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Independent Auditor's Reports and Financial Statements

June 30, 2019

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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, 2019, 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.



Board of Directors College Savings Plans of Mississippi Mississippi Affordable College Savings Program Page 2

#### **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, 2019, 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, 2019, and the changes in its fiduciary net position for the year then ended, in conformity with 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 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 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.

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

We have previously audited the Program's 2018 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated January 3, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2018, 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 December 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 December 3, 2019

BKD, LLP

# Statement of Fiduciary Net Position June 30, 2019 (With Summarized Information for 2018)

	2019									
	3	318400000 Trust Fund		318300000 ministrative Fund		318500000 Indowment Fund		Total		2018 Total
Assets and Deferred Outflows of Resources										
Cash and cash equivalents Accounts and other receivables	\$	11,418	\$	19,662	\$	1,000	\$	32,080	\$	25,441 275
Investment securities		241,282,994						241,282,994		227,643,175
Total assets		241,294,412		19,662		1,000		241,315,074		227,668,891
Deferred outflows of resources		-		88,332		-		88,332		145,044
Total assets and deferred outflows of resources	•	241 204 412	•	107.004	•	1,000	•	241 402 406	•	227 912 025
of resources	3	241,294,412	\$	107,994	\$	1,000	\$	241,403,406	\$	227,813,935
Liabilities, Deferred Inflows of Resources and Fiduciary Net Position (Deficit) Liabilities Accounts and warrants payable Payable for securities transactions, redemptions and management fees	\$	104,412	\$	4,698	\$	-	\$	4,698 104,412	\$	9,267 100,030
Compensated absences		104,412		9,871		-		9,871		7,016
Net other postemployment benefit liability Net pension liability		-		10,367 166,330		- -		10,367 166,330		12,484 332,468
Total liabilities		104,412		191,266		-		295,678		461,265
Deferred inflows of resources		-		137,789		-		137,789		19,429
Fiduciary net position (deficit) held in trust		241,190,000		(221,061)		1,000		240,969,939		227,333,241
Total liabilities, deferred inflows of resources and fiduciary net position	\$	241,294,412	\$	107,994	\$	1,000	\$	241,403,406	\$	227,813,935

### Statement of Changes in Fiduciary Net Position Year Ended June 30, 2019 (With Summarized Information for 2018)

	2019								
		3318400000 Trust Fund		18300000 ninistrative Fund	End	3500000 owment und		Total	 2018 Total
Additions									
Investment earnings									
Interest	\$	-	\$	634	\$	-	\$	634	\$ 353
Dividends		6,583,626		-		-		6,583,626	5,726,905
Net realized gain and net appreciation									
in fair value of investments		5,457,211		-		-		5,457,211	6,450,382
Subscriptions		33,516,921		-		-		33,516,921	30,745,765
Administrative transfers				175,402			_	175,402	 120,000
Total additions		45,557,758		176,036				45,733,794	 43,043,405
Deductions									
Redemptions		30,695,718		-		-		30,695,718	26,476,410
Management fees		1,215,460		-		-		1,215,460	1,171,002
Salaries and travel		-		138,935		-		138,935	180,106
Contractual services		-		45,073		-		45,073	27,695
Commodities and supplies				1,910				1,910	 2,132
Total deductions		31,911,178		185,918				32,097,096	 27,857,345
Net Increase (Decrease)		13,646,580		(9,882)		-		13,636,698	15,186,060
Fiduciary Net Position, Beginning of Year		227,543,420		(211,179)		1,000		227,333,241	 212,147,181
Fiduciary Net Position, End of Year	\$	241,190,000	\$	(221,061)	\$	1,000	\$	240,969,939	\$ 227,333,241

## Notes to Financial Statements June 30, 2019

#### 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 schools 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 equity securities, which may have greater potential for returns than debt securities, but

## Notes to Financial Statements June 30, 2019

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.

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

## Notes to Financial Statements June 30, 2019

#### • 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 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

## Notes to Financial Statements June 30, 2019

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%. Effective April 1, 2019 through March 31, 2020, the rate increased \$1.85%.

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 2018 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 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.

