Independent Auditor's Reports and Financial Statements

June 30, 2018



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#### **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, 2018, 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.



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#### **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, 2018, 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 Matters**

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, 2018, 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.

As discussed in *Note* 9, in 2018, the Program adopted Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. 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 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 and other postemployment benefit 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

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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.

#### **Report on Summarized Comparative Information**

We have previously audited the Program's 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 17, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 3, 2019, on our consideration of the Program's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the 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.

Jackson, Mississippi January 3, 2019

BKD,LLP

# Statement of Fiduciary Net Position June 30, 2018 (With Summarized Information for 2017)

	2018							
	3	318400000 Trust Fund		318300000 ministrative Fund	_	318500000 Indowment Fund	Total	2017 Total
Assets and Deferred Outflows								
of Resources								
Cash and cash equivalents	\$	-	\$	24,441	\$	1,000	\$ 25,441	\$ 45,869
Accounts and other receivables		275		-		-	275	20
Investment securities	_	227,643,175		-		-	 227,643,175	 212,309,039
Total assets		227,643,450		24,441		1,000	227,668,891	212,354,928
Deferred outflows of resources		-		145,044		_	145,044	 40,925
Total assets and deferred outflows								
of resources	\$	227,643,450	\$	169,485	\$	1,000	\$ 227,813,935	\$ 212,395,853
Liabilities, Deferred Inflows of Resources and Fiduciary Net Position (Deficit) Liabilities Accounts and warrants payable Payable for securities transactions, redemptions and management fees Compensated absences Net other postemployment benefit liability	\$	- 100,030 -	\$	9,267 - 7,016 12,484	\$	- - - -	\$ 9,267 100,030 7,016 12,484	\$ 3,147 41,269 11,356
Net pension liability		-		332,468		-	 332,468	 178,625
Total liabilities		100,030		361,235		-	461,265	234,397
Deferred inflows of resources		-		19,429		-	19,429	475
Fiduciary net position (deficit) held in trust		227,543,420		(211,179)		1,000	 227,333,241	 212,160,981
Total liabilities, deferred inflows of resources and fiduciary net position	\$	227,643,450	\$	169,485	\$	1,000	\$ 227,813,935	\$ 212,395,853

### Statement of Changes in Fiduciary Net Position Year Ended June 30, 2018 (With Summarized Information for 2017)

	2018									
	3318400000 Trust Fund		3318300000 Administrative Fund		3318500000 Endowment Fund		Total			2017 Total
Additions										
Investment earnings										
Interest	\$	_	\$	353	\$	_	\$	353	\$	298,037
Dividends	Ψ	5,726,905	Ψ	-	Ψ	_	Ψ	5,726,905	Ψ	3,517,390
Net realized gain and net appreciation		3,720,703						3,720,703		3,317,370
in fair value of investments		6,450,382		_		_		6,450,382		13,449,724
Subscriptions		30,745,765		_		_		30,745,765		20,433,474
Administrative transfers		-		120,000				120,000		153,245
Total additions		42,923,052		120,353				43,043,405		37,851,870
Deductions										
Redemptions		26,476,410		-		_		26,476,410		16,169,594
Management fees		1,171,002		-		-		1,171,002		863,411
Salaries and travel		-		180,106		-		180,106		145,946
Contractual services		-		27,695		-		27,695		19,926
Commodities and supplies				2,132				2,132		291
Total deductions		27,647,412		209,933				27,857,345		17,199,168
Net Increase (Decrease)		15,275,640		(89,580)				15,186,060		20,652,702
Fiduciary Net Position, Beginning of Year, as Previously Reported		212,267,780		(107,799)		1,000		212,160,981		191,508,279
Cumulative Effect of Change in Accounting Principle				(13,800)				(13,800)		
Fiduciary Net Position, Beginning of Year, as Restated		212,267,780		(121,599)		1,000		212,147,181		191,508,279
Fiduciary Net Position, End of Year	\$	227,543,420	\$	(211,179)	\$	1,000	\$	227,333,241	\$	212,160,981

## Notes to Financial Statements June 30, 2018

#### 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.

The Tax Cuts and Jobs Act, passed by Congress in December 2017, expanded the definition of a qualified higher education expense under Section 529 of the Internal Revenue Code. Expenses for tuition in connection with enrollment or attendance at elementary or secondary public, private or religious school are now included as a qualified higher education expense.

