Governors Policy 1983-18-A: *Waiver of Tuition and/or Fees*, tuition benefits for university employees or their spouses/dependents, or tuition exchange programs.
- **Net Price**—From the perspective of the student, the price the student must pay to the university. Net price is calculated as the student’s tuition, fees, room and board, less institutional aid and all other grants, scholarships, and waivers received by the student.
- **Net Revenue**—Gross tuition and fee revenue less total institutional aid.
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- **Undergraduate Student**—A student in a bachelor’s degree program, an associate’s degree program, a vocational, technical, or certificate program below the baccalaureate level; or a nondegree-seeking student matriculated in a lower or upper division course.

#### **C. D. Policy Guidelines**

To aid in recruiting and providing students and families with meaningful information on the cost of attending a State System university before the student needs to commit, both the Board, for tuition, and councils of trustees, for fees, shall approve rates as early as possible. Tuition rates will be set annually no later than April 30 for the upcoming two academic years. The tuition rate for the second year, based on the most current three-year average increase in the State System’s basic tuition rate, will be set as tentative, with the opportunity to be adjusted no later than April 30 prior to the start of that academic year. This does not preclude the Board from adjusting rates at a later date due to unforeseen circumstances.

#### **1. Undergraduate In-State Tuition**

- ~~Undergraduate The Board of Governors will establish annually undergraduate in-state tuition rate(s), based primarily on the financial requirements of each university within the System and the Commonwealth’s commitment toward meeting those requirements. Secondary consideration will be given to other factors, such as change in enrollment demographics, family income, financial aid availability, inflation, and relative standing in terms of tuition charges at peer institutions of higher education.~~

- 4) The president, in consultation with the council of trustees, and upon concurrence of the chancellor, shall recommend multiyear university tuition strategies for approval by the Board.
    - iv. A president's recommendations must include tuition rate(s), rate structure(s), and net price strategies proposed for their university. University tuition strategies may incorporate the wide variety of practices used across the nation in public higher education, but all must include net price strategies to minimize financial barriers to student access and success and net revenue strategies to serve the needs and best interests of the university and the System. The president must develop university procedures for establishing, maintaining, administering, and assessing the university's strategic pricing programs.
    - v. The chancellor, in consultation with the presidents, will establish the expectations and framework for sharing information in support of university strategic pricing proposals. The framework must include a description of the proposed multiyear pricing strategy, supported by proven strategies founded in research; an analysis of the cost, benefit, and risk to the university based on a range of possible outcomes; and demonstration of adequate administrative capacity, as well as administrative and financial capability.
    - vi. The president will provide to the chancellor periodically an assessment of any in-state tuition strategies that have been approved by the Board. The assessment must address, at a minimum, enrollment, total and net revenue, student access, student affordability, and student success.
  - 5) The Board shall approve a basic tuition rate for those universities that do not have an approved pricing strategy. Undergraduate students enrolled in 12–18 credits in a fall or spring semester will be charged a full-time tuition rate, unless otherwise approved by the Board [see section D.1.a.1)]. The full-time rate is equal to the per-credit rate for 12 credits per semester. Undergraduate students enrolled in a fall or spring semester for greater than 18 credits will be charged a full-time tuition rate for the first 18 credits and the appropriate per-credit rate for all remaining credits.
  - 6) The president may adjust tuition rate(s) to allow the university to establish partnerships with other institutions in collaborative/consortial arrangements. The chancellor, in consultation with the presidents, may adjust tuition rate(s) to allow the State System to establish partnerships with other institutions or entities in collaborative/consortial arrangements.
- b. ~~Graduate Undergraduate students enrolled in 12–18 credits in a fall or spring semester will be charged a full-time tuition rate, unless otherwise approved by the Board of Governors (see section C.1.e.). The full-time rate is equal to the per-credit rate for 12 credits per semester. Undergraduate students enrolled in a fall or spring semester for greater than 18 credits will be charged a full-time tuition rate for the first 18 credits and the appropriate per-credit rate for all remaining credits.~~
- 3) The Board will establish annually basic graduate in-state tuition rate(s) on a per-credit basis that recognizes the higher cost of providing graduate education.

4) The president may set alternate graduate tuition rate(s), based upon such factors as the cost of instruction, the level of service provided to the student, market demand, and the level of tuition necessary for the university to offer programs.

- ~~c. The chancellor may adjust undergraduate in-state tuition rate(s) solely to allow the State System to establish partnerships with other institutions in collaborative/consortial arrangements.~~
- ~~d. The Board of Governors will establish annually undergraduate out-of-state tuition rate(s) at a level to ensure that undergraduate out-of-state students are paying the System's average net cost of education.~~
- ~~e. The Board of Governors, upon recommendation of the chancellor, may consider alternative in-state and/or out-of-state tuition rate structures for individual universities, based upon such factors as the average net cost of undergraduate education; the goals and objectives of the university and the System; the degree to which universities are at, above, or below student enrollment capacity; the current relationship between pricing, cost, and student demand; the change to student payment amounts; and student affordability.~~

~~Presidents, upon the approval of their council of trustees, may request that the chancellor recommend an alternative tuition rate structure for their university.~~

- ~~1) Alternative methods of charging tuition may include, but are not limited to:
  - ~~a) Charging per-credit tuition regardless of number of credits in which the student is enrolled.~~
  - ~~b) Modifying the range of credits for which the full-time tuition rate is applied.~~
  - ~~c) Charging different tuition rates to different cohort groups.~~~~
- ~~2) In addition, out-of-state tuition may be applied differently to out-of-state students based on the following demographic criteria:
  - ~~a) Geographic region.~~
  - ~~b) Academic program.~~
  - ~~c) Scholastic and/or extracurricular achievement.~~~~
- ~~f. Biennially, the president will provide to the chancellor an assessment of any in-state alternative tuition rate structures that have been approved by the Board of Governors. The assessment must address, at a minimum, enrollment, total and net revenue, student access, student affordability, and student success. Student-centered metrics must include an assessment of demographics, analysis of workforce earnings based on existing national and/or state data sets, and outcomes regarding status and time to degree attainment.~~

