MICHIGAN PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

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

Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2016

M P S E R S

Prepared by:
Financial Services
for
Office of Retirement Services
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INTRODUCTORY SECTION

Certificate of Achievement

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Michigan Public School Employees' Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

September 30, 2015

Executive Director/CEO

Public Pension Standards Award

PPCC

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
2016

Presented to

Michigan Office of Retirement Services

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle
Program Administrator

Letter of Transmittal

Michigan Public School Employees'
Retirement System
P.O. Box 30171
Lansing, Michigan 48909-7671
Telephone 517- 322-5103
Outside Lansing 1-800-381-5111

STATE OF MICHIGAN

RICK SNYDER, Governor

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

January 11, 2017

The Honorable Rick Snyder
Governor, State of Michigan,

Members of the Legislature
State of Michigan,

Retirement Board Members
and
Members, Retirees and Beneficiaries

Ladies and Gentlemen:

We are pleased to present the comprehensive annual financial report of the Michigan Public School Employees' Retirement System (System) for fiscal year 2016.

INTRODUCTION TO REPORT

The System was established by legislation under Public Act 136 of 1945, and is administered by the Office of Retirement Services (ORS). The number of active and retired members and beneficiaries of the System is presented in Note 1 of the financial statements in the Financial Section of this report. The purpose of the System is to provide benefits for all public school employees. The services performed by ORS staff provide benefits to members.

Responsibility

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the leadership team of the System. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the System.

Internal Control Structure

The leadership team of the System is responsible for maintaining adequate internal accounting controls designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization, and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with accounting principles generally accepted in the

Letter of Transmittal (Continued)

United States of America. The internal control structure is designed to provide reasonable assurance regarding the safekeeping of assets and reliability of all financial records.

The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. This internal control structure includes maintaining written policies and procedures. Discussion and analysis of fiduciary net position and related additions and deductions are presented in the Management Discussion and Analysis which can be found immediately following the Independent Auditor's Report.

Independent Auditors and Actuary

The Office of the Auditor General (OAG), independent auditors, conducted an annual audit of the System. The independent auditor's report on the System's financial statements is included in the Financial Section of this report.

Statute requires that an annual actuarial valuation be conducted. The purpose of the valuation is to evaluate the mortality, service, compensation and other financial experience of the System and to recommend employer-funding rates for the subsequent year. The annual actuarial valuation was completed by Gabriel Roeder Smith & Company for the fiscal year ended September 30, 2015. Actuarial certification and supporting statistics are included in the Actuarial Section of this report.

Management's Discussion and Analysis (MD&A)

Generally Accepted Accounting Principles (GAAP) require that management provide a narrative introduction, overview, and analysis to accompany the Basic Financial Statements in the form of MD&A. This letter of transmittal is intended to complement MD&A and should be read in conjunction with it. The MD&A can be found immediately following the Independent Auditor's Report.

PROFILE OF THE GOVERNMENT

In accordance with Public Act 300 of 1980, on October 31, 1980, the Public School Employees' Chapter I Retirement Fund merged with the Public School Employees' Chapter II Retirement Fund to establish the Public School Employees' Retirement System. Public Acts 136 of 1945 and 259 of 1974, respectively, created the two original funds. A twelve-member board governs administrative policy.

Employee contributions, employer contributions, and investment earnings provide financing for the System. Under Public Act 91 of 1985, employees may contribute additional amounts into a "member investment plan." Public Act 75 of 2010 established a new Pension Plus plan which provides all individuals hired on or after July 1, 2010, with a combined Defined Benefit and Defined Contribution benefit structure. PA 300 of 2012 granted active members a voluntary election regarding their pension. Under the reform, members voluntarily chose to increase, maintain, or stop their contributions to the pension fund by remaining in the hybrid plan or choosing the defined contribution plan.

ECONOMIC CONDITIONS AND OUTLOOK

Despite challenging economic times, the System continues to show steady performance over the long-term.

Investments

The State Treasurer is the investment fiduciary and custodian of all investments of the System pursuant to State law. The primary investment objective is to maximize the rate of return on the total investment portfolio, consistent with a high degree of prudence and sufficient diversity to eliminate inordinate risks and to meet the actuarial assumption for the investment return rate. The investment activity for the year produced a total rate of return on the portfolio of 7.6% for the Pension and Other Postemployment Benefits (OPEB) Plans. For the last five years, the System has experienced an annualized rate of return of 10.2% for the Pension Plan and 10.1% for the Other Postemployment Benefits (OPEB) Plan. A summary of asset allocation and rates of return can be found in the Investment Section of this report.

Letter of Transmittal (Continued)

Accounting System

Transactions of the System are reported on the accrual basis of accounting. Revenues are recorded when earned, and expenses are recorded when incurred. Participants' benefits are recorded when payable by law. We believe that the accounting and administrative internal controls established by the System provide reasonable assurance the System is carrying out its responsibilities in safeguarding its assets, in maintaining the reliability of the financial records for preparing financial statements, and in maintaining accountability for its assets.

