

# **Mississippi Affordable College Savings Program**

Independent Auditor's Reports and Financial Statements

June 30, 2017



**Mississippi Affordable College Savings Program**  
**June 30, 2017**

**Contents**

<b>Independent Auditor’s Report .....</b>	<b>1</b>
 <b>Financial Statements</b>	
Statement of Fiduciary Net Position.....	4
Statement of Changes in Fiduciary Net Position.....	5
Notes to Financial Statements .....	6
 <b>Required Supplementary Information</b>	
Schedule of the Employer’s Proportionate Share of the Net Pension Liability.....	22
Schedule of the Employer’s Contributions .....	23
 <b>Independent Auditor’s Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards .....</b>	
	<b>24</b>

## Independent Auditor's Report

Board of Directors  
College Savings Plans of Mississippi  
Mississippi Affordable College Savings Program  
Jackson, Mississippi

### Report on the Financial Statements

We have audited the accompanying financial statements of Mississippi Affordable College Savings Program (the Program), which are comprised of the statement of fiduciary net position as of June 30, 2017, and the statement of changes in fiduciary net position for the year then ended and the related notes to the financial statements.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Mississippi Affordable College Savings Program as of June 30, 2017, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

***Emphasis of Matter***

As discussed in *Note 1*, the financial statements of the Program are intended to present the fiduciary net position and changes in fiduciary net position only for the portion of the fiduciary activities of the State of Mississippi that is attributable to the transactions of the Program. They do not purport to, and do not present fairly, the fiduciary net position of the State of Mississippi as of June 30, 2017, and the changes in its fiduciary net position for the year then ended, in conformity with the accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

***Other Matter***

***Required Supplementary Information***

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the financial statements. Such missing information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board (GASB), who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic or historical context. Our opinion on the financial statements is not affected by this missing information.

Accounting principles generally accepted in the United States of America require that the pension information listed in the table of contents be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by GASB, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2017, on our consideration of the Program's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Program's internal control over financial reporting and compliance.

*BKD, LLP*

Jackson, Mississippi  
November 17, 2017

**Mississippi Affordable College Savings Program**  
**Statement of Fiduciary Net Position**  
**June 30, 2017**

	<b>3318400000</b>	<b>3318300000</b>	<b>3318500000</b>	
	<b>Trust</b>	<b>Administrative</b>	<b>Endowment</b>	<b>Total</b>
	<b>Fund</b>	<b>Fund</b>	<b>Fund</b>	
<b>Assets and Deferred Outflows of Resources</b>				
Cash and cash equivalents	\$ 10	\$ 44,859	\$ 1,000	\$ 45,869
Accounts and other receivables	-	20	-	20
Investment securities	212,309,039	-	-	212,309,039
<b>Total assets</b>	<b>212,309,049</b>	<b>44,879</b>	<b>1,000</b>	<b>212,354,928</b>
Deferred outflows of resources	-	40,925	-	40,925
<b>Total assets and deferred outflows of resources</b>	<b>\$ 212,309,049</b>	<b>\$ 85,804</b>	<b>\$ 1,000</b>	<b>\$ 212,395,853</b>
<b>Liabilities, Deferred Inflows of Resources and Fiduciary Net Position</b>				
<b>Liabilities</b>				
Accounts and warrants payable	\$ -	\$ 3,147	\$ -	\$ 3,147
Payable for securities transactions, redemptions and management fees	41,269	-	-	41,269
Compensated absences	-	11,356	-	11,356
Net pension liability	-	178,625	-	178,625
<b>Total liabilities</b>	<b>41,269</b>	<b>193,128</b>	<b>-</b>	<b>234,397</b>
Deferred inflows of resources	-	475	-	475
Fiduciary net position held in trust	212,267,780	(107,799)	1,000	212,160,981
<b>Total liabilities, deferred inflows of resources and fiduciary net position</b>	<b>\$ 212,309,049</b>	<b>\$ 85,804</b>	<b>\$ 1,000</b>	<b>\$ 212,395,853</b>

**Mississippi Affordable College Savings Program**  
**Statement of Changes in Fiduciary Net Position**  
**Year Ended June 30, 2017**