## Notes to Financial Statements June 30, 2019

#### 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, 2019

#### 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, 2019 and 2018, deferred outflows of resources and deferred inflows of resources were comprised of the following:

	Defe	Deferred Outflows of Resources					
		2019		2018			
Pension plan ( <i>Note 7</i> ) OPEB plan ( <i>Note 8</i> )	\$	87,853 479	\$	144,512 532			
	\$	88,332	\$	145,044			
	Def	erred Inflow	s of R	esources			
		2019		2018			
Pension plan ( <i>Note 7</i> ) OPEB plan ( <i>Note 8</i> )	\$	136,220 1,569	\$	17,687 1,742			
	\$	137,789	\$	19,429			

#### **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.

## Notes to Financial Statements June 30, 2019

#### 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 (OPEB) 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, 2019

#### 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 years ended June 30, 2019 and 2018, 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 \$1,392,285 and \$1,348,791 for the years ended June 30, 2019 and 2018, respectively. 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.

## Notes to Financial Statements June 30, 2019

#### Note 4: Investment Securities

As of June 30, 2019 and 2018, investment securities consisted of the following:

	20	2019		2018	
	Cost	Fair Value	Cost	Fair Value	
Schwab Mutual Funds					
Treasury Inflation Protected					
Securities Fund	\$ 12,219,171	\$ 12,559,037	\$ 11,799,876	\$ 11,773,001	
TIAA-CREF Institutional Mutual Funds					
International Equity Fund	8,094,962	7,285,348	6,745,725	6,990,826	
International Equity Index Fund	31,446,531	32,279,731	25,057,709	25,584,026	
Small-Cap Blend Index Fund	2,889,936	2,868,548	2,396,869	2,637,326	
Large-Cap Value Index Fund	33,459,760	35,375,506	33,585,957	34,152,680	
Large-Cap Growth Index Fund	17,032,182	20,520,508	23,035,904	26,866,076	
S&P 500 Index Fund	3,089,760	3,295,592	1,155,666	1,169,310	
Small-Cap Equity Fund	3,520,322	3,182,589	3,218,657	3,338,678	
Bond Index Fund	35,610,961	36,768,187	35,199,056	34,233,145	
Short-Term Bond Index Fund	8,072,225	8,155,098	7,873,612	7,784,559	
Vanguard Mutual Funds					
REIT Index Fund	11,262,176	11,975,869	12,566,807	12,271,188	
High-Yield Corporate Fund	2,108,933	2,110,993	1,957,389	1,892,633	
Total International Bond Index Fund	2,027,781	2,117,650	1,890,521	1,891,286	
Emerging Markets Stock Index Fund	11,092,813	11,429,671	8,614,474	8,726,557	
TIAA-CREF Life Insurance Company					
Funding Agreement	50,077,050	51,358,667	47,694,984	48,331,884	
	\$ 232,004,563	\$ 241,282,994	\$ 222,793,206	\$ 227,643,175	

At June 30, 2019, the net unrealized appreciation of mutual funds was \$9,278,431, consisting of gross unrealized appreciation of \$10,447,166 and gross unrealized depreciation of \$1,168,735.

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.

#### **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 of the

## Notes to Financial Statements June 30, 2019

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, 2019 and 2018.

	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
2019					
Credit rating					
AAA	22%	72%	72%	4%	100%
AA	27%	6%	4%	-	-
A	34%	11%	11%	-	-
BBB	17%	11%	13%	6%	-
BB	-	-	-	45%	-
B or below	-	-	-	45%	-
Not rated					
Total	100%	100%	100%	100%	100%
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%

## Notes to Financial Statements June 30, 2019

#### 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, 2019 and 2018.

	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
2019					
Maturity					
Less than 1 year	1%	4%	3%	7%	-
1-5	41%	96%	44%	25%	41%
6-10	30%	-	37%	58%	43%
More than 10	28%		16%	10%	16%
Total	100%	100%	100%	100%	100%
Weighted average maturity in years	10.10	1.98	7.87	4.10	8.15
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

## Notes to Financial Statements June 30, 2019

#### 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, 2019, 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 were funded through payments to the State Treasury on behalf of MACS by Intuition during the years ended June 30, 2019 and 2018.

