

Michigan State Employees' Retirement System

A Pension and Other Employee Benefit Trust Fund of the State of Michigan

Schedule of Employer Allocations and Schedule of Pension Amounts by Employer for Fiscal Year Ended September 30, 2016



**MICHIGAN OFFICE OF
RETIREMENT SERVICES**
Big Plans. Small Steps.

Prepared by

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Office of the Auditor General

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Doug A. Ringler, CPA, CIA
Auditor General

Independent Auditor's Report

Ms. Laurie Hill, Chair
State of Michigan Retirement Board
Stevens T. Mason Building
and
Mr. David L. DeVries, Director
Department of Technology, Management, and Budget
Lewis Cass Building
and
Ms. Kerrie L. Vanden Bosch, Director
Office of Retirement Services
Stevens T. Mason Building
Lansing, Michigan

Dear Ms. Hill, Mr. DeVries, and Ms. Vanden Bosch:

Report on the Schedules

We have audited the accompanying schedule of employer allocations of the Michigan State Employees' Retirement System as of and for the fiscal year ended September 30, 2016 and the related notes. We have also audited the respective totals by employer for the columns titled September 30, 2016 net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the fiscal year ended September 30, 2016 and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules 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 schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk



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assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer 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 schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer.

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

Opinions

In our opinion, the schedules referred to in the first paragraph present fairly, in all material respects, the employer allocations and the respective employers' September 30, 2016 net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total employer pension expense for the Michigan State Employees' Retirement System as of and for the fiscal year ended September 30, 2016 in accordance with accounting principles generally accepted in the United States of America.

Other Matter

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 the System as of and for the fiscal year ended September 30, 2016, and our report thereon, dated January 18, 2017, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the State of Michigan Retirement Board, the Department of Technology, Management, and Budget, the Office of Retirement Services, and the System's participating employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Sincerely,

A handwritten signature in black ink that reads 'Doug Ringler'. The signature is written in a cursive, slightly slanted style.

Doug Ringler
Auditor General
September 7, 2017

**MICHIGAN STATE EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER ALLOCATIONS
AS OF AND FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2016**

Employer Name	Total Required Employer Contributions	Proportionate Share
GOVERNMENTAL ACTIVITIES		
State Of Michigan	\$ 664,956,559	0.9304995971
State Building Authority	62,350	0.0000872481
BUSINESS TYPE ACTIVITIES		
Information Technology Fund	31,942,961	0.0446990286
State Lottery Fund	2,999,047	0.0041966825
Liquor Purchase Revolving Fund	1,903,392	0.0026634900
Office Services Revolving Fund	1,762,146	0.0024658398
Correctional Industries Revolving Fund	825,305	0.0011548809
Motor Transport Fund	463,681	0.0006488462
Attorney Discipline System	114,471	0.0001601837
Risk Management Fund	92,905	0.0001300053
COMPONENT UNITS		
Michigan State Housing Development Authority	5,000,536	0.0069974443
Michigan Strategic Fund	476,201	0.0006663668
Michigan Economic Development Corporation	1,450,375	0.0020295656
Michigan Finance Authority	928,756	0.0012996443
Mackinac Bridge Authority	951,611	0.0013316258
Mackinac Island State Park Commission	332,473	0.0004652423
Michigan Education Trust	264,545	0.0003701877
Land Bank Fast Track Authority	59,481	0.0000832335
State Bar Of Michigan	36,365	0.0000508875
Total	\$ 714,623,160	1.0000000000

Employer-level results may not add to System-wide results due to rounding.
The accompanying notes are an integral part of this schedule.

**MICHIGAN STATE EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
AS OF AND FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2016**