	<b>3318400000</b> <b>Trust</b> <b>Fund</b>	<b>3318300000</b> <b>Administrative</b> <b>Fund</b>	<b>3318500000</b> <b>Endowment</b> <b>Fund</b>	<b>Total</b>
<b>Additions</b>				
Investment earnings				
Interest	\$ 297,328	\$ 709	\$ -	\$ 298,037
Dividends	3,517,390	-	-	3,517,390
Net realized gain and net appreciation in fair value of investments	13,449,724	-	-	13,449,724
Subscriptions	20,433,474	-	-	20,433,474
Program manager transfers	-	153,245	-	153,245
	<u>37,697,916</u>	<u>153,954</u>	<u>-</u>	<u>37,851,870</u>
Total additions				
<b>Deductions</b>				
Redemptions	16,169,594	-	-	16,169,594
Management fees	863,411	-	-	863,411
Salaries and travel	-	145,946	-	145,946
Contractual services	-	19,926	-	19,926
Commodities and supplies	-	291	-	291
	<u>17,033,005</u>	<u>166,163</u>	<u>-</u>	<u>17,199,168</u>
Total deductions				
<b>Net Increase (Decrease)</b>	20,664,911	(12,209)	-	20,652,702
<b>Fiduciary Net Position, Beginning of Year</b>	191,602,869	(95,590)	1,000	191,508,279
<b>Fiduciary Net Position, End of Year</b>	<u>\$ 212,267,780</u>	<u>\$ (107,799)</u>	<u>\$ 1,000</u>	<u>\$ 212,160,981</u>

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### Note 1: Organization

Mississippi Affordable College Savings Program (MACS or the Program) was created by the 2000 Session of the Mississippi Legislature to assist qualified students in financing costs of attending institutions of higher education, to encourage timely financial planning for higher education, provide a savings program for those persons who wish to save to meet post-secondary educational needs beyond the traditional baccalaureate curriculum and to provide a choice of programs to persons who determine that the overall educational needs of their families are best provided by either a savings trust agreement under MACS or a prepaid tuition contract under Mississippi Prepaid Affordable College Tuition Program (MPACT). MACS operates under the provisions of Mississippi Code Ann., Section 37-155-101 through Section 37-155-125. The administration functions of MACS are delegated to the State of Mississippi Treasury Department (State Treasury). The Program is governed by the 13-member College Savings Plans of Mississippi Board of Directors (the Board) consisting of the following members: the State Treasurer (or designee), the Commissioner of Higher Education (or designee), the Executive Director of the Community and Junior College Board (or designee), the Department of Finance and Administration Executive Director (or designee), one member from each congressional district as appointed by the Governor with the advice and consent of the Senate and four nonvoting advisory members appointed by the Lieutenant Governor and the Speaker of the Mississippi House of Representatives. The Board has authority to appoint investment managers, adopt resolutions for the administration of the Program and establish investment policies for the Program. TIAA-CREF Tuition Financing, Inc. (TFI), a subsidiary of Teachers Insurance and Annuity Association of America (TIAA), and the Board entered into a management agreement under which TFI served as Program Manager until June 25, 2017. On June 26, 2017 Intuition College Savings Solution, LLC (Intuition) began serving as Program Administrator. MACS is operated in a manner such that it is exempt from registration as an investment company under the Investment Company Act of 1940.

Contributions to the Program can be made among 10 investment options.

- **Managed Allocation Option**

*Investment Objective.* The Managed Allocation Option seeks to match the investment objective and level of risk to the investment horizon by taking into account the beneficiary's current age and the number of years before the beneficiary turns 18 and is expected to enter an eligible educational institution.

*Investment Strategy.* Depending on the beneficiary's age, contributions to this investment option will be placed in one of nine age bands, each of which has a different investment objective and investment strategy. The age bands for younger beneficiaries seek a favorable long-term return by investing primarily in mutual funds that primarily invest in equity securities, which may have greater potential for returns than debt securities, but which also have greater risk than debt securities. As a beneficiary nears college age, the age bands invest less in mutual funds that invest primarily in equity securities and invest



# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

more heavily in mutual funds that invest in fixed-income securities and in a funding agreement to preserve capital.