#### 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, 2019

#### 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, 2019 and 2018

	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, 2019 Mutual Funds	\$ 189,924,327	\$ 189,924,327	\$ -	\$ -
June 30, 2018 Mutual Funds	179,311,291	179,311,291	_	-

#### 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, 2019.

#### Note 7: Pension Plan

#### Plan Description

MACS contributes to 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, Mississippi 39201-1005, or by calling 601.359.3589 or 1.800.444.PERS or online at http://www.pers.ms.gov.

Notes to Financial Statements
June 30, 2019

#### 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 actuarial cost method and include provisions for an annual 3.00% cost-of-living increase calculated according to the terms of the respective plan.

## Notes to Financial Statements June 30, 2019

Employees are required to contribute 9.00% of their annual pay. The employer's contractually required contribution rate for the year ended June 30, 2019, 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, 2019 and 2018, contributions to the pension plan from MACS were \$14,647 and \$13,222, respectively.

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

At June 30, 2019 and 2018, MACS reported a liability of \$166,330 and \$332,468, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2018 and 2017, 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, 2018 and 2017, relative to the total employer contributions of participating employers to PERS. At June 30, 2018, MACS' proportion was 0.001%, which was a decrease of .001% from its proportion measured as of June 30, 2017.

## Notes to Financial Statements June 30, 2019

For the years ended June 30, 2019 and 2018, MACS recognized pension expense of \$9,054 and \$67,468, respectively. At June 30, MACS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources.

	Deferred Outflows of Resources		Deferred Inflows of Resources	
June 30, 2019				
Difference between expected and actual experience	\$	730	\$	1,402
Changes of assumptions or other inputs		197		93
Net difference between projected and actual				
earnings on pension plan investments		-		12,939
Changes in proportion		72,279		121,786
Contributions subsequent to the measurement date		14,647		
	\$	87,853	\$	136,220
	Out	eferred tflows of sources	Inf	eferred flows of sources
June 30, 2018	Out	tflows of	Inf	flows of
June 30, 2018 Difference between expected and actual experience	Out	tflows of	Inf	flows of
Difference between expected and actual experience Changes of assumptions or other inputs	Ou <sup>-</sup> Re	tflows of sources	Inf Re	flows of sources
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual	Ou <sup>-</sup> Re	tflows of sources	Inf Re	2,426 284
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual earnings on pension plan investments	Ou <sup>-</sup> Re	tflows of sources	Inf Re	flows of sources
Difference between expected and actual experience Changes of assumptions or other inputs Net difference between projected and actual	Ou <sup>-</sup> Re	2,388 3,864	Inf Re	2,426 284

## Notes to Financial Statements June 30, 2019

At June 30, 2019 and 2018, MACS reported \$14,647 and \$13,222, 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, 2020. 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
2020	\$	9,037
2021		(26,386)
2022		(44,917)
2023		(748)
	\$	(63,014)

#### **Actuarial Assumptions**

The total pension liability in the June 30, 2018 and 2017, actuarial valuations were determined using the following actuarial assumptions and other inputs:

Inflation 3.00%

Salary increases 3.25% -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, 2018 and 2017, valuations were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2016. The experience report is dated April 18, 2017.

For the years ended June 30, 2018 and 2017, 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.

## Notes to Financial Statements June 30, 2019

The target allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2018, are summarized in the following table:

Asset Class	Target Allocation Percentage	Long-term Expected Real Rate of Return
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, 2018 and 2017. 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, 2019

## 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.

	_	. ,		Current iscount te (7.75%)	1.00% Increase (8.75%)		
Proportionate share of the net pension liability	\$	219,009	\$	166,330	\$	122,547	

#### 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, 2019 and 2018, 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).

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;

## Notes to Financial Statements June 30, 2019

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. 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 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

## Notes to Financial Statements June 30, 2019

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 years ended June 30, 2019 and 2018, contributions to the OPEB Plan from MACS were \$479 and \$532, respectively.

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

At June 30, 2019, MACS reported a liability of \$10,367 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2018, 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, 2018, MACS' proportion was 0.0013%, which was a decrease of 0.0003% from its proportion measured as of June 30, 2017.