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

## Notes to Financial Statements June 30, 2018

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 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.

## Notes to Financial Statements June 30, 2018

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

#### • 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 Insurance Company (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

## Notes to Financial Statements June 30, 2018

interest is declared in advance for a period of up to 12 months and is not guaranteed for any future periods.

Effective April 1, 2017, accumulations (including contributions and earnings) under the Funding Agreement for the Guaranteed Option as of March 31, 2017, were credited to MACS with an effective interest rate of 1.50% and were guaranteed to earn this rate through March 31, 2018, subject to the claims-paying ability of TIAA-CREF Life. Effective April 1, 2018 through March 31, 2019, the rate increased to 1.65%.

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 (GAAP) and standards of the Governmental Accounting Standards Board (GASB).

#### **Prior Year Comparative Totals**

The financial statements include certain prior year summarized comparative information in total, but not by fund. Such information does not include sufficient detail to constitute a complete presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the Program's 2017 financial statements from which the information was derived.

#### Use of Estimates

The preparation of financial statements in conformity with GAAP 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

## Notes to Financial Statements June 30, 2018

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.

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.

## Notes to Financial Statements June 30, 2018

#### 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 reporting periods are reported as deferred outflows of resources and deferred inflows of resources. At June 30, 2018 and 2017, deferred outflows of resources and deferred inflows of resources were comprised of the following:

	Deferred Outflows of Resources						
		2018					
Pension plan ( <i>Note 7</i> ) OPEB plan ( <i>Note 8</i> )	\$	144,512 532	\$	40,925			
	\$	145,044	\$	40,925			
	Def	erred Inflow	s of Re	esources			
		2018		2017			
Pension plan ( <i>Note 7</i> ) OPEB plan ( <i>Note 8</i> )	\$	17,687 1,742	\$	475			
	\$	19,429	\$	475			

#### 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

## Notes to Financial Statements June 30, 2018

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.

#### 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.

#### **Pensions**

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

#### Cost-Sharing Defined Benefit Other Postemployment Benefit Plan

MACS participates in a cost-sharing multiple-employer defined benefit other postemployment benefit plan, the State of Mississippi State and School Employees' Life and Health Insurance Plan, (the OPEB Plan). For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the OPEB Plan and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis as they are reported by the OPEB Plan. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### 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.

## Notes to Financial Statements June 30, 2018

#### 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 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.

#### Note 3: Management Agreements

For its services as Plan Administrator for the year ended June 30, 2018 and 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 were \$1,348,791 and \$12,298 for the years ended June 30, 2018 and 2017, respectively, 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.

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, 2107, 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 redemptions.

## Notes to Financial Statements June 30, 2018

#### Note 4: Investment Securities

As of June 30, 2018 and 2017, investment securities consisted of the following:

	20	18	2017			
	Cost	Fair Value	Cost	Fair Value		
Schwab Mutual Funds						
Treasury Inflation Protected						
Securities Fund	\$ 11,799,876	\$ 11,773,001	\$ 10,926,562	\$ 10,854,164		
TIAA-CREF Institutional Mutual Funds						
International Equity Fund	6,745,725	6,990,826	7,083,929	7,054,897		
International Equity Index Fund	25,057,709	25,584,026	23,765,319	23,763,311		
Small-Cap Blend Index Fund	2,396,869	2,637,326	2,424,030	2,419,721		
Large-Cap Value Index Fund	33,585,957	34,152,680	32,118,414	32,084,373		
Large-Cap Growth Index Fund	23,035,904	26,866,076	25,211,774	24,897,804		
S&P 500 Index Fund	1,155,666	1,169,310	15	15,159		
Small-Cap Equity Fund	3,218,657	3,338,678	3,091,169	3,092,771		
Bond Index Fund	35,199,056	34,233,145	31,866,222	31,667,982		
Short-Term Bond Index Fund	7,873,612	7,784,559	7,416,223	7,408,480		
Vanguard Mutual Funds						
REIT Index Fund	12,566,807	12,271,188	11,151,018	10,960,806		
High-Yield Corporate Fund	1,957,389	1,892,633	1,694,135	1,701,694		
Total International Bond Index Fund	1,890,521	1,891,286	1,701,100	1,693,277		
Emerging Markets Stock Index Fund	8,614,474	8,726,557	8,561,970	8,520,959		
TIAA-CREF Life Insurance Company						
Funding Agreement	47,694,984	48,331,884	46,159,351	46,173,641		
			,			
	\$ 222,793,206	\$ 227,643,175	\$213,171,231	\$ 212,309,039		