## 2. **Graduate Out-of-State Tuition**

- ~~a. The Board of Governors will establish annually graduate in-state tuition rate(s) on a per-credit basis that reflect more accurately the System's average cost of graduate education.~~
- ~~b. The Board of Governors will establish annually the graduate out-of-state tuition rate(s) at a level to ensure that graduate out-of-state students are paying the System's average net cost of graduate education.~~

- ~~c. The chancellor, upon recommendation of the president, has the authority to adjust the graduate tuition rate for specific graduate programs, based upon such factors as the cost of instruction, the level of service provided to the student, and the level of tuition necessary for the university to offer programs.~~

Students from other states and countries who enroll at State System universities add a richness of experience and diversity that benefits all students and their universities. However, those students must pay an additional amount of tuition, which offsets the Commonwealth's contribution intended to subsidize the education of Pennsylvanians. The president will establish annually out-of-state tuition rate(s) in accordance with the statutory requirement for a price differential between in-state and out-of-state tuition.

### **3. ~~Summer/Winter Session~~ Technology Tuition Fee**

~~The chancellor, upon the recommendation of the president, may set alternative tuition rates for summer or winter sessions.~~

- ~~c. The Board will establish annually the technology tuition fee in a manner that is proportional to enrollment and domicile status (in-state/out-of-state).~~
- ~~d. Technology tuition fee revenues shall be expended on instructional technology. These revenues shall be used for the direct benefit of students to help them achieve the learning objectives of their academic programs.~~

### **4. ~~Distance Education Tuition~~**

~~a. In-state distance education students, both graduate and undergraduate, will be charged at the appropriate prevailing per-credit resident rate.~~

~~b. Out-of-state distance education students, both graduate and undergraduate, will be charged a per-credit tuition of at least 102 percent of the prevailing in-state per-credit tuition rate. Presidents may set the out-of-state distance education per-credit tuition rate on a course-by-course or program-by-program basis.~~

~~c. The chancellor, upon recommendation of the president, has the authority to adjust the in-state tuition rate for a particular course or program.~~

~~d. This policy applies to students who are charged on a per-credit-hour basis. Full-time undergraduate students continue to pay full-time tuition, if applicable. The president may establish a full-time out-of-state undergraduate distance education rate based upon the per-credit out-of-state distance education rate for students enrolled 100 percent in distance education courses.~~

### **5. ~~Technology Tuition Fee~~**

~~a. The Board of Governors will establish annually the technology tuition fee in a manner that is proportional to enrollment and residency status (in-state/out-of-state).~~

~~b. Technology tuition fee revenues shall be expended only on instructional technology. These revenues shall be used for the direct benefit of students to help them achieve the learning objectives of their academic programs.~~

### **6. 4. Implementation**

The chancellor shall promulgate procedures and standards as necessary to ensure proper implementation of this policy. Amendments approved April 4, 2019 are effective for fall 2020.



## PA State System of Higher Education Board of Governors

Page 1 of 4

### ***POLICY 1999-02-A: TUITION***

**See Also:**

**Adopted:** April 8, 1999  
**Amended:** October 10, 2002, July 14, 2005, October 11, 2007, July 17, 2008,  
January 20, 2011, and January 26, 2017

#### **A. Purpose**

The Board of Governors has statutory authority to set tuition for Pennsylvania's State System of Higher Education. This policy articulates the basic philosophy, objectives, and guidelines of the System's tuition structure, providing a common understanding of the basis for establishing tuition for the State System.

#### **B. Definitions**

- **Capacity**—The optimum academic year full-time equivalent student enrollment at each university that most efficiently utilizes its facilities and faculty.
- **Cohort**—A specific group of students established for tracking purposes; commonly used in reference to the group of new students enrolling at a university in an academic year.
- **Distance Education**—An educational process in which the instruction occurs with the instructor and student in different locations. Distance education makes use of one or more technologies, including web-conference, to deliver 80 percent or more of the instruction for the course to students who are separated from the instructor and to support interaction between the students and the instructor synchronously or asynchronously.
- **Full-Time Tuition**—The tuition rate charged to undergraduate students enrolled in 12 or more semester credits.
- **Graduate Student**—A student who holds at least a bachelor's or first professional degree and is enrolled at the post-baccalaureate level, including nondegree students in graduate courses who may or may not be admitted to a graduate program.
- **Out-of-State Student**—A student who is not legally domiciled in Pennsylvania, as defined in Board of Governors' Policy 1985-03, *Student Domicile Regulations*.

- **In-State Student**—A student who is legally domiciled in Pennsylvania, as defined in Board of Governors’ Policy 1985-03, *Student Domicile Regulations*.
- **Technology Tuition Fee**—A separate tuition fee established by the Board of Governors for rendering technology resources and services to enhance student learning experiences.
- **Tuition**—The basic fee established by the Board of Governors for rendering educational services, as enumerated in Act 188 of 1982. The technology tuition fee is a form of tuition.
- **Undergraduate Student**—A student in a bachelor’s degree program, an associate’s degree program, a vocational or technical program below the baccalaureate level; or a nondegree-seeking student matriculated in a lower or upper division course.

## C. Policy

### 1. Undergraduate Tuition

- a. The Board of Governors will establish annually undergraduate in-state tuition rate(s), based primarily on the financial requirements of each university within the System and the Commonwealth’s commitment toward meeting those requirements. Secondary consideration will be given to other factors, such as change in enrollment demographics, family income, financial aid availability, inflation, and relative standing in terms of tuition charges at peer institutions of higher education.
- b. Undergraduate students enrolled in 12–18 credits in a fall or spring semester will be charged a full-time tuition rate, unless otherwise approved by the Board of Governors (see section C.1.e.). The full-time rate is equal to the per-credit rate for 12 credits per semester. Undergraduate students enrolled in a fall or spring semester for greater than 18 credits will be charged a full-time tuition rate for the first 18 credits and the appropriate per-credit rate for all remaining credits.
- c. The chancellor may adjust undergraduate in-state tuition rate(s) solely to allow the State System to establish partnerships with other institutions in collaborative/consortial arrangements.
- d. The Board of Governors will establish annually undergraduate out-of-state tuition rate(s) at a level to ensure that undergraduate out-of-state students are paying the System’s average net cost of education.
- e. The Board of Governors, upon recommendation of the chancellor, may consider alternative in-state and/or out-of-state tuition rate structures for individual universities, based upon such factors as the average net cost of undergraduate education; the goals and objectives of the university and the System; the degree to which universities are at, above, or below student enrollment capacity; the current relationship between pricing, cost, and student demand; the change to student payment amounts; and student affordability.