For the years ended June 30, 2019 and 2018, MACS recognized an OPEB credit of (\$1,758) and OPEB expense of \$426. At June 30, 2019, MACS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Outfl	erred lows of ources	Deferred Inflows of Resources			
June 30, 2019						
Changes of assumptions or other inputs	\$	-	\$	739		
Changes in proportion and differences between						
MACS' contributions and proportionate share of						
contributions		-		830		
Contributions subsequent to the measurement date		479		-		
	\$	479	\$	1,569		

## Notes to Financial Statements June 30, 2019

	Outfl	erred lows of ources	Infl	ferred ows of sources
June 30, 2018				
Changes of assumptions or other inputs	\$	-	\$	636
Changes in proportion and differences between				
MACS' contributions and proportionate share of				
contributions		-		1,106
Contributions subsequent to the measurement date		532		
	\$	532	\$	1,742

At June 30, 2019 and 2018, MACS reported \$830, 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, 2020. Other amounts reported as deferred inflows of resources related to OPEB at June 30, 2019, will be recognized in OPEB expense as follows:

Year Ending June 30	Α	mount
2020	\$	(320)
2021		(320)
2022		(320)
2023		(320)
2024		(242)
Thereafter		(47)
	\$	(1,569)

## Notes to Financial Statements June 30, 2019

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

Year Ending June 30,	2019	2018
Actuarial valuation date	June 30, 2018	June 30, 2017
Measurement date	June 30, 2018	June 30, 2017
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	4.50%	NA
Discount rate	3.89%	3.56%
Projected cash flows	NA	NA
Projected salary increases	3.25%-18.50%	3.25%-18.50%
Health care cost trend rates	7.25% decreasing to	7.75% decreasing to
	4.75% by 2028	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.

#### Discount Rate

The discount rate used to measure the total OPEB liability at June 30, 2017 and 2016 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

The long-term expected rate of return, net of OPEB Plan investment expense, including inflation, was 4.50%.

## Notes to Financial Statements June 30, 2019

## 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 3.89%. 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%		Current	1.00%		
		Decrease		Discount	Increase		
		(2.89%)		Ite (3.89%)	(4.89%)		
Proportionate share of the net OPEB liability	\$	11,492	\$	10,367	\$	9,400	

MACS' proportionate share of the net OPEB liability has been calculated using health care trend rates of 7.25% decreasing to 4.75% by 2028. 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.

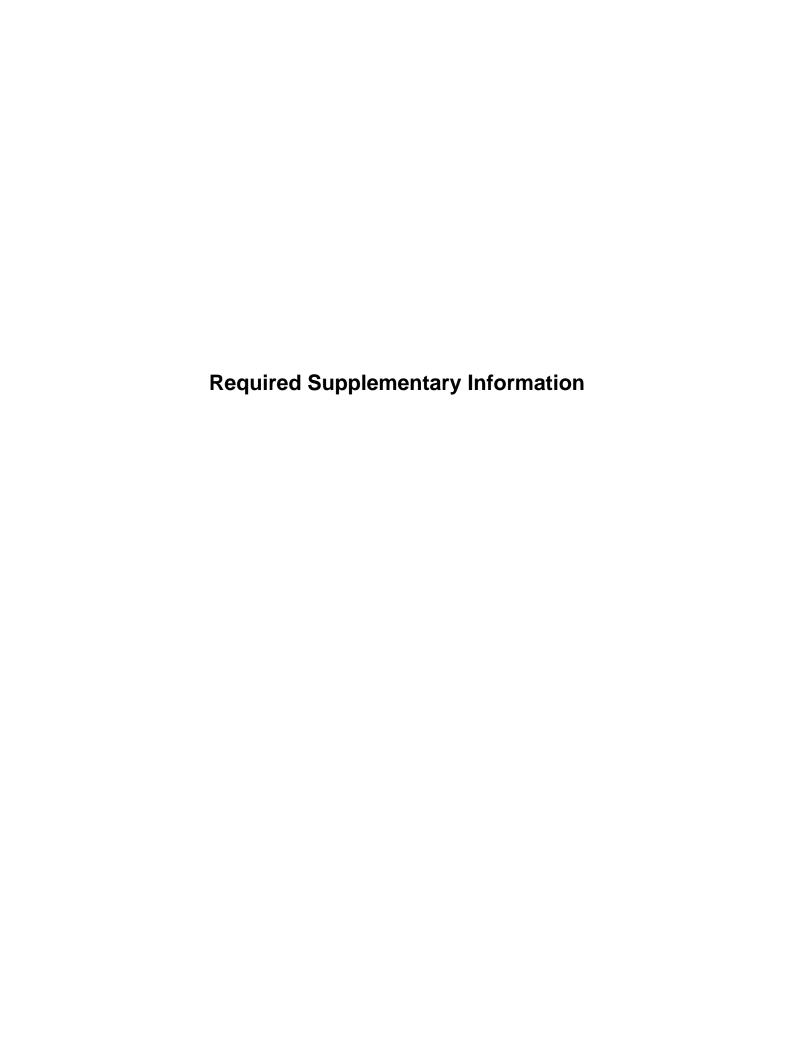
	1.00% ecrease	He: Co	Current alth Care est Trend Rates	1.00% Increase	
Proportionate share of the net OPEB liability	\$ 9,604	\$	10,367	\$	11,235