At June 30, 2018, the net unrealized appreciation of mutual funds was \$4,849,969, consisting of gross unrealized appreciation of \$6,292,183 and gross unrealized depreciation of \$1,442,214.

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 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

## Notes to Financial Statements June 30, 2018

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, 2018 and 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
2018					
Credit rating					
AAA	22%	74%	71%	5%	100%
AA	27%	5%	3%	-	-
A	34%	12%	12%	-	-
BBB	17%	9%	14%	5%	-
BB	-	-	-	46%	-
B or below	-	-	-	44%	-
Not rated					
Total	100%	100%	100%	100%	100%
2017					
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	100%	100%	100%	100%	100%

## Notes to Financial Statements June 30, 2018

#### 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.

The maturities of the underlying bonds in the bond funds held by MACS consisted of the following at June 30, 2018 and 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
2018					
Maturity					
Less than 1 year	-	3%	2%	7%	-
1-5	41%	97%	39%	25%	41%
6-10	31%	-	43%	58%	41%
More than 10	28%		16%	10%	18%
Total	100%	100%	100%	100%	100%
Weighted average					
maturity in years	7.91	1.92	6.06	4.38	7.67
2017					
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

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## Notes to Financial Statements June 30, 2018

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, 2018, 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: Administrative Transfers

Expenditures from the Administrative Fund during 2018 were funded through payments to the State Treasury on behalf of MACS by Intuition during the year ended June 30, 2018 and from June 26, 2017 through June 30, 2017 and from TFI from July 1, 2016 through June 25, 2017, from fees charged to MACS' account owners as specified by the Management Agreement.

#### 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

## Notes to Financial Statements June 30, 2018

#### 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, 2018 and 2017:

	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
June 30, 2018 Mutual Funds	\$ 179,311,291	\$ 179,311,291	\$ -	\$ -
June 30, 2017 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, 2018.

#### 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,

## Notes to Financial Statements June 30, 2018

Jackson, Mississippi 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.

#### **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

## Notes to Financial Statements June 30, 2018

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, 2018, 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 years ended June 30, 2018 and 2017, contributions to the pension plan from MACS were \$13,222 and \$15,420, respectively.

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

At June 30, 2018 and 2017, MACS reported a liability of \$332,468 and \$178,625, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2017 and 2016, respectively, and the total pension liability used to calculate the net pension liability was determined by actuarial valuations as of those dates. MACS' proportion of the net pension liability was based on employer contributions to PERS for the plan's fiscal years ended June 30, 2017 and 2016, relative to the total employer contributions of participating employers to PERS. At June 30, 2017, MACS' proportion was 0.002%, which was an increase of .001% from its proportion measured as of June 30, 2016.

## Notes to Financial Statements June 30, 2018

For the years ended June 30, 2018 and 2017, MACS recognized pension expense of \$67,468 and \$8,864, respectively. At June 30, MACS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources.

	Out	eferred tflows of sources	Inf	eferred lows of sources
June 30, 2018				
Difference between expected and actual experience	\$	2,388	\$	2,426
Changes of assumptions or other inputs		3,864		284
Net difference between projected and actual				
earnings on pension plan investments		-		14,977
Change in proportion		125,038		
Contributions subsequent to the measurement date		13,222		
	\$	144,512	\$	17,687
	Out	eferred tflows of sources	Inf	eferred lows of sources
June 30, 2017	Out	tflows of	Inf	lows of
June 30, 2017 Difference between expected and actual experience	Out	tflows of	Inf	lows of
•	Out Re	tflows of sources	Infi Res	lows of
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual	Out Re	4,983 8,420	Infi Res	lows of sources
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual earnings on pension plan investments	Out Re	4,983 8,420 12,102	Infi Res	lows of sources
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual	Out Re	4,983 8,420	Infi Res	lows of sources