Presidents, upon the approval of their council of trustees, may request that the chancellor recommend an alternative tuition rate structure for their university.

- 1) Alternative methods of charging tuition may include, but are not limited to:
  - a) Charging per-credit tuition regardless of number of credits in which the student is enrolled.
  - b) Modifying the range of credits for which the full-time tuition rate is applied.
  - c) Charging different tuition rates to different cohort groups.
- 2) In addition, out-of-state tuition may be applied differently to out-of-state students based on the following demographic criteria:
  - a) Geographic region.
  - b) Academic program.
  - c) Scholastic and/or extracurricular achievement.
  - f. Biennially, the president will provide to the chancellor an assessment of any in-state alternative tuition rate structures that have been approved by the Board of Governors. The assessment must address, at a minimum, enrollment, total and net revenue, student access, student affordability, and student success.

Student-centered metrics must include an assessment of demographics, analysis of workforce earnings based on existing national and/or state data sets, and outcomes regarding status and time to degree attainment.

## **2. Graduate Tuition**

- a. The Board of Governors will establish annually graduate in-state tuition rate(s) on a per-credit basis that reflect more accurately the System's average cost of graduate education.
- b. The Board of Governors will establish annually the graduate out-of-state tuition rate(s) at a level to ensure that graduate out-of-state students are paying the System's average net cost of graduate education.
- c. The chancellor, upon recommendation of the president, has the authority to adjust the graduate tuition rate for specific graduate programs, based upon such factors as the cost of instruction, the level of service provided to the student, and the level of tuition necessary for the university to offer programs.

## **3. Summer/Winter Session Tuition**

The chancellor, upon the recommendation of the president, may set alternative tuition rates for summer or winter sessions.

## **4. Distance Education Tuition**

- a. In-state distance education students, both graduate and undergraduate, will be charged at the appropriate prevailing per-credit resident rate.
- b. Out-of-state distance education students, both graduate and undergraduate, will be charged a per-credit tuition of at least 102 percent of the prevailing in-state



per-credit tuition rate. Presidents may set the out-of-state distance education per-credit tuition rate on a course-by-course or program-by-program basis.

- c. The chancellor, upon recommendation of the president, has the authority to adjust the in-state tuition rate for a particular course or program.
- d. This policy applies to students who are charged on a per-credit-hour basis. Full-time undergraduate students continue to pay full-time tuition, if applicable. The president may establish a full-time out-of-state undergraduate distance education rate based upon the per-credit out-of-state distance education rate for students enrolled 100 percent in distance education courses.

## **5. Technology Tuition Fee**

- a. The Board of Governors will establish annually the technology tuition fee in a manner that is proportional to enrollment and residency status (in-state/out-of-state).
- b. Technology tuition fee revenues shall be expended only on instructional technology. These revenues shall be used for the direct benefit of students to help them achieve the learning objectives of their academic programs.

## **6. Implementation**

The chancellor shall promulgate procedures and standards as necessary to ensure proper implementation of this policy.



## PA State System of Higher Education Board of Governors

Effective: January 11, 2001

Page 1 of 2

### **POLICY 1984-08-A-R: BOARD OF GOVERNORS' SCHOLARS PROGRAM**

See Also:

Adopted: June 19, 1984

Amended: October 15, 1985; January 12, 1989; and January 11, 2001

Rescinded: [April xx, 2019](#)

#### **~~A. Purposes~~**

- ~~1. Each university is authorized to waive basic fees or tuition for not more than two percent of the university's full-time equivalent enrollment.~~
- ~~2. The chancellor is authorized to grant individual university requests to extend up to 1/10 percent additional Board of Governors' scholarships to participants in articulation partnerships with underserved school districts, and for participants in the State System Partnership program.~~

#### **~~B. Procedures~~**

~~The following procedures are applicable to the Board of Governors Scholarship Program:~~

- ~~1. A university's maximum allotment of waivers under this policy will include all students enrolled at any one time but will exclude all students receiving waivers under any other program providing basic fee or tuition waivers.~~
- ~~2. Waivers will be granted to serve the needs and best interests of the university and its undergraduate resident students and will include, but not be limited to, fulfillment of desegregation plan commitments, minority students, academics, leadership, and performing arts. Beginning in spring 2001, at least 50 percent of the waivers that a university grants beyond one percent will be used to help increase the numbers of resident students enrolled as mathematics, science, or technology majors, or in other areas identified as high need, including math and science education and teacher preparation programs designed to serve urban or rural communities. No waivers will be granted for athletics.~~
- ~~3. Waivers will be reviewed and decisions made on renewals each academic year.~~

- ~~4. Each university will develop criteria and procedures for the award of waivers, which will be disseminated within the university community. A copy of the university criteria and procedures will be filed in the Office of the Chancellor for review. For each recipient, all Pell, PHEAA, and other aid should be exhausted and the difference then waived.~~
- ~~5. At the beginning of each semester or session, each university president (or designee) will submit to the chancellor a list of undergraduate resident students who have been awarded waivers including the names, addresses, classifications, and majors of the students and the reasons for or categories of waivers.~~
- ~~6. The two percent figure to be used in determining the number of available waivers for any current academic year will be based upon the university's full time equivalent enrollment for the fall semester of the preceding academic year. Each university will submit the aforementioned full time equivalent enrollment figure to the chancellor or his/her designee as quickly as possible following closure of the fall registration period. No commitments for waivers will be granted until the enrollment figure has been submitted to the chancellor.~~
- ~~7. No other fees will be waived under the terms of this policy.~~
- ~~8. This program will be in effect under the above procedures, January 11, 2001, and will continue, subject to periodic Board review to determine its continuing effectiveness.~~