- **Aggressive Allocation Option**

*Investment Objective.* This investment option seeks a favorable long-term return.

*Investment Strategy.* This investment option invests in the same mutual funds and at the same percentages as the Managed Allocation Option age band for beneficiaries aged 0-4 years. This investment option invests primarily in mutual funds that invest primarily in equity securities and, to a lesser extent, in mutual funds that invest primarily in debt securities.

- **Moderate Allocation Option**

*Investment Objective.* This investment option seeks moderate growth.

*Investment Strategy.* This investment option invests in the same mutual funds and at the same percentages as the Managed Allocation Option age band for beneficiaries aged 9-10 years. This investment option invests in mutual funds that invest primarily in equity securities and in mutual funds that invest primarily in debt securities.

- **Conservative Allocation Option**

*Investment Objective.* This investment option seeks a conservative to moderate total return.

*Investment Strategy.* This investment option invests in the same mutual funds and at the same percentages as the Managed Allocation Option age band for 15-year-old beneficiaries. This investment option invests primarily in mutual funds that invest primarily in debt securities and, to a lesser extent, in mutual funds that invest primarily in equity securities.

- **Diversified Equity Option**

*Investment Objective.* This investment option seeks to provide a favorable long-term return, mainly from capital appreciation.

*Investment Strategy.* This investment option invests 100% of its assets in mutual funds that invest primarily in equity securities

- **Fixed Income Option**

*Investment Objective.* This investment option seeks to provide a moderate long-term rate of return primarily through current income.

*Investment Strategy.* This investment option invests in mutual funds that invest primarily in debt securities.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

- **U.S. Large-Cap Stock Index Option**

*Investment Objective.* This investment option seeks to provide a favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of equity securities of large domestic companies selected to track U.S. equity markets based on a market index.

*Investment Strategy.* This investment option invests in mutual funds that invest primarily in equity securities.

- **International Equity Fund Option**

*Investment Objective.* This investment option seeks to provide favorable long-term total return, mainly through capital appreciation, by investing primarily in a portfolio of foreign equity investments based on a market index.

*Investment Strategy.* This investment option invests in mutual funds that invest primarily in equity securities.

- **Bond Fund Option**

*Investment Objective.* This investment option seeks to provide a favorable long-term total return, mainly from current income, by primarily investing in a portfolio of fixed-income securities that is designed to produce a return that corresponds with the total return of the U.S. investment-grade bond market based on a broad bond index.

*Investment Strategy.* This investment option invests in mutual funds that invest primarily in fixed income funds.

- **Guaranteed Option**

*Investment Objective.* This investment option seeks to preserve capital and provide a stable return.

*Investment Strategy.* The assets in this investment option are allocated to a funding agreement issued by TIAA-CREF Life, which is an affiliate of TFI, to the Board as the policyholder on behalf of the trust. The funding agreement provides a minimum guaranteed rate of return on the amounts allocated to it by the investment option. The minimum effective annual interest rate will be neither less than 1% nor greater than 3% at any time. The guarantee is made by the insurance company to the policyholder, not to account owners. In addition to the guaranteed rate of interest to the policyholder, the funding agreement allows for the possibility that additional interest may be credited as declared periodically by TIAA-CREF Life. The rate of any additional interest is declared in advance for a period of up to 12 months and is not guaranteed for any future periods.

Effective April 1, 2016, accumulations (including contributions and earnings) under the Funding Agreement for the Guaranteed Option as of March 31, 2016, were credited to

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

MACS with an effective interest rate of 1.20% and were guaranteed to earn this rate through March 31, 2017, subject to the claims-paying ability of TIAA-CREF Life Insurance Company. Effective April 1, 2017 through March 31, 2018, the rate increased to 1.50%.

Teachers Advisors, Inc., an affiliate of TFI, is registered with the Securities and Exchange Commission (the Commission) as an investment advisor and provides investment advisory services to the TIAA-CREF Institutional Mutual Funds. Teachers Personal Investor Services, Inc., an affiliate of TFI, and TIAA-CREF Individual & Institutional Services, Inc., also an affiliate of TFI, both of which are registered with the Commission as broker-dealers and are members of the National Association of Securities Dealers, Inc., provide the telephone counseling, marketing and information services required of TFI.