## Notes to Financial Statements June 30, 2018

At June 30, 2018 and 2017, MACS reported \$13,222 and \$15,420, respectively, 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, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30,		Amount
2019	\$	51,998
2020		51,725
2021		16,302
2022		(6,422)
	\$	113,603

#### **Actuarial Assumptions**

The total pension liability in the June 30, 2017, actuarial valuation was determined using the following actuarial assumptions and other inputs:

Inflation 3.00%

Salary increases 3.75% -18.50%, average, including inflation Investment rate of return 7.75%, net of pension plan investment expense,

including inflation

Mortality rates were based on the RP-2014 Healthy Annuitant Blue Collar Table Projected with Scale BB to 2022, set forward one year for males.

The actuarial assumptions used in the June 30, 2017, valuation were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2016. The experience report was dated April 18, 2017.

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

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.

## Notes to Financial Statements June 30, 2018

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 was dated May 4, 2015.

For the years ended June 30, 2017 and 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, 2017, are summarized in the following table:

Asset Class	Target Allocation Percentage		
U.S. Broad	27%	4.60%	
International equity	18%	4.50%	
Emerging markets equity	4%	4.75%	
Global	12%	4.75%	
Fixed income	18%	0.75%	
Real assets	10%	3.50%	
Private equity	8%	5.10%	
Emerging debt	2%	2.25%	
Cash	1%	-	
	100%		

#### Discount Rate

The discount rate used to measure the total pension liability was 7.75% at June 30, 2017 and 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.

## Notes to Financial Statements June 30, 2018

## 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.

	 1.00% Decrease (6.75%)		Current Discount Rate (7.75%)		1.00% Increase (8.75%)	
Proportionate share of the net pension liability	\$ 436,054	\$	332,468	\$	246,469	

#### 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, 2018 and 2017, MACS has no amounts payable for outstanding contributions to the pension plan.

#### Note 8: Other Postemployment Benefit Plan

#### Plan Description

The following brief description of the State of Mississippi State and School Employees' Life and Health Insurance Plan (the OPEB Plan) is provided for general information purposes only. Participants should refer to Title 25 Chapter 15 of the Mississippi statutes as amended or the OPEB Plan Document for more complete information.

The OPEB Plan was established by Section 25-15-3 et seq., Mississippi Code Ann. (1972), which may be amended only by the State Legislature. The State and School Employees' Health Insurance Management Board (the OPEB Board) administers the OPEB Plan. The OPEB Plan is self-insured and is financed through premiums collected from employers, employees, retirees and COBRA participants. The OPEB Plan is maintained solely for the benefit of eligible employees, dependents and retirees. The OPEB Plan is a fund of the State of Mississippi (the State).

## Notes to Financial Statements June 30, 2018

The 14-member OPEB Board, which administers the OPEB Plan, is comprised of the Chairman of the Workers' Compensation Commission; the State Personnel Director; the Commissioner of Insurance; the Commissioner of Higher Education; the State Superintendent of Public Education; the Executive Director of the Department of Finance and Administration; the Executive Director of the Mississippi Community College Board; the Executive Director of the Public Employees' Retirement System; two appointees of the Governor; the Chairman of the Senate Insurance Committee, or his designee; the Chairman of the House of Representatives Insurance Committee, or his designee; the Chairman of the Senate Appropriations Committee, or his designee; and the Chairman of the House of Representatives' Appropriations Committee, or his designee. The OPEB Board has a fiduciary responsibility to manage the funds of the OPEB Plan. The OPEB Plan maintains a budget approved by the OPEB Board.

#### Benefits Provided

The OPEB Plan provides for Other Postemployment Benefits (OPEB) as a multiple-employer defined benefit OPEB plan for units of state government, political subdivisions, community colleges and school districts. A trust was created June 28, 2018 for the OPEB Plan and, while no trust was in place for the June 30, 2017 plan year-end, for purposes of comparability for future periods, terminology used herein is based on the plan being a cost-sharing multiple-employer defined benefit OPEB plan. Benefits of the OPEB Plan consist of an implicit rate subsidy, which is essentially the difference between the average cost of providing health care benefits to retirees under age 65 and the average cost of providing health care benefits to all participants when premiums paid by retirees are not age-adjusted.