# PA State System of Higher Education Board of Governors

Effective: January 18, 1996

Page 1 of 2

## Policy 1996-01-~~A~~-R: Sources of Funding for University Scholarships

See Also:

Adopted: January 18, 1996  
Amended: April 2, 2009; January 20, 2011; April 10, 2014; April 7, 2016; and  
November 13, 2017  
Rescinded: April xx, 2019

### ~~A.~~ **Purpose**

~~To provide flexibility for universities to award institutional scholarships from unrestricted funds. This policy does not apply to scholarships supported by restricted funding sources.~~

### ~~B.~~ **Definitions**

~~**Institutional scholarships**—University-funded financial assistance to a student for the purpose of undertaking for credit course work not to exceed the full cost of attendance less other grant awards.~~

~~**Instructional fees**—Mandatory fees that may be used to support general instructional operations and academic facilities needs. These fees may be used to cover unusual costs of certain special programs such as music instruments, practica, instructional equipment, required course/university tests and examinations, laboratory supplies, course-required field trips, student teaching, clinical experiences, or related activities.~~

~~**Need-based institutional scholarships**—Institutional scholarships for which eligibility is based upon an analysis of financial need, to include information reported in the Free Application for Federal Student Aid (FAFSA).~~

~~**Restricted funds**—Resources received with purpose restrictions imposed by a donor or an agency outside the State System. The funds must be expended according to the specific directions of the donor or external agency. Examples of entities that can cause funds to be classified as restricted are the Commonwealth of Pennsylvania and its agencies, the federal government, and corporate or individual donors. Unrestricted funds have no restrictions placed on them by donors or external agencies.~~

### ~~C.~~ **Administration of Need-Based Institutional Scholarships**

- ~~1. Need-based institutional scholarships may be granted to students who meet the following criteria:
  - ~~a. Domiciled in Pennsylvania.~~
  - ~~b. Have completed the FAFSA for the award year.~~~~

- ~~c. Have demonstrated financial need.~~
  - ~~d. The total financial aid awarded does not exceed the cost of attendance.~~
- ~~2. Presidents must develop university procedures for establishing, maintaining, and administering a need-based institutional scholarship fund. University procedures must include funding expectations, not to exceed 10.0 percent of the prior year's gross tuition and fee revenue, or higher limits if established by the chancellor. University procedures must be approved by the university council of trustees.~~

~~**D. Funding of Institutional Scholarships that are Not Based on Need**~~

~~Subject to the recommendation of the president and approval of the university council of trustees, as part of the annual university budget approval process, the following sources of *unrestricted* revenue may be used to fund institutional scholarships that are not based on need:~~

- ~~1. Gifts.~~
- ~~2. Unrestricted endowment income.~~
- ~~3. Corporate sponsorship.~~
- ~~4. Camp, conference, and similar event income (net of expenditure).~~
- ~~5. Net revenue from athletic concessions, snack vending machines, and licensing royalties.~~
- ~~6. Up to 10.0 percent of the prior year's gross nonresident tuition and fee revenue, or higher limits if established by the chancellor.~~
- ~~7. Other sources of revenue, as approved by the chancellor.~~

~~**E. Restricted Scholarship Funds**~~

~~Nothing herein shall be deemed to govern the awarding of scholarships that are based on sources of funding which are specifically restricted for that purpose by an external source or donor.~~

~~**F. Administration**~~

~~The chancellor shall promulgate procedures and standards for the administration of this policy, which may include increases to the amount of unrestricted funds available for institutional scholarships.~~

**Board of Governors Meeting**

April 3-4, 2019

**SUBJECT:** Fiscal Year 2019/20 Educational and General Appropriation Allocation (ACTION)**UNIVERSITIES AFFECTED:** All

**BACKGROUND:** In accordance with statute, Board of Governors Policy 1984-06-A: *Allocation Formula*, specifies the method by which the Educational and General (E&G) appropriation is allocated annually to the universities for their basic funding requirements, provides for the Board to allocate appropriations for System-wide initiatives, and funds the Office of the Chancellor at 0.5 percent of the appropriation.

As part of the System Redesign strategy affirmed by the Board of Governors at its meeting on January 17, 2019, the System has begun retooling its budgeting and investment practices to reorganize and reprioritize the use of System resources, freeing investment funds to support growth while ensuring stability for the affordable, high quality programs that the people and economy of the Commonwealth require. A major component of this effort is developing a new methodology for distributing resources, to include the creation of an investment pool. To this end, it is anticipated that a new allocation formula will be established to distribute state appropriations beginning with fiscal year (FY) 2020/21.

On February 5, 2019, Governor Wolf recommended a 1.5 percent, or \$7.0 million, increase in the System's appropriation, for a total of \$475.1 million. Although the Commonwealth's FY 2019/20 general fund budget has not yet been finalized, in anticipation of future changes to the allocation formula and to provide universities with greater stability and predictability in their funding in the upcoming fiscal year, it is proposed that the use of the current base allocation formula and performance funding program be suspended for the FY 2019/20 allocation. In the interim, each university will receive the same total appropriation in FY 2019/20 as it received in FY 2018/19 (the combined result of base formula and performance funding). The allocation of any increase in appropriations—net of changes in the allocations for other System-wide initiatives and the Office of the Chancellor—received by the State System will be determined by the Board of Governors with input from the University Presidents and the Chancellor. If the enacted FY 2019/20 Commonwealth budget provides a different appropriation for the System, the allocation may be revised at a subsequent Board meeting.

Attachment 1 reflects the proposed FY 2019/20 allocation distribution. Attachment 2 provides a brief overview of each System-wide initiative for which appropriations are allocated.

**MOTION:** That the Board of Governors approves the allocation of funds from the System's fiscal year 2019/20 E&G appropriation, as reflected in Attachment 1.