### **Note 2: Summary of Significant Accounting Policies**

#### ***Basis of Presentation***

The financial statements contained in this report are prepared using the economic resources measurement focus on the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when services or benefits are received. The financial statements are prepared in conformity with accounting principles generally accepted in the United States of America and standards of the Governmental Accounting Standards Board (GASB).

#### ***Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred inflows of resources, liabilities and deferred outflows of resources and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of changes in fiduciary net position during the reporting period. Actual results could differ from those estimates.

#### ***Cash and Cash Equivalents***

The Program defines cash equivalents as demand deposit accounts and cash in the State Treasury.

#### ***Investments***

The fair value of the investments in mutual funds is based on the net asset values of the funds as of the close of business on the financial statement date.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

The value of the TIAA-CREF Life Insurance Company Funding Agreement is based on the principal contributed and interest credited less any amounts withdrawn. The Funding Agreement is considered a nonparticipating, interest-earning investment contract and is accounted for at cost, which approximates fair value. Because it is valued at cost, it is not included in the fair value hierarchy in *Note 6*.

Securities transactions are accounted for as of the date the securities are purchased or sold (trade date). Interest income is recorded as earned. Dividend income is recorded on the ex-dividend date. Net realized gain and net appreciation in fair value of investments include unrealized and realized gains and losses. Realized gains and losses are based upon the specific identification method.

The Program's assets are invested in various types of investment securities and in different companies and multiple markets. Investment securities are exposed to several risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term, and that such changes could materially affect the amounts reported in the Program's financial statements.

### ***Deferred Outflows/Inflows of Resources***

Transactions not meeting the definition of an asset or liability that result in the consumption or acquisition of net position in one period that are applicable to future periods are reported as deferred outflows of resources and deferred inflows of resources.

### ***Contributions and Withdrawals***

Contributions by an account owner are evidenced through the issuance of units in the particular assigned investment option. Contributions received by the Program Manager before the close of trading on the New York Stock Exchange on any business day are credited to the account to which the contribution is made within one business day thereafter. Contributions are invested in units of the assigned investment option on the business day the contribution is credited to the account owner's account. Withdrawals are based on the net asset value calculated for such investment option at the end of the business day on which the Program Manager processes the withdrawal request.

### ***Exchanges***

For certain investment options, account balances will automatically be exchanged from one portfolio to another more conservative portfolio as the beneficiary gets older. The transfers of funds between portfolios are referred to as exchanges, age band roll or customer age band restructuring. The amounts of contributions and withdrawals reported in the statement of changes in fiduciary net position do not include these exchanges, as they have no impact on the overall net financial position or changes in net financial position of the Program.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### ***Penalty Fees***

The Program does not retain penalty fees on nonqualified withdrawals; however, the account owner may be subject to additional federal income taxes relating to any earnings on nonqualified withdrawals.

### ***Tax Status***

MACS is exempt from federal income tax as a qualified state tuition program under Section 529 of the Internal Revenue Code of 1986. Section 1806 of the Small Business Job Protection Act of 1996 added Section 529. This code section provides that a qualified state tuition program is exempt from all federal income taxation except that relating to unrelated business income. The term “qualified state tuition program” is defined generally in Code Section 529 as a program established and maintained by a state or agency and instrumentality thereof under which, among other things, a person may make cash contributions to an account established solely for meeting the qualified higher education expenses of the designated beneficiary of the account. To the extent necessary and applicable, the Program documents include the qualification criteria required by Section 529.

### ***Reporting Entity***

MACS is part of the State of Mississippi’s reporting entity and is reported as a private purpose trust fund (fiduciary fund) in the State of Mississippi Comprehensive Annual Financial Report (CAFR). These financial statements and the accompanying notes relate solely to MACS. MPACT issues separate financial statements.