#### **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, 2019.



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

	 2019	2018	2017	2016	2015	2014
Employer's proportion of the net pension liability	0.001%	0.002%	0.001%	0.001%	0.001%	0.001%
Employer's proportionate share of the net pension liability	\$ 166,330	\$ 332,468	\$ 178,625	\$ 154,580	\$ 121,382	\$ 138,559
Employer's covered-employee payroll	92,997	83,949	97,905	79,441	52,216	75,625
Employer's proportionate share of the net pension liability as a percentage of its covered employee payroll	178.9%	396.0%	182.4%	194.6%	232.5%	183.2%
Plan fiduciary net position as a percentage of the total pension liability	62.54%	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 increased from 3.37 years for the 2017 measurement period to 3.90 for the 2018 measurement period.

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

	 2019	2018	2017	2016	2015	2014
Contractually required contribution	\$ 14,647	\$ 13,222	\$ 15,420	\$ 12,512	\$ 8,224	\$ 11,911
Contributions in relation to the contractually required contribution	 14,647	13,222	 15,420	 12,512	8,224	11,911
Contribution deficiency (excess)	\$ 	\$ -	\$ 	\$ 	\$ 	\$ 
Employer's covered-employee payroll	\$ 92,997	\$ 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%	15.75%

#### Notes to Schedule:

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

#### 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 2016, 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%.

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

	2019	2018	2017
Employer's proportion of the net OPEB liability	0.0013%	0.0016%	0.0018%
Employer's proportionate share of the net OPEB liability	\$ 10,367	\$ 12,484	\$ 14,291
Employer's covered-employee payroll	92,997	83,949	97,905
Employer's proportionate share of the net OPEB liability as a percentage of its covered employee payroll	11.1%	14.9%	14.6%
Plan fiduciary net position as a percentage of the total OPEB liability	0.00%	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.

### **Schedules of the Employer's OPEB Contributions**

	2019		2018	2017		
Contractually required contribution	\$	479	\$ 532	\$	491	
Contributions in relation to the contractually required contribution		479	 532		491	
Contribution deficiency (excess)	\$	_	\$ _	\$	_	
Employer's covered-employee payroll	\$	92,997	\$ 83,949	\$	97,905	
Contributions as a percentage of covered- employee payroll		0.52%	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.



# Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

#### **Independent Auditor's Report**

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, 2019, 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 December 3, 2019, which contained an "Emphasis of Matter" paragraph regarding the entity reflected in the financial statements and an "Other Matter" paragraph regarding the omission and inclusion of required supplementary information.

#### Internal Control Over Financial Reporting

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.



Board of Directors College Savings Plans of Mississippi Mississippi Affordable College Savings Program Page 35

#### Compliance and Other Matters

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

BKD, LLP

Jackson, Mississippi December 3, 2019