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**Supporting Documents Included:** Proposed FY 2019/20 E&G Appropriation Allocation (Attachment 1); Funding of System-Wide Initiatives (Attachment 2)

**Other Supporting Documents Available:** FY 2019/20 Appropriations Request; Governor's FY 2019/20 General Fund Budget; Board of Governors Policy 1984-06-A: *Allocation Formula*

**Reviewed by:** Council of Presidents, March 19, 2019

**Prepared by:** Sharon P. Minnich

**Telephone:** (717) 720-4100

**Proposed FY 2019/20 E&G Appropriation Allocation**

*Assumes the enacted FY 2019/20 Commonwealth General Fund Budget will provide the Governor's recommended \$475.1 million in appropriations for Pennsylvania's State System of Higher Education. If the enacted funding level differs, the Board may revise the allocation at a subsequent meeting.*

	<b>Proposed FY 2019/20 Appropriation</b>
<b>Universities</b> (Same as 2018/19 allocation)*	
Bloomsburg	\$37,575,747
California	33,442,584
Cheyney	13,205,930
Clarion	25,939,282
East Stroudsburg	28,121,647
Edinboro	27,958,861
Indiana	54,846,695
Kutztown	36,601,617
Lock Haven	25,189,876
Mansfield	17,683,846
Millersville	34,446,907
Shippensburg	30,675,302
Slippery Rock	38,926,348
West Chester	56,936,541
<b>Subtotal, Universities</b>	<b>\$461,551,183</b>
<b>System-wide Initiatives</b> (See Attachment 2)	
Increase recommended by Governor**	\$7,778,278
Dixon University Center	1,301,000
Chincoteague Bay Field Station	1,078,481
Office of Internal Audit and Risk Assessment	749,154
System Reserve Replenishment	300,000
<b>Subtotal, System-wide Initiatives</b>	<b>\$11,206,913</b>
<b>Office of the Chancellor</b>	<b>2,371,904</b>
<b>Total Appropriation</b>	<b>\$475,130,000</b>

*\*University amounts reflect combined allocations from the base formula and performance funding.*

*\*\*Number is net of changes in System-wide initiative. Allocation of the remainder will be made by the Board of Governors after passage of the Commonwealth's 2019/20 budget.*

**Pennsylvania’s State System of Higher Education  
Funding of System-Wide Initiatives  
As Proposed for the Fiscal Year 2019/20 E&G Appropriation**

**Increase Recommended by the Governor ..... \$7,778,278**

Number is net of changes in System-wide initiative. Allocation of the remainder will be made by the Board of Governors after passage of the Commonwealth’s 2019/20 budget.

**Dixon University Center Academic Consortium..... \$1,301,000**

The administrative and physical support for the academic programming performed at Dixon University Center has been partially funded through the E&G appropriation for many years. The FY 2018/19 appropriation of \$1,301,000 provided for continuation of academic services and associated maintenance of the Dixon University Center site. Based on a review of its revenue-generating capabilities, expenditures and services provided, it is recommended that the allocation for the Dixon University Center be continued at the same level as funded in 2018/19.

**Chincoteague Bay Field Station..... \$1,078,481**

The Chincoteague Bay Field Station, founded in 1968 by three Pennsylvania state colleges, is managed by a consortium that is primarily comprised of System universities. It provides students field experiences across a variety of disciplines. The Field Station’s main campus, located at Wallops Island, Virginia, underwent a \$15 million revitalization of its education center and dormitories, which was financed with System bonds as approved by the Board of Governors on April 10, 2008, and for which debt service was paid by three System universities through FY 2017/18. In March 2017, the Board was notified of the consortium’s interest in seeking new ownership for the Field Station due to the cost of operating the enterprise, including debt service obligations. As these facilities have supported various academic and research initiatives of most System universities, the associated debt service began to be funded directly from the System’s E&G appropriation in 2018/19, while the consortium actively seeks to divest itself from the property.

**Office of Internal Audit and Risk Assessment..... \$749,154**

The Office of Internal Audit and Risk Assessment (OIARA) is responsible for facilitating risk assessment activities and, in turn, structuring and executing an internal audit plan based on high-risk areas. The Board’s Audit and Compliance Committee approved the 2019/20 proposed OIARA budget of \$912,952 at its meeting on March 26, 2019. It is recommended that this combined budget be funded at \$749,154, as \$163,798 remains from the previous year’s allocation primarily due to savings from a vacancy.

**Replenishment of the System Reserve ..... \$300,000**

Board of Governors Policy 1984-07-A: *System Reserve Allocation and Expenditure Criteria*, establishes a \$1.5 million Board reserve for items of System-wide importance and value. The reserve must be fully replenished annually. Expenses against the reserve include presidential searches and official residence renovations. The total required replenishment of the System Reserve for 2019/20 is currently estimated at \$300,000, based on projected expenditures through June 30, 2019, but may be adjusted based on actual expenditures. The amount to be replenished is net of interest earnings.



**Anticipated 2018/19 System Reserve Expenditures\***

Presidential Searches (Edinboro, Mansfield)	\$170,000
Mansfield University's Official Residence Renovation	<u>150,000</u>
<b>Total Anticipated Fiscal Year 2018/19 Expenditures</b>	<b>\$320,000</b>

*\* If actual expenditures through year-end require adjustments to the System Reserve allocation, a corresponding adjustment may be made to the Investment Pool.*

**Board of Governors Meeting**

April 4, 2019

**SUBJECT:** Annual Syed R. Ali-Zaidi Award for Academic Excellence (PRESENTATION)

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**UNIVERSITIES AFFECTED:** All

**BACKGROUND:** Created in 2000 by the State System Foundation, the Syed R. Ali-Zaidi Award for Academic Excellence is conferred upon a graduating senior from one of the State System universities. This award was founded by Dr. Syed R. Ali-Zaidi, a charter member of the Board of Governors. Funding for this academic excellence award was made possible through gifts from Dr. Ali-Zaidi, Highmark Inc., and the State System Foundation, Inc. Dr. Ali-Zaidi wishes to inspire and honor State System students who exhibit excellence in their pursuit of knowledge. The State System Foundation's vision is to be a meaningful partner to the State System by providing resources to impact student success, cultivating lifelong learning opportunities, strengthening our communities, and better equipping the future workforce of the Commonwealth.