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Employer Name	September 30, 2016 Net Pension Liability	Deferred Outflows of Resources				Total Deferred Outflows of Resources
		Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	
GOVERNMENTAL ACTIVITIES						
State Of Michigan	\$ 4,924,047,606	\$ 588,796	\$ 110,625,853	\$ -	\$ 3,905,419	\$ 115,120,068
State Building Authority	461,702	55	10,373	-	-	10,428
BUSINESS TYPE ACTIVITIES						
Information Technology Fund	236,539,753	28,284	5,314,208	-	1,440,560	6,783,052
State Lottery Fund	22,208,139	2,656	498,938	-	119,994	621,588
Liquor Purchase Revolving Fund	14,094,742	1,685	316,659	-	-	318,344
Office Services Revolving Fund	13,048,810	1,560	293,160	-	-	294,720
Correctional Industries Revolving Fund	6,111,436	731	137,302	-	-	138,033
Motor Transport Fund	3,433,585	411	77,140	-	3,722	81,273
Attorney Discipline System	847,665	101	19,044	-	-	19,145
Risk Management Fund	687,966	82	15,456	-	19,532	35,070
COMPONENT UNITS						
Michigan State Housing Development Authority	37,029,300	4,428	831,917	-	-	836,345
Michigan Strategic Fund	3,526,301	422	79,223	-	-	79,645
Michigan Economic Development Corporation	10,740,120	1,284	241,292	-	-	242,576
Michigan Finance Authority	6,877,499	822	154,513	-	-	155,335
Mackinac Bridge Authority	7,046,740	843	158,315	-	77,376	236,534
Mackinac Island State Park Commission	2,461,984	294	55,312	-	2,072	57,678
Michigan Education Trust	1,958,971	234	44,011	-	6,891	51,136
Land Bank Fast Track Authority	440,458	53	9,896	-	-	9,949
State Bar Of Michigan	269,288	32	6,050	-	1,045	7,127
	<u>\$ 5,291,832,065</u>	<u>\$ 632,773</u>	<u>\$ 118,888,662</u>	<u>\$ -</u>	<u>\$ 5,576,611</u>	<u>\$ 125,098,046</u>

Employer-level results may not add to System-wide results due to rounding.
The accompanying notes are an integral part of this schedule.

MICHIGAN STATE EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
AS OF AND FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2016

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Deferred Inflows of Resources				Pension Expense		
Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
\$ -	\$ -	\$ 337,945	\$ 337,945	\$ 418,975,154	\$ 12,957,617	\$ 431,932,771
-	-	3,037	3,037	39,285	(1,429)	37,856
-	-	15,902	15,902	20,126,588	9,339,549	29,466,137
-	-	1,476	1,476	1,889,636	605,237	2,494,873
-	-	360,847	360,847	1,199,287	(1,736,131)	(536,844)
-	-	8,871	8,871	1,110,291	(136,863)	973,428
-	-	136,778	136,778	520,007	(1,456,687)	(936,680)
-	-	225	225	292,155	94,785	386,940
-	-	3,018	3,018	72,126	(58,899)	13,227
-	-	45	45	58,537	130,651	189,188
-	-	76,131	76,131	3,150,732	3,443	3,154,175
-	-	3,860,558	3,860,558	300,044	(17,607,260)	(17,307,216)
-	-	1,064,223	1,064,223	913,851	(4,082,356)	(3,168,505)
-	-	66,264	66,264	585,190	(174,045)	411,145
-	-	476	476	599,590	361,343	960,933
-	-	-	-	209,484	(6,704)	202,780
-	-	129	129	166,684	48,547	215,231
-	-	2,671	2,671	37,477	(82,187)	(44,710)
-	-	20	20	22,913	6,509	29,422
\$ -	\$ -	\$ 5,938,616	\$ 5,938,616	\$ 450,269,031	\$ (1,794,880)	\$ 448,474,151

Employer-level results may not add to System-wide results due to rounding.
The accompanying notes are an integral part of this schedule.

Michigan State Employees' Retirement System Notes to the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer

Note 1: Plan Description

Organization

The Michigan State Employees' Retirement System (System) is a single-employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State) and created under Public Act 240 of 1943, as amended. Section 2 of this act established the board's authority to promulgate or amend the provisions of the System. Executive Order 2015-13 signed by the Governor on October 27, 2015 established the State of Michigan Retirement Board. The executive order establishes the board's authority to promulgate or amend the provision of the System. The board consists of nine members:

- The Attorney General
- The State Treasurer
- The Legislative Auditor General
- The State Personnel Director
- One member or retirant of the State Employees' Retirement System appointed by the Governor
- One member of the Judges Retirement System appointed by the Governor
- One current or former officer or enlisted person in the Michigan military Establishment who is a member or retirant under the Military Retirement Provisions appointed by the Governor
- One retirant member of the State Employees' Retirement System appointed by the Governor.
- One member of the general public appointed by the Governor.