#### **Contributions**

Employees' premiums are funded primarily by their employers. Retirees must pay their own premiums, as do active employees for spouse and dependent medical coverage. The OPEB Board has the sole authority for setting life and health insurance premiums for the OPEB Plan.

Per Section 12-15-15 (10) Mississippi Code Ann. (1972), a retired employee electing to purchase retiree life and health insurance will have the full cost of such insurance premium deducted monthly from his state retirement plan check or direct billed for the cost of the premium if the retirement check is insufficient to pay for the premium. If the OPEB Board determined actuarially that the premium paid by the participating retirees adversely affects the overall cost of the OPEB Plan to the State, then the OPEB Board may impose a premium surcharge, not to exceed 15%, upon such participating retired employees who are under the age for Medicare eligibility and who are initially employed before January 1, 2006. For participating retired employees who are under the age for Medicare eligibility and who are initially employed on or after January 1, 2006, the OPEB Board may impose a premium surcharge in an amount actuarially determined to cover the full cost of insurance.

Pursuant to the authority granted by Mississippi Statute, the Board has the authority to establish and change premium rates for the participants, employers and other contributing entities. An

## Notes to Financial Statements June 30, 2018

outside consulting actuary advises the OPEB Board regarding changes in premium rates. If premium rates are changed, they generally become effective at the beginning of the next calendar year or next fiscal year.

Plan participants are not subject to supplemental assessment in the event of a premium deficiency. At the time of premium payment, the risk of loss due to incurred benefit costs is transferred from the participant to the OPEB Plan. If the assets of the OPEB Plan were to be exhausted, participants would not be responsible for the OPEB Plan's liabilities.

For the year ended June 30, 2018, contributions to the OPEB Plan from MACS were \$532.

## OPEB Liabilities, OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2018, MACS reported a liability of \$12,484 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. MACS' proportion of the net OPEB liability was determined by comparing the employer's average monthly employees participating in the Plan with the total average employees participating in the plan in the fiscal year of all employers. This allocation was utilized because the level of premiums contributed by each employer is the same for any employee regardless of plan participation elections made by an employee. At June 30, 2017, MACS' proportion was 0.0016%, which was an increase of 0.0002% from its proportion measured as of June 30, 2016.

For the year ended June 30, 2018, MACS recognized OPEB expense of \$426. At June 30, 2018, MACS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Outfl	erred lows of ources	Infl	Deferred Inflows of Resources		
Changes of assumptions or other inputs Changes in proportion and differences between MACS' contributions and proportionate share of	\$	-	\$	636		
contributions		-		1,106		
Contributions subsequent to the measurement date		532				
	\$	532	\$	1,742		

## Notes to Financial Statements June 30, 2018

At June 30, 2018, MACS reported \$532, as deferred outflows of resources related to OPEB resulting from MACS' contributions subsequent to the measurement date that will be recognized as a reduction of the net OPEB liability in the year ending June 30, 2019. Other amounts reported as deferred inflows of resources related to OPEB at June 30, 2018, will be recognized in OPEB expense as follows:

Year Ending June 30	,	Amount			
2019	\$	(306)			
2020		(306)			
2021		(306)			
2022		(306)			
2023		(306)			
Thereafter		(212)			
	\$	(1,742)			

#### **Actuarial Methods and Assumptions**

Year Ending June 30,	une 30, 2018	
Actuarial valuation date	June 30, 2017	June 30, 2016
Measurement date	June 30, 2017	June 30, 2016
Experience study	April 18, 2017	April 18, 2017
Actuarial assumptions		
Actuarial cost method	Entry Age Normal	Entry Age Normal
Inflation rate	3.00%	3.00%
Long-term expected rate of return	NA	NA
Discount rate	3.56%	3.01%
Projected cash flows	NA	NA
Projected salary increases	3.25%-18.50%	3.25%-18.50%
Health care cost trend rates	7.75% decreasing to	7.75% decreasing to
	5.00% by 2023	5.00% by 2023

Both preretirement and postretirement mortality rates were based on the RP 2014 Healthy Annuitant Blue Collar Table projected with Scale BB to 2022, male rates set forward 1 year and adjusted by 106% for males at all ages, and females adjusted to 90% for ages less than 76, 95% for age 76, 105% for age 78 and 110% for ages 79 and greater. Post-disability mortality rates were based on the RP 2014 Disabled Retiree Mortality Table set forward 4 years for males and 3 years for females.