The Foundation is committed to excellence in fundraising and relationship building efforts that align with System priorities and needs. Its primary focus is on enhancing student persistence and completion rates, recognizing the importance of student success

Candidates for the 2019 award were recommended by their university president at the conclusion of a campus application and selection process that was open to all graduating seniors. Multiple selection criteria included outstanding academic scholarship, including prizes, honors, and honorary societies; participation in extra/co-curricular activities; and a two-page essay by the nominee addressing how the university has prepared him or her for the next career step.

This year, a review panel appointed by the chancellor considered 14 nominees in accordance with the criteria outlined above. Ms. Erin Jones, a student at Millersville University of Pennsylvania, was selected as the recipient of the 2019 Syed R. Ali-Zaidi Award for Academic Excellence and will receive a check for \$1,000.

These students are truly the best of the best and as such, the 13 finalists will each receive a 2019 Syed R. Ali-Zaidi Award for Academic Excellence Finalist Certificate signed by the chancellor and chair of the Student Success Committee of the Board.

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**Supporting Documents Included:** Millersville President Nomination Letter, Résumé**Other Supporting Documents Available:** N/A**Reviewed by:** David Maser, Chair of Student Success Committee**Prepared by:** Peter H. Garland**Telephone:** (717) 720-4200

Office of the President  
Phone: 717-871-7001  
Fax: 717-871-7930

November 30, 2018

Dr. Daniel Greenstein  
Office of the Chancellor  
Pennsylvania State System of Higher Education  
Dixon University Center  
2986 North Second Street  
Harrisburg, PA 17110-1201

Dear Chancellor Greenstein:

It is my distinct pleasure to put forward, as my inaugural nomination, Millersville University senior, Ms. Erin Jones, for the 2019 Syed Ali-Zaidi Award for Academic Excellence. Enclosed are the materials in support of her nomination.

Ms. Jones has accumulated a truly superior record of academic achievement at Millersville University. She matriculated to Millersville University having been valedictorian of her high school while receiving 40 Advanced Placement credits. At Millersville, she continued her outstanding academic performance, as demonstrated by her 4.0 GPA. This is particularly impressive given the challenging curriculum she has undertaken, pursuing a Bachelor of Science degree with a major in Meteorology with minors in Mathematics and Emergency Management all while pursuing an Honors College curriculum that culminates in a senior research thesis. Her outstanding academic performance, coupled with the multiple research experiences she has had while an undergraduate, has led to her receiving multiple awards, accolades, and recognition on the national stage that includes being the recipient of a *2017 Ernest F. Hollings Undergraduate Scholarship* and having been selected as a *2018 Barry Goldwater Scholar Honorable Mention*.

We believe one of the reasons for this is because Ms. Jones has embraced the student-scholar model, recognizing the importance of placing the content she is learning in the classroom into practice by participating in numerous research experiences. During her time at Millersville University, Ms. Jones has had the opportunity to participate in five distinct research experiences, two multi-year experiences within the university and three off-campus summer opportunities, all of which were either funded by state agencies, the National Science Foundation (NSF), or the National Oceanic and Atmospheric Administration (NOAA). Ms. Jones also participated in the National Atmospheric Deposition Program focused on monitoring wet deposition of ions and trace metals along with the NSF-funded education deployment project called *Student Experience in Airborne Research-Mid-Atlantic Region* (SEAR-MAR). For this project, she assisted

with leading the effort to take charge of the daily operations (e.g. forecast science missions, conduct pre-flight briefings), the design of flight patterns for science missions, and the setup of the project's ground-based field site, consisting of an entire suite of meteorological instruments. Ms. Jones is using the results of this project to fulfill the requirements for the University Honors thesis.

These alone are significant accomplishments but they only scratch the surface of what she has accomplished within a research setting. During the 2016 summer, Ms. Jones worked with Dr. Neil Laird of Hobart and William Smith College on an NSF funded project designed to understand and quantify the portion of annual snowfall in the Great Lakes region that is associated with mesoscale lake-effect snow. From Ms. Jones' research, they were able to determine the spatial variability of the portion of annual snowfall in the vicinity of Lakes Michigan, Erie and Ontario that was produced from lake-effect snow storms during two winters. The culmination of this work resulted in the manuscript entitled "The Influence of a Lake-to-Lake Connection from Lake Huron on the Lake-effect Snowfall in the vicinity of Lake Ontario" published in the peer-reviewed *Journal of Applied Meteorology and Climatology*. As Dr. Laird noted in his December 2017 letter to the Barry Goldwater Foundation, "Erin performed the expected responsibilities of the internship and often exceeded my expectations by conducting relevant analyses that were not asked of her. In addition, she often asked insightful questions that demonstrated that she was thinking critically of her own research."

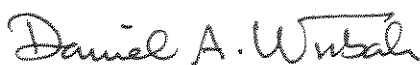
During the 2017 summer, Ms. Jones accepted an opportunity to work on another NSF funded project, this time with Dr. Christopher Nowotarski of Texas A&M University. Their research focused on understanding the dynamics of severe convective storms, with a focus on the processes that lead to tornadoes in supercell thunderstorms, near storm environments most likely to produce tornadoes, and improvements in operational weather forecasting and other severe weather hazards. As you might expect, Dr. Nowotarski had nothing but glowing words regarding Ms. Jones' performance, as mentioned in his January 2018 letter to the Barry Goldwater Foundation, "Through close interaction with Erin over the course of her project, I can confidently say that Erin is by far the best undergraduate student researcher I have encountered in my career." The culmination of their effort resulted in the manuscript entitled "Multivariate Self-Organizing Map Approach to Classifying Supercell Tornado Environments Using Near-Storm, Low-Level Wind and Thermodynamic Profiles" published in the peer-reviewed *Weather and Forecasting*. As Dr. Nowotarski noted, "Erin is the first undergraduate student who has been productive enough to warrant co-authorship on one of my group's papers..."