MACS is comprised of the following three fiduciary funds:

- Trust Fund (Fund 3318400000) includes contributions from MACS’ account owners and serves to acquire, invest and disburse amounts from account owners pursuant to savings trust agreements.
- Administrative Fund (Fund 3318300000) includes administrative fees from MACS for the purpose of administration and marketing of the Program.
- Endowment Fund (Fund 3318500000) includes contributions and donations to MACS and serves to receive and disburse monies as specified by the Board.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### Note 3: Management Agreements

For its services as Program Manager from July 1, 2016 through June 25, 2017, TFI and related entities are paid an annual management fee of 0.5% of the average daily net assets of the Program, plus specific investment management fees for the underlying investments in the TIAA-CREF Institutional Mutual Funds. Total management fees earned by TFI and related entities for the year ended June 30, 2017, was \$1,122,089, which included \$851,113 of fees on average daily net assets of the Program and \$270,976 of fees on the underlying Program investments in the TIAA-CREF Institutional Mutual Funds. Fees earned by TFI and related entities on the underlying Program investments were not charged to the Program but were paid by account owners according to the Program management agreements and are reported in the statement of changes in fiduciary net position as customer redemptions.

For its services as Plan Administrator from June 26, 2017 through June 30, 2017, Intuition and related entities are paid an annual administration fee of 0.6% of the average daily net assets of the Program. Total administration fees earned by Intuition and related entities for the year ended June 30, 2017 was \$12,298, calculated on the average daily net assets of the Program. In addition to the Plan Administration fee, Intuition is authorized to withdraw an annual paper delivery fee for those plan participants not electing to receive information electronically.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### Note 4: Investment Securities

As of June 30, 2017, investment securities consisted of the following:

	<u>Cost</u>	<u>Fair Value</u>
Schwab Mutual Funds		
Treasury Inflation Protected Securities Fund	\$ 10,926,562	\$ 10,854,164
TIAA-CREF Institutional Mutual Funds		
International Equity Fund	7,083,929	7,054,897
International Equity Index Fund	23,765,319	23,763,311
Small-Cap Blend Index Fund	2,424,030	2,419,721
Large-Cap Value Index Fund	32,118,414	32,084,373
Large-Cap Growth Index Fund	25,211,774	24,897,804
S&P 500 Index Fund	15	15,159
Small-Cap Equity Fund	3,091,169	3,092,771
Bond Index Fund	31,866,222	31,667,982
Short-Term Bond Index Fund	7,416,223	7,408,480
Vanguard Mutual Funds		
REIT Index Fund	11,151,018	10,960,806
High-Yield Corporate Fund	1,694,135	1,701,694
Total International Bond Index Fund	1,701,100	1,693,277
Emerging Markets Stock Index Fund	8,561,970	8,520,959
TIAA-CREF Life Insurance Company		
Funding Agreement	<u>46,159,351</u>	<u>46,173,641</u>
	<u>\$ 213,171,231</u>	<u>\$ 212,309,039</u>

At June 30, 2017, the net unrealized depreciation of mutual funds was \$862,192, consisting of gross unrealized appreciation of \$38,595 and gross unrealized depreciation of \$900,787.

### **Custodial Credit Risk**

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, MACS will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the government and are held by either the counterparty or the counterparty's trust department or agent. The Mississippi Code

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

of 1972, Section 37-155-115(3) requires that all investments be clearly marked to indicate ownership by MACS and, to the extent possible, be registered in the name of MACS. Investments of the Program are entirely uninsured and are held by third parties in the name of MACS for the benefit of account owners.

For deposits, custodial credit risk is the risk that in the event of a bank failure, MACS' deposits may not be returned to it. Deposits of the Program are entirely insured or collateralized with securities.

### Credit Risk

Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. Credit ratings of the underlying bonds in the bond funds held by MACS consisted of the following at June 30, 2017.

	Vanguard Total International Bond Index Fund	TIAA-CREF Short-Term Bond Index Fund	TIAA-CREF Bond Index Fund	Vanguard High-Yield Corporate Fund	Schwab Treasury Inflation Protection Securities Fund
Credit rating					
AAA	22%	41%	71%	3%	100%
AA	28%	11%	5%	-	-
A	31%	15%	10%	-	-
BBB	19%	23%	14%	6%	-
BB	-	5%	-	46%	-
B or below	-	3%	-	45%	-
Not rated	-	2%	-	-	-
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

### Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. MACS does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates.



# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

The maturities of the underlying bonds in the bond funds held by MACS consisted of the following at June 30, 2017.