## Notes to Financial Statements June 30, 2018

#### **Discount Rate**

The discount rate used to measure the total OPEB liability at June 30, 2016 and 2017 was based on an average of the Bond Buyer General Obligation 20-year Municipal Bond Index Rates during the month of June published at the end of each week by the Bond Buyer.

#### Long-term Expected Rate of Return

Since no trust was set up as of June 30, 2017, there is no projection of cash flows for the OPEB Plan and no long-term expected rate of return on plan assets.

## Sensitivity of MACS' Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate and Health Care Cost Trend Rates

MACS' proportionate share of the net OPEB liability has been calculated using a discount rate of 3.56%. The following presents MACS' proportionate share of the net OPEB liability calculated using a discount rate 1% higher and 1% lower than the current discount rate.

		1.00% Decrease (2.56%)		Current Discount Rate (3.56%)		Ir	1.00% ncrease 4.56%)
Proportionate share of the net OPEB liability	3	\$	12,814	\$	12,484	\$	12,239

MACS' proportionate share of the net OPEB liability has been calculated using health care trend rates of 7.75% decreasing to 5.00% by 2023. The following presents MACS' proportionate share of the net OPEB liability calculated using health care cost trend rates 1% higher and 1% lower than the current health care cost trend rates.

	1	1.00% Decrease	He	Current alth Care ost Trend Rates	_	1.00% Increase		
Proportionate share of the net OPEB liability		11,530	\$	12,484	\$	13,574		

## Notes to Financial Statements June 30, 2018

#### **OPEB Plan Fiduciary Net Position**

Detailed information about the OPEB Plan's fiduciary net position is available in the separately issued plan financial report.

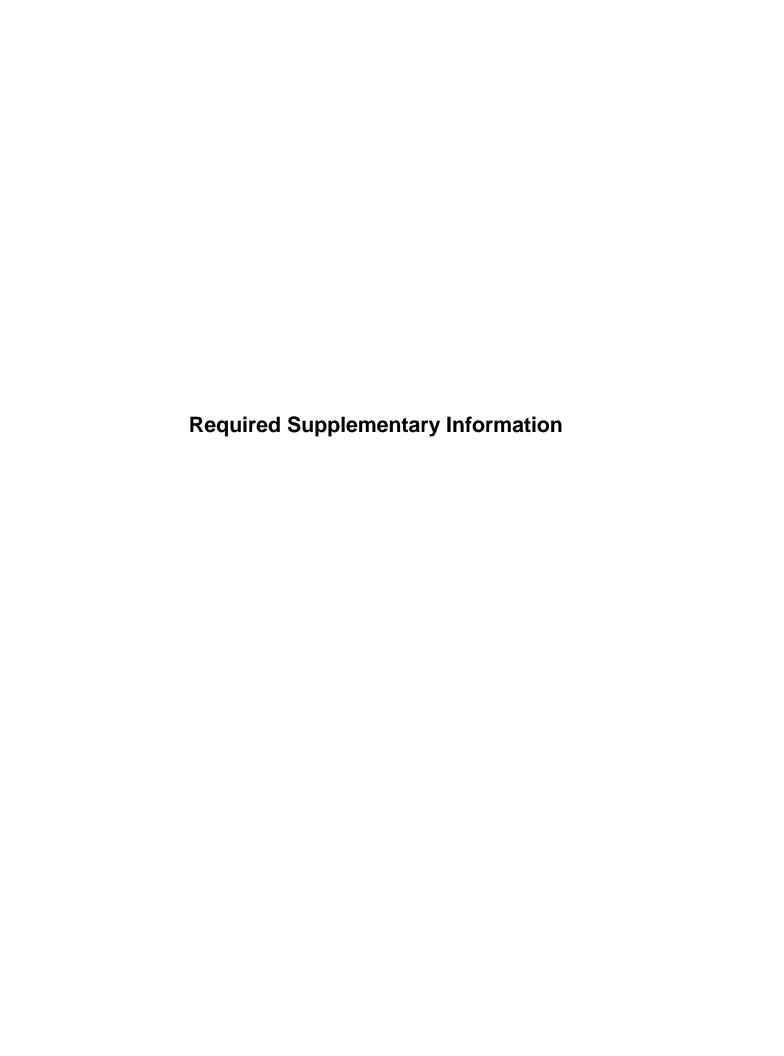
#### Payable to the OPEB Plan

MACS did not have a payable for any outstanding amounts of contributions to the OPEB Plan required for the year ended June 30, 2018.