Finally, this past summer, Ms. Jones conducted research on a project at NOAA's Atlantic Oceanographic and Meteorological Laboratory/Hurricane Research Division (AOML/HRD) under the direction of Dr. Hui Christophersen and Dr. David Nolan. This project, which was a component of her Ernest Hollings Scholarship, simulated flight-level vertical velocity data with the goal of quantifying spiral gravity waves radiating from tropical cyclones. As part of this research, Ms. Jones participated in flight missions on the NOAA WP-3D Hurricane Hunter. We anticipate another manuscript stemming from this research.

Ms. Jones is a truly exceptional and well-rounded student involved in numerous co-curricular activities. While Dr. DeCaria highlighted five reasons why Ms. Jones stands out from among her peers (persistence, problem-solving skills, hands-on researcher, ability to plan ahead and multitask, and work ethic), he also notes "... one more reason why Erin stands apart from other brilliant students. She is multi-dimensional." Ms. Jones' interests extend well beyond the sciences into the performing arts. She is an accomplished dancer with a passion for pursuing several dance forms. She was a member of the Women's Choir, is an active member of the University's American Meteorological Society (AMS) Student Chapter, and holds elected positions in the Honors College Student Association. Ms. Jones is also articulate and personable. She serves as a peer mentor for both of the previously mentioned student organizations, is lead forecaster for the University's Campus Weather Service, and has given numerous national presentations of her research as well as public presentations to the local community. As Dr. Nowotarski noted, "Both [of her research] presentations drew praise from my colleagues, asking who this superstar was and when she'd be applying to grad school so they could recruit her into their group!" We will be immensely sorry to see her go!

In conclusion, Ms. Jones is an outstanding student scholar, leader, and member of our university community. She is collaborative, sincere, and caring, embodying the very best qualities of a Millersville University student. Through her maturity, self-motivation, inquisitive nature, and clear sense of purpose, she has chartered her own bold path and is prepared to embrace the unknown challenges that await. As Dr. Clark notes, "In my 30 years of undergraduate teaching, mentoring, and supervising research, only a handful of students stand out with the intellectual acumen, motivation, potential, and work ethic of Ms. Erin Jones." Therefore, I am honored to enthusiastically endorse Ms. Erin Jones for the 2019 Syed Ali-Zaidi Award for Academic Excellence.

Sincerely,



Daniel A. Wubah, Ph.D.  
President

Enclosures

c: Dr. Vilas A. Prabhu, Provost and Vice President, Academic Affairs  
Dr. Michael Jackson, Dean, College of Science and Technology  
Dr. James Delle, Associate Provost, Academic Administration  
Dr. Richard Clark, Chair, Department of Earth Sciences  
Ms. Alice McMurry, Vice President, Advancement

# Erin Jones

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## Personal Statement

As a senior at Millersville University majoring in Meteorology, I have developed analytical and communication skills through my academic program. My research experiences at academic and government institutions highlight my dedication toward my work and my aptitude for increasing my skillset. My creativity and leadership skills have also been enhanced through my extracurricular activities. I look forward to pursuing higher education in the atmospheric sciences to increase my knowledge in the field.

## Education

Millersville University of Pennsylvania; Bachelor of Science in Meteorology  
Anticipated Graduation: December 2018  
4.00 GPA through Spring 2018  
Minors: Mathematics  
Environmental Hazards and Emergency Management  
Newark High School; Valedictorian; June 2015

## Academic and Professional Accomplishments

*Student Researcher;*  
2017-2018

- Participated in the Student Experience in Airborne Research in the Mid-Atlantic Region
- Set up instruments, forecasted for the aircraft, and was a student scientist on one of the research flights
- Used data from the project in senior honors thesis working with Dr. Alex DeCaria to study the effects of assimilating local observations on high-resolution model forecasts
- Defended thesis in December 2018

*NOAA Ernest F. Hollings  
Scholarship and  
Internship; 2017-2018*

- Selected for prestigious scholarship in oceanic and atmospheric science in 2017 during sophomore year
- Internship for the program conducted at NOAA's Atlantic Oceanographic and Meteorological Laboratory/Hurricane Research Division in summer 2018
- Worked with Dr. Hui Christophersen and Dr. David Nolan studying the quantification of spiral gravity waves radiating from tropical cyclones
- Flew on a NOAA P-3 Hurricane Hunter aircraft into Tropical Storm Chris
- Gave oral presentation at NOAA's Science and Research Symposium

REU Summer  
Researcher; 2017

- Selected to participate in National Science Foundation-sponsored Atmospheric Science in the Gulf Coast Region Research Experience for Undergraduates in summer 2017
- Worked with Dr. Christopher Nowotarski on project producing statistical comparisons and simulations of supercells in environments with varying significant tornado parameters
- Gave poster presentation on research at American Meteorological Society Student Conference and Northeastern Storm Conference
- Published work in *Weather and Forecasting* in June 2018

Student Researcher;  
2016

- Selected to participate in the Summer Research Program at Hobart and William Smith Colleges in summer 2016
- Worked with Dr. Neil Laird on project studying the contribution of lake-effect snow to annual snowfall totals in the vicinity of Lake Michigan, Lake Erie, and Lake Ontario
- Gave a poster presentation on research at American Meteorological Society Student Conference
- Gave an oral presentation at Northeastern Storm Conference
- Published work in *Journal of Applied Meteorology and Climatology* in July 2018
- Work selected as one of the "Papers of Note" in the *Bulletin of the American Meteorological Society* in September 2018

## Publications

\*Lang, C.E., J. McDonald, L. Gaudet, D. Doebelin, **E.A. Jones**, and N.F. Laird, 2018: The Influence of a Lake-to-Lake Connection from Lake Huron on the Lake-effect Snowfall in the vicinity of Lake Ontario. *J. Appl. Meteor. Climatol.*, **57**, 1423-1439, <https://doi.org/10.1175/JAMC-D-17-0225.1>

Nowotarski, C.J. and **E.A. Jones**, 2018: Multivariate Self-Organizing Map Approach to Classifying Supercell Tornado Environments Using Near-Storm, Low-Level Wind and Thermodynamic Profiles. *Wea. Forecasting*, **33**, 661-670, <https://doi.org/10.1175/WAF-D-17-0189.1>