	<b>Vanguard Total International Bond Index Fund</b>	<b>TIAA-CREF Short-Term Bond Index Fund</b>	<b>TIAA-CREF Bond Index Fund</b>	<b>Vanguard High-Yield Corporate Fund</b>	<b>Schwab Treasury Inflation Protection Securities Fund</b>
Maturity					
Less than 1 year	1%	23%	2%	6%	-
1-5	40%	66%	43%	27%	39%
6-10	31%	7%	40%	58%	42%
More than 10	28%	4%	15%	9%	19%
Total	100%	100%	100%	100%	100%
Weighted average maturity in years	7.77	1.92	5.97	4.31	7.65

### **Foreign Currency Risk**

Foreign currency and investment risk is the risk that changes in exchange rates that will adversely affect the fair value of investments in foreign securities. The Program does not have any direct investment in foreign fixed income securities. Certain program options allocate assets to underlying mutual funds that are exposed to foreign currency and investment risk. At June 30, 2017, the TIAA-CREF International Equity Fund, the TIAA-CREF International Equity Index Fund, the Vanguard Total International Bond Index Fund and the Vanguard Emerging Markets Stock Index Fund significantly invested in foreign securities.

### **Note 5: Program Manager Transfers**

Expenditures from the Administrative Fund during 2017 were funded through payments to the State Treasury on behalf of MACS by TFI from fees charged to MACS account owners as specified by the Management Agreement.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### Note 6: Disclosures About Fair Value of Assets and Liabilities

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements must maximize the use of observable inputs and minimize the use of unobservable inputs. There is a hierarchy of three levels of inputs that may be used to measure fair value:

- Level 1** Quoted prices in active markets for identical assets or liabilities
- Level 2** Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities
- Level 3** Unobservable inputs supported by little or no market activity and are significant to the fair value of the assets or liabilities

#### Recurring Measurements

The following table presents the fair value measurements of assets and liabilities recognized in the accompanying financial statements measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements fall at June 30, 2017:

	<b>Fair Value</b>	<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Mutual Funds	\$ 166,135,398	\$ 166,135,398	\$ -	\$ -

#### Investments

Where quoted market prices are available in an active market, securities are classified within Level 1 of the valuation hierarchy. If quoted market prices are not available, then fair values are estimated by using quoted prices of securities with similar characteristics or independent asset pricing services and pricing models, the inputs of which are market-based or independently sourced market parameters, including, but not limited to, yield curves, interest rates, volatilities, prepayments, defaults, cumulative loss projections and cash flows. Such securities are classified in Level 2 of the valuation hierarchy. In certain cases where Level 1 or Level 2 inputs are not available, securities are classified within Level 3 of the hierarchy. MACS held no Level 2 or Level 3 investments at June 30, 2017.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### Note 7: Pension Plan

#### ***Plan Description***

MACS contributes to the Public Employees' Retirement System of Mississippi (PERS), a cost sharing, multiple-employer defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Benefit provisions are established by state law and may be amended only by the State of Mississippi Legislature. PERS issues a publicly available financial report that includes financial statements and required supplementary information. That information may be obtained by writing the Public Employees' Retirement System of Mississippi, PERS Building, 429 Mississippi Street, Jackson, MS 39201-1005 or by calling 601.359.3589 or 1.800.444.PERS or online at <http://www.pers.ms.gov>.

#### ***Benefits Provided***

For the cost-sharing plan, participating members who are vested and retire at or after age 60 or those who retire regardless of age with at least 30 years of creditable service (25 years of creditable service for employees who became members of PERS before July 1, 2011) are entitled, upon application, to an annual retirement allowance payable monthly for life in an amount equal to 2.00% of their average compensation for each year of creditable service up to and including 30 years (25 years for those who became members of PERS before July 1, 2011), plus 2.50% for each additional year of creditable service with an actuarial reduction in the benefit for each year of creditable service below 30 years, or the number of years in age that the member is below 65, whichever is less. Average compensation is the average of the employee's earnings during the four highest compensated years of creditable service. A member may elect a reduced retirement allowance payable for life with the provision that, after death, a beneficiary receives benefits for life or for a specified number of years. Benefits vest upon completion of 8 years of membership service (4 years of membership service for those who became members of PERS before July 1, 2007). PERS also provides certain death and disability benefits. In the event of death prior to retirement of any member whose spouse and/or children are not entitled to a retirement allowance, the deceased member's accumulated contributions and interest are paid to the designated beneficiary.