#### Note 9: Change in Accounting Principle

In 2018, MACS changed its method of accounting for its postemployment benefits other than pensions as a result of implementing GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which became effective for reporting periods beginning after June 15, 2017.

The impact of the change in accounting principle was to improve accounting and financial reporting for OPEB. This statement established standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources and expenses. The statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Changes made to comply with the adoption of GASB 75 were reported as an adjustment to beginning net position as of July 1, 2017. Beginning fiduciary net position as of July 1, 2017, was decreased by \$13,800 as a result of adopting GASB 75.



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

	2018	2017	2016	2015	2014
Employer's proportion of the net pension liability	0.002%	0.001%	0.001%	0.001%	0.001%
Employer's proportionate share of the net pension liability	\$ 332,468	\$ 178,625	\$ 154,580	\$ 121,382	\$ 138,559
Employer's covered-employee payroll	97,905	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	339.6%	224.9%	296.0%	160.5%	207.0%
Plan fiduciary net position as a percentage of the total pension liability	61.49%	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 3.48 years for the 2016 measurement period to 3.37 for the 2017 measurement period.

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

#### Schedule of the Employer's Pension Contributions

	2018	2017	2016	2015	2014
Contractually required contribution	\$ 13,222	\$ 15,420	\$ 12,512	\$ 8,224	\$ 11,911
Contributions in relation to the contractually required contribution	13,222	15,420	12,512	8,224	11,911
Contribution deficiency (excess)	\$ 	\$ -	\$ _	\$ _	\$ -
Employer's covered-employee payroll	\$ 83,949	\$ 97,905	\$ 79,441	\$ 52,216	\$ 75,625
Contributions as a percentage of covered- employee payroll	15.75%	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%.

In 2017, the expectation of retired life mortality was changed to the RP-2014 Healthy Annuitant Blue Collar Mortality Table projected with Scale BB to 2022. Small adjustments were also made to the Mortality Table for disabled lives. In 2017, the wage inflation assumption was reduced from 3.75% to 3.25%. In 2017, withdrawal rates, pre-retirement mortality rates, disability rates and service retirement rates were also adjusted to more closely reflect actual experience. Finally, the percentage of active member disabilities assumed to be in the line of duty was increased from 6% to 7%.

#### **Changes in Benefit Provisions:**

In 2017, the interest rate on employee contributions shall be calculated based on the money market rate as published by *The Wall Street Journal* on December 31 of each preceding year, with a minimum rate of 1% and a maximum rate of 5%.

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

	2018			2017		
Employer's proportion of the net OPEB liability		0.0016%		0.0018%		
Employer's proportionate share of the net OPEB liability	\$	12,484	\$	14,291		
Employer's covered-employee payroll		97,905		79,441		
Employer's proportionate share of the net OPEB liability as a percentage of its covered employee payroll		12.8%		18.0%		
Plan fiduciary net position as a percentage of the total OPEB liability		0.00%		0.00%		

#### **Notes to Schedule:**

Information above is presented as of the measurement date.

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

A trust was created June 28, 2018 for the OPEB Plan.

### Schedule of the Employer's OPEB Contributions

	2	018	2017		
Contractually required contribution	\$	532	\$	491	
Contributions in relation to the contractually required contribution		532		491	
Contribution deficiency (excess)	\$	_	\$		
Employer's covered-employee payroll	\$	83,949	\$	97,905	
Contributions as a percentage of covered- employee payroll		0.63%		0.50%	

#### **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.



# 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, 2018, 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 January 3, 2019, which contained an "Emphasis of Matters" paragraph regarding the entity reflected in the financial statements, a change in accounting principle 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.



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#### **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.

Jackson, Mississippi January 3, 2019

BKD,LLP