\*A summary of this work was published in the "Papers of Note" Section in the September 2018 issue of the *Bulletin of the American Meteorological Society*

## Presentations

### Oral Presentations

**Jones, E.A.**, C.E. Lang, and N.F. Laird, 2017: Contribution of lake-effect to annual snowfall totals in the vicinity of Lakes Michigan, Erie, and Ontario, *Northeastern Storm Conf.*, Saratoga Springs, NY

### Poster Presentations

**Jones, E.A.**, and C.J. Nowotarski, 2018: Statistical comparison and simulation of supercells in environments with varying Significant Tornado Parameters, *Northeastern Storm Conf.*, Saratoga Springs, NY

**Jones, E.A.**, and C.J. Nowotarski, 2018: Statistical comparison and simulation of supercells in environments with varying Significant Tornado Parameters, *Made in Millersville*, Millersville, PA

**Jones, E.A.,** and C.J. Nowotarski, 2018: Statistical comparison and simulation of supercells in environments with varying Significant Tornado Parameters, *17th Annual AMS Student Conf.*, Austin, TX, Amer. Meteor. Soc.

**Jones, E.A.,** C.E. Lang, and N.F. Laird, 2017: Contribution of lake-effect to annual snowfall totals in the vicinity of Lakes Michigan, Erie, and Ontario, *Made in Millersville*, Millersville, PA

**Jones, E.A.,** C.E. Lang, and N.F. Laird, 2017: Contribution of lake-effect to annual snowfall totals in the vicinity of Lakes Michigan, Erie, and Ontario, *16th Annual AMS Student Conf.*, Seattle, WA, Amer. Meteor. Soc.

### **Service and Extracurricular Activities**

*Honors College Student Association (HCSA);*  
August 2015—Present

- HCSA is a student-run organization in coordination with the Millersville University Honors College, requires participation in community service activities and monthly meetings
- Elected Officer: Treasurer; June 2018—Present
  - Monitor and inform members about the club's finances
  - Responsible for club's allocated and fundraiser accounts
  - Reimburse members for club-related expenses
  - Keep accurate record of funds
- Honors College Mentor; May 2016—Present
  - Guide a freshman Honors College student through first year
- Elected Officer: Membership Retention Chair; June 2017—May 2018
  - Act as a liaison between members of the club and the elected board
  - Surveyed membership and communicated information to board

*American Meteorological Society (AMS) Student Chapter;*  
August 2015—Present

- Participated in many AMS chapter events including meetings and seminars
- Volunteer for Public Weather Awareness Day (PWAD)
  - PWAD is a yearly event in which the public is invited to Millersville University to learn about meteorology
  - Assisted with preparation for event and ran a table presenting educational activities
- Met-mentor; August 2016—Present
  - Guide a freshman meteorology student through first year and participate in bonding events

*Campus Weather Service;* August 2015—Present

- Work weekly shift in the Millersville University Weather Information Center to compose and record weather forecasts for the university and surrounding area
- Lead Forecaster; August 2016—Present
  - Train new members and review forecasts before distribution

*Expressions Dance;*  
August 2015—Present

- Participate in three to six dance classes a week
- Perform in dance recital every semester
- Chosen for self-choreographed solo in Fall 2018



- Emerald Isle Academy of Irish Dance; August 2012—Present*
  - Participate in dance classes during university breaks
  - Perform in yearly recital and local performances
  - Compete in Irish dance competitions
- WxChallenge; September 2015—Present*
  - Participant in national competition
  - Top ten undergraduate forecaster at university for the previous three years (8 out of 45 students in 2015/16; 3 out of 30 students in 2016/17; and 3 out of 23 students in 2017/18)
  - In 2017/18—wild card contender for the junior/senior undergraduate level and “Sweet 16” participant for the national tournament
- National Atmospheric Deposition Program (NADP) Collector; April 2016—June 2017*
  - Collect rain samples for NADP
  - Record and archive information about the quality of the samples
- Mathematics Tutor; October—December 2015*
  - Tutored College Algebra weekly
- Women's Choir; August 2015—June 2016*
  - Participated in two classes a week
  - Performed in two to three concerts a semester

### **Upcoming Work Experience**

*Science Undergraduate Laboratory Internships (SULI) Intern; Brookhaven National Laboratory; Upton, NY; Starting January 2019*

### **Scholarships**

#### **National Scholarships**

- American Meteorological Society Senior Named Scholarship: Dickerson Virtual Endowment Scholarship in Meteorology; 2018
- Ernest F. Hollings Undergraduate Scholarship; 2017
- National Weather Association Phillips Family Undergraduate Scholarship for Meteorology; 2017
- American Meteorological Society Freshman Scholarship; 2015
- National Merit Foundation Special Scholarship; 2015
- Washington Crossing Foundation Scholarship; 2015

#### **State Scholarships**

- Edward W Cooch Environmental Scholarship; 2015
- Diamond State Scholarship; 2015
- Michael C. Ferguson Achievement Award Scholarship; 2011 and 2013

#### **Local Scholarships**

- Dr. Frederick Kutz- Science Scholarship; 2015
- Robert Chambers- Physics Scholarship; 2015
- Ancient Order of Hibernians Scholarship; 2015

## University Scholarships

- Henry Bitner Scholarship; 2017 and 2018
- Paul & Caroline Beideman Honors College Scholarship; 2018
- Andrew and Clara Kissh Academic Scholarship; 2015

## Grants

### University Grants

- Student Grants for Research and Creative Activity; 2016
- Undergraduate Travel Fellowship; 2016
- Textbook Grant; 2015

## Awards

### National Awards

- Barry Goldwater Scholarship: Honorable Mention; 2018

### University Awards

- Millersville University Dean's List; 2015, 2016, 2017, and 2018
- Honors College Academic Achievement Award; 2016, 2017, and 2018
- Partial Differential Equations Course Honors; 2017
- Probability and Statistics Course Honors; 2017
- Expressions Dance Beginner Hip Hop Dance Award; 2017
- Ordinary Differential Equations Course Honors; 2016
- Expressions Dance Modern Dance Award; 2015