The System is administered by the Office of Retirement Services within the Michigan Department of Technology, Management & Budget. The Department Director appoints the Office Director, with whom the general oversight of the System resides. The State Treasurer serves as the investment officer and custodian for the System.

Plan Membership

The System's pension plan was established by the State to provide retirement, survivor and disability benefits to state employees. Members are eligible to receive a monthly benefit when they meet certain age and service requirements. The System also provides duty disability, non-duty disability and survivor benefits.

Effective March 31, 1997, Public Act 487 of 1996 closed the plan to new entrants. All new employees become members of the defined contribution plan. The Public Act allows returning employees and members who left State employment on or before March 31, 1997, to elect the defined benefit plan instead of the defined contribution plan.

Public Act 185 of 2010 established a pension supplement. Members who retired under the retirement incentive of the legislation agreed to forfeit accumulated leave balances, excluding banked leave time; in exchange they receive a pension supplement for 60 months to their retirement allowance payments equal to 1/60 of the amount forfeited from funds, beginning January 1, 2011.

The System's financial statements are available online at: <http://www.michigan.gov/sers-cafr>.

Note 2: Summary of Significant Accounting Policies

Governmental Accounting Standards Board (GASB) Statement No. 68

Employers participating in the System are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions*.

The requirements of GASB 68 incorporate provisions intended to reflect the effects of transactions and events related to pensions in the measurement of employer liabilities for pensions and recognition of pension expense and deferred outflows of resources and deferred inflows of resources related to pensions.

The Schedule of Employer Allocations recognizes the employers' proportionate share of net pension liability determined in conformity with GASB 68. The Schedule of Pension Amounts by Employer recognizes the pension expense, including ending net pension liability, deferred inflows of resources and deferred outflows of resources related to the System's pension plan. These schedules were prepared by ORS with assistance from its third-party actuaries and provide employers with the required information for financial reporting related to the System's pension plan as of and for the fiscal year ended September 30, 2016 (the measurement period).

Basis of Accounting and Presentation

The System's financial statements are prepared using the accrual basis of accounting, in accordance with accounting principles generally accepted in the United States (GAAP). Employer contributions are recognized as revenue when due and payable. Benefits and refunds are recognized when due and payable in accordance with the terms of the System.

The Schedule of Employer Allocations and Schedule of Pension Amounts by Employer were prepared in conformity with GAAP. The preparation of these schedules required management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

The schedules present elements of the financial statements of the System and its participating employers and are not a complete financial presentation of the System or its participating employers.

Proportionate Share Allocation Methodology

The primary government and certain component units participate in the System, which is classified for financial reporting purposes as a single-employer. However, GASB 68 requires that, in stand-alone financial statements, each government should account for and report its participation in the single-employer plan as if it was a cost-sharing employer. Therefore, this allocation is to identify the primary government activities, business-type activities, and component units' proportionate shares of the collective net pension liability.

In determining the proportionate share allocation, GASB 68 requires that the proportion for each employer be consistent with the determination of the System's contributions. The System has determined that utilizing the statutorily required employer pension contributions based on reportable compensation during the System's fiscal year is an appropriate allocation methodology. Each employer's proportionate share allocation is determined by dividing each employer's statutorily required pension contributions to the system during the measurement period by the percent of pension contributions required from all applicable employers during the measurement period.

The Schedule of Employer Allocations has been rounded and presents the first ten decimal places.

Note 3: Net Pension Liability

The System's net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this is the accrued liability less the market value of assets.

Net Pension Liability As of September 30, 2015	
Pension Liability	\$ 16,234,303,171
Fiduciary Net Position	(10,731,762,400)
Net Pension Liability*	\$ 5,502,540,771

Fiduciary Net Position as a Percentage of Total Pension Liability	66.11%
Net Pension Liability as a Percentage of Covered-Employee Payroll	581.06%

Net Pension Liability As of September 30, 2016	
Pension Liability	\$ 16,272,174,819
Fiduciary Net Position	(10,980,342,752)
Net Pension Liability*	\$ 5,291,832,067

Fiduciary Net Position as a Percentage of Total Pension Liability	67.48%
Net Pension Liability as a Percentage of Covered-Employee Payroll	606.61%

* Employer-level results may not add to System-wide results due to rounding.