Funding

Funds are derived from the excess of additions to plan fiduciary net position over deductions from plan fiduciary net position. Funds are accumulated by the System to meet future benefit obligations to retirees and beneficiaries. The percentage computed by dividing the actuarial value of assets by the actuarial accrued liability is referred to as the "funded ratio." This ratio provides an indication of the funding status of the System and generally, the greater this percentage, the stronger the System.

Pension – The actuarial value of the assets and actuarial accrued liability for pension benefits were $41.0 billion and $67.7 billion, respectively, resulting in a funded ratio of 60.5% at September 30, 2015. A historical perspective of funding levels for the Pension Plan is presented on the Schedule of Funding Progress in the Statistical Section of this report.

Postemployment Benefits – Prefunding for postemployment benefits began in fiscal year 2013. As of September 30, 2015, the actuarial value of the assets and actuarial accrued liability for postemployment benefits were $3.5 billion and $12.8 billion, respectively, resulting in a funded ratio of 27.5%. A historical perspective of funding levels is presented on the Schedule of Funding Progress in the Required Supplementary Information of the Financial Section in this report.

MAJOR GOALS ACCOMPLISHED

Customer Education and Branding – ORS developed a comprehensive plan to better educate and support its members. The plan included the creation and introduction of a new logo. The new logo presents ORS as a trusted partner helping members navigate the journey to retirement success. This will be an exciting story and an exciting time that will bring our organization closer together and closer to the people who rely on ORS in their retirement journey.

New Intranet Launched – ORS deployed a new intranet in SharePoint to engage its employees with a portal to the most current information and provide opportunities to collaborate and interact with each other. Information and tools were consolidated and reorganized to improve accessibility and communication throughout the business.

Customer Needs and Expectations Study – ORS surveyed active and retired customers to improve its understanding of what customers need and expect. The study's purpose was to measure customer perceptions, evaluate satisfaction levels with various services, and determine the areas in need of change. ORS will use the findings to set priorities and develop improvements in its products and services.

ORS Delivers 1095-B Statements – This was the first year that ORS was required to deliver 1095-B health coverage statements to all non-Medicare PPO healthcare plan recipients. ORS executed a communication plan that included FAQ development, staff training, targeted email communication to customers, web content, and the 1095-B form development in compliance with IRS guidelines. ORS sent the 1095-B statements to approximately 52,000 recipients the first week of February 2016. As a result of the proactive communication plan and clear communication, ORS received contact on this topic from only 1,000 customers in January 2016 through April 2016.

New MPSERS Healthcare and Pharmacy Benefits Manager Contracts – New contracts for MPSERS healthcare and pharmacy benefits manager resulted in savings of nearly $500 million. ORS initiated a competitive bid process for the MPSERS healthcare and pharmacy benefits manager. The new contracts resulted in significant savings to the school employers who fund the benefit while maintaining the highest quality plan.

Letter of Transmittal (Continued)

HONORS

Public Pension Standards Award – ORS has recently been awarded the 2016 Public Pension Coordinating Council Standards Award from the Public Pension Coordinating Councils Standards Program (PPCC) for both funding and administration. ORS has received this award every year since 2004. The PPCC Standards reflect expectations for public retirement system management and administration, and serve as a benchmark for all defined benefit public plans to be measured.

Government Finance Officers Association Award – The Government Finance Officers Association (GFOA) of the United States and Canada awarded the retirement system with the Certificate of Achievement for Excellence in Financial Reporting for our fiscal year 2015 Comprehensive Annual Financial Report (CAFR). This marks the 25th consecutive year ORS has received this prestigious award.

Truven Advantage Award – For the fourth time, ORS has earned a Truven Advantage Award. The Truven award recognizes hospitals, health plans, government agencies, and employers that use data analytics to improve quality of care and business results. ORS was recognized for its partnership with Truven in developing a new process for improving the accuracy of invoices and claims for Michigan Public School Employees' Retirement System healthcare plans.

Plan Sponsor Council of America (PSCA) Signature Award – ORS and Voya Financial® took second place in PSCA's Plan Publications for Participants category for their *Nearing Retirement Guide*. This is the second consecutive year that ORS and Voya have won a Signature Award. The *Nearing Retirement Guide* is handed out during ORS's Pre-Retirement Orientations and at Voya's Get Ready to Retire seminars.

ACKNOWLEDGEMENTS

The preparation of this report was accomplished with the dedication and cooperation of many people. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the funds of the System.

We would, therefore, like to express our appreciation for the assistance given by staff, the advisors and the many people who contributed to its preparation. We believe their combined efforts have produced a report that will enable employers and plan members to better evaluate and understand the Michigan Public School Employees' Retirement System. Their cooperation contributes significantly to the success of the System.