A cost-of-living adjustment (COLA) payment is made to eligible retirees and beneficiaries. The COLA is equal to 3.00% of the annual retirement allowance for each full fiscal year of retirement up to the year in which the retired member reaches age 60 (55 for those who became members of PERS before July 1, 2011), with 3.00% compounded for each fiscal year thereafter.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### **Contributions**

Plan provisions and the PERS Board of Trustees' authority to determine contribution rates are established by Mississippi Code Ann. Section 25-11-1 et seq., (1972, as amended) and may be amended only by the Mississippi Legislature.

Policies for PERS provide for employer and member contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are adequate to accumulate sufficient assets to pay benefits when due. Contribution rates for PERS are established in accordance with actuarial contribution requirements determined through the most recent June 30 annual valuation and adopted by the PERS Board of Trustees. Employer contribution rates consist of an amount for service cost; the amount estimated to finance benefits earned by current members during the year; and an amount for amortization of the unfunded actuarial accrued liability. For determining employer contribution rates, the actuary evaluates the assets of the plan based on a five-year smoothed expected return with 20.00% of a year's excess or shortfall of expected return recognized each year for five years. Contribution rates are determined using the entry age actuarial cost method and include provisions for an annual 3.00% cost-of-living increase calculated according to the terms of the respective plan.

Employees are required to contribute 9.00% of their annual pay. The employer's contractually required contribution rate for the year ended June 30, 2017, was 15.75% of annual payroll, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For the year ended June 30, 2017, contributions to the pension plan from MACS were \$15,420.

### ***Pension Liabilities, Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions***

At June 30, 2017, MACS reported a liability of \$178,625 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. MACS' proportion of the net pension liability was based on employer contributions to PERS for the plan's fiscal year ended June 30, 2016, relative to the total employer contributions of participating employers to PERS. At June 30, 2016, MACS' proportion was 0.001%, which was consistent with its proportion measured as of June 30, 2015.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

For the year ended June 30, 2017, MACS recognized pension expense of \$8,864. At June 30, 2017, MACS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources.

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Difference between expected and actual experience	\$ 4,983	\$ -
Changes of assumptions or other inputs	8,420	475
Net difference between projected and actual earnings on pension plan investments	12,102	-
Contributions subsequent to the measurement date	15,420	-
	<u>\$ 40,925</u>	<u>\$ 475</u>

At June 30, 2017, MACS reported \$15,420 as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date that will be recognized as a reduction of the net pension liability in the year ending June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

<b>Year Ending June 30</b>	<b>Amount</b>
2018	\$ 8,690
2019	6,542
2020	6,270
2021	3,528
	<u>\$ 25,030</u>

### **Actuarial Assumptions**

The total pension liability in the June 30, 2016, actuarial valuation was determined using the following actuarial assumptions and other inputs:

Inflation	3.00%
Salary increases	3.75% -19.00%, average, including inflation
Investment rate of return	7.75%, net of pension plan investment expense, including inflation

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

Mortality rates were based on the RP-2014 Healthy Annuitant Blue Collar Table Projected with Scale BB to 2016, set forward one year for males.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of an actuarial experience study for the period July 1, 2010 through June 30, 2014. The experience report is dated May 4, 2015.

For the year ended June 30, 2016, the long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected nominal returns, net of pension plan investment expense and the assumed rate of inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The target allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2016, are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation Percentage</b>	<b>Long-term Expected Real Rate of Return</b>
U.S. Broad	34%	5.20%
International equity	19%	5.00%
Emerging markets equity	8%	5.45%
Fixed income	20%	0.25%
Real assets	10%	4.00%
Private equity	8%	6.15%
Cash	1%	-0.50%
	<u>100%</u>	

### **Discount Rate**

The discount rate used to measure the total pension liability was 7.75% at June 30, 2016. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate (9.00%), and that participating employer contributions will be made at the current employer contribution rate (15.75%). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

# Mississippi Affordable College Savings Program

## Notes to Financial Statements

June 30, 2017

### ***Sensitivity of MACS' Proportionate Share of the Net Pension Liability to Changes in the Discount Rate***

MACS' proportionate share of the net pension liability has been calculated using a discount rate of 7.75%. The following presents MACS' proportionate share of the net pension liability calculated using a discount rate 1% higher and 1% lower than the current rate.