Discount Rate

A discount rate of 8.00% was used to measure the total pension liability. This discount rate was based on the expected rate of return on pension plan investments of 8.00%. The projection of cash flows used to determine this discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these 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.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

As required by GASB Statement No. 68, the following presents the System's net pension liability, as well as what the System's net pension liability would be if it were calculated using a discount rate that is one percent lower or one percent higher.

	1% Decrease 7.0%	Current Discount Rate Assumption 8.0%	1% Increase 9.0%
Total Pension Liability	\$ 17,774,938,659	\$ 16,272,174,817	\$ 14,975,255,774
Fiduciary Net Position	(10,980,342,752)	(10,980,342,752)	(10,980,342,752)
Net Pension Liability	\$ 6,794,595,907	\$ 5,291,832,065	\$ 3,994,913,022

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed every two years. If the actuarial valuation is not calculated as of the System's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the System's fiscal year end.

The total pension liability as of September 30, 2016, is based on the results of an actuarial valuation date of September 30, 2015, and rolled forward using generally accepted actuarial procedures.

Actuarial Valuations and Assumptions

Actuarial valuations for the pension plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Additional information as of the latest actuarial valuation follows:

Summary of Actuarial Assumptions

Valuation Date:	September 30, 2015
Actuarial Cost Method:	Entry-Age, Normal
Remaining Amortization Period:	21 years
Inflation:	2.5%
Salary Increases:	3.5% wage inflation
Investment Rate of Return	8.0% net of investment and administrative expenses
Mortality:	RP-2000 Male and Female Combined Healthy Life Mortality Tables, adjusted for mortality improvements to 2015 using projection scale BB. For retirees, 100% of the table rates were used. For active members, 50% of the table rates were used for males and females.

Notes:

- Assumption changes as a result of an experience study for the periods 2007 through 2012 have been adopted by the System for use in the annual pension valuations beginning with the September 30, 2014 valuation.
- Recognition period for liabilities is the average of the expected remaining service lives of all employees in years is 1.2253.
- Recognition period for assets in years is 5.0000
- Full actuarial assumptions are available in the 2016 SERS CAFR:
http://www.michigan.gov/documents/orsstatedb/SERS_CAFR_2016_FINAL_550680_7.pdf

Note 4: Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The following table provides details of the System pension expense for the fiscal year ended September 30, 2016.

<u>Expense</u>	<u>Total</u>
Service Cost	\$ 74,041,629
Interest on the Total Pension Liability	1,250,116,794
Current-Period Benefit Changes	-
Employee Contributions (shown as negative for addition here)	(46,665,882)
Projected Earnings on Plan Investments (shown as negative for addition here)	(837,494,443)
Pension Plan Administrative Expense	6,628,719
Other Changes in Plan Fiduciary Net Position	(278,446)
Recognition of Outflow (Inflow) of Resources due to Liabilities	18,331,574
Recognition of Outflow (Inflow) of Resources due to Assets	(14,410,912)
Total Pension Expense*	\$ 450,269,033

*Employer-level results may not add to System-wide results due to rounding.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in future years' pension expense as follows:

<u>Fiscal Year Ending September 30</u>	<u>Net Deferred (Inflows) and Outflows of Resources</u>
2017	\$ (13,778,138)
2018	(14,410,913)
2019	136,517,250
2020	11,193,238
2021	-
Thereafter	-
Total	\$ 119,521,437

Note 5: Subsequent Events

Discount Rate – Assumed Rate of Return

On March 2, 2017, in accordance with PA 240 of 1943, as amended, the State of Michigan Retirement Systems' Board approved a decrease in the assumed investment rate of return (discount rate) used in the System's annual actuarial valuation for the defined benefit pension plan from 8% to 7.5% effective for the fiscal year 2016 valuation and following.

The September 30, 2016 Annual Actuarial Valuation Report will be used to establish the employer contribution for fiscal year beginning October 1, 2018 and will be based upon the 7.5% investment rate of return assumption. The actuarial computed employer contributions and the net pension liability will increase as a result of lowering the assumed investment rate of return.

Discount Rate – Dedicated Investment Gains Policy

On August 24, 2017, in accordance with PA 240 of 1943, as amended, the State of Michigan Retirement Systems' Board approved a Dedicated Investment Gains policy whereby the assumed investment rate of return will decrease below 7.5% in years where there are investment returns in excess of the assumed rate of return according to a schedule developed by the System's actuary. The policy will take effect with the September 30, 2017 Annual Actuarial Valuation Report.