	<b>1.00% Decrease (6.75%)</b>	<b>Current Discount Rate (7.75%)</b>	<b>1.00% Increase (8.75%)</b>
Proportionate share of the net pension liability	\$ 229,037	\$ 178,625	\$ 136,799

### ***Pension Plan Fiduciary Net Position***

Detailed information about the pension plan's fiduciary net position is available in the separately issued CAFR, which can be obtained at <http://www.pers.ms.gov>.

### ***Payable to the Pension Plan***

At June 30, 2017, MACS has no amounts payable for outstanding contributions to the pension plan required for the year ended June 30, 2017.

## **Required Supplementary Information**



# Mississippi Affordable College Savings Program

## Schedule of the Employer's Proportionate Share of the Net Pension Liability

	2017	2016	2015	2014
Employer's proportion of the net pension liability	0.001%	0.001%	0.001%	0.001%
Employer's proportionate share of the net pension liability	\$ 178,625	\$ 154,580	\$ 121,382	\$ 138,559
Employer's covered-employee payroll	\$ 79,441	\$ 52,216	\$ 75,625	\$ 66,926
Employer's proportionate share of the net pension liability as a percentage of its covered employee payroll	224.9%	296.0%	160.5%	207.0%
Plan fiduciary net position as a percentage of the total pension liability	57.47%	61.70%	67.21%	61.02%

**Notes to Schedule:**

Information above is presented as of the measurement date.

The average expected remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees) determined as of the beginning of the measurement period decreased from 3.72 years for the 2015 measurement period to 3.48 for the 2016 measurement period.

Information is not currently available for prior years; additional years will be displayed as they become available.

## Mississippi Affordable College Savings Program

### Schedule of the Employer's Contributions

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Contractually required contribution	\$ 15,420	\$ 12,512	\$ 8,224	\$ 11,911
Contributions in relation to the contractually required contribution	<u>15,420</u>	<u>12,512</u>	<u>8,224</u>	<u>11,911</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Employer's covered-employee payroll	\$ 97,905	\$ 79,441	\$ 52,216	\$ 75,625
Contributions as a percentage of covered-employee payroll	15.75%	15.75%	15.75%	15.75%

**Notes to Schedule:**

Information above is presented as of the employer's fiscal year.

Information is not currently available for prior years; additional years will be displayed as they become available.

**Changes in Assumptions:**

In 2015 and later, the expectation of retired life mortality was changed to the RP-2014 Healthy Annuitant Blue Collar Table Projected to 2016 using Scale BB rather than the RP-2000 Combined Mortality Table Projected, which was used prior to 2015. In 2015, the expectation of disabled mortality was changed to the RP-2014 Disabled Retiree Table, rather than the RP-2000 Disabled Mortality Table, which was used prior to 2015. Withdrawal rates, pre-retirement mortality rates, disability rates and service retirement rates were also adjusted to more closely reflect actual experience. In 2015, assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience. Finally, the price inflation and investment rate-of-return assumptions were changed from 3.50% to 3.00% and 8.00% to 7.75%, respectively.

In 2016, the assumed rate of interest credited to employee contributions was changed from 3.50% to 2.00%.

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

Board of Directors  
College Savings Plans of Mississippi  
Mississippi Affordable College Savings Program  
Jackson, Mississippi

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of Mississippi Affordable College Savings Program (the Program), which comprise the statement of fiduciary net position as of June 30, 2017, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated November 17, 2017, which contained an "Emphasis of Matter" paragraph regarding the entity reflected in the financial statements and "Other Matter" paragraph regarding the omission and inclusion of required supplementary information.

***Internal Control Over Financial Reporting***

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

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

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

***Compliance***

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

***Purpose of this Report***

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

**BKD, LLP**

Jackson, Mississippi  
November 17, 2017