Sincerely,

David B. Behen, Director
Department of Technology, Management & Budget

Kerrie Vanden Bosch, Director
Office of Retirement Services

Administrative Organization

Retirement Board Members*

Ivy Bailey
Active Classroom Teacher
Term Expired March 30, 2012

Scott Koenigsknecht, Chair
Active Superintendent
Term Expires
March 30, 2017

Mike Engle
Active Classroom Teacher
Term Expires March 30, 2017

Timothy Raymer
Retired Finance/Operations
Term Expires March 30, 2019

Stephen Epstein
General Public –
Investments
Term Expires
March 30, 2020

Michael Ringuette, Vice Chair
General Public -
Actuary/Health Insurance
Term Expires March 30, 2018

Ann G Kroneman
Community College Trustee
Term Expires March 30, 2020

Kevin Philipps
Active Finance/Operations,
Non-Superintendent
Term Expires
March 30, 2020

Charles Christner
Retired Teacher
Term Expires March 30, 2018

Christine Veld
Retired Non-Certified Support
Term Expires March 30, 2017

Larry Ward
Reporting Unit Board of
Control
Term Expires
March 30, 2020

Brian Whiston
State Superintendent
of Education

*Statute provides that board members may continue to serve after their term expires until they are replaced or reappointed.

Advisors and Consultants

Actuaries
Gabriel Roeder Smith & Co.
Mita D. Drazilov
Southfield, Michigan

Independent Auditors
Doug A. Ringler, C.P.A., C.I.A.
Auditor General
State of Michigan

Investment Manager and Custodian
Nick A. Khouri
State Treasurer
State of Michigan

Legal Advisor
Bill Schuette
Attorney General
State of Michigan

Investment Performance Measurement
State Street Corporation
State Street Investment Analytics
Boston, MA

Administrative Organization (Continued)

Organization Chart

Department of Technology, Management & Budget
David Behen, Director

Department of Treasury *
Nick A. Khouri, State Treasurer

Financial Services
Michael Gilliland, Director

Bureau of Investments
Jon M. Braeutigam,
Chief Investment Officer

Fiscal Management Division
Ronald W. Foss, Director

Office of
Retirement Services
Kerrie Vanden Bosch, Director

*The investments of the System are managed by the Michigan Department of Treasury. Information on the investments and the fiduciary, Michigan Department of Treasury, can be found in the Investment Section, Introduction. In addition, see the Investment Section, Schedule of Investment Fees and Schedule of Investment Commissions, for information regarding the investment fees and commissions paid as well as investment professionals utilized by the System.

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FINANCIAL SECTION

Independent Auditor’s Report
Management’s Discussion and Analysis
Basic Financial Statements
Notes to Basic Financial Statements
Required Supplementary Information
Note to Required Supplementary Information
Supporting Schedules

OAG
Office of the Auditor General
Doug A. Ringler, CPA, CIA
Auditor General
201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • www.audgen.michigan.gov

Independent Auditor's Report on the Financial Statements
and Other Reporting Required by *Government Auditing Standards*

Mr. Scott Koenigsknecht, Chair
Michigan Public School Employees' Retirement System Board
and
Mr. David B. Behen, Director
Department of Technology, Management, and Budget
and
Ms. Kerrie L. Vanden Bosch, Director
Office of Retirement Services

Dear Mr. Koenigsknecht, Mr. Behen, and Ms. Vanden Bosch:

Report on the Financial Statements
We have audited the accompanying financial statements of the Michigan Public School Employees' Retirement System as of and for the fiscal year ended September 30, 2016 and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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

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

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

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

Opinion
In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the fiduciary net position of the Michigan Public School Employees' Retirement System as of September 30, 2016 and the changes in fiduciary net position for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter
As discussed in Note 6 to the financial statements, the Michigan Public School Employees' Retirement System adopted Governmental Accounting Standards Board Statement No. 72, *Fair Value Measurement and Application*, for the fiscal year ended September 30, 2016. Our opinion is not modified with respect to this matter.

Mr. Scott Koenigsknecht, Chair
Mr. David B. Behen, Director
Ms. Kerrie L. Vanden Bosch, Director
Page 2

Other Matters
Required Supplementary Information
Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of funding progress - other postemployment benefit plan, schedule of changes in net pension liability, schedule of net pension liability, schedules of contributions, schedule of investment returns, and related note, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The supporting schedules and the introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*
In accordance with *Government Auditing Standards*, we will also issue a report on our consideration of the System'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 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 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 System's internal control over financial reporting and compliance.

Sincerely,

Doug Ringler

Doug Ringler
Auditor General
January 11, 2017

Management's Discussion and Analysis

Our discussion and analysis of the Michigan Public School Employees' Retirement System's (System) financial performance provides an overview of the System's financial activities for the fiscal year ended September 30, 2016. Please read it in conjunction with the transmittal letter in the Introductory Section on page 6 and the basic financial statements, which follow this discussion.

FINANCIAL HIGHLIGHTS

- System assets exceeded liabilities at the close of fiscal year 2016 by $48.3 billion (reported as *net position restricted for Pension Benefits and OPEB*). Fiduciary net position is restricted to meet future benefit payments.
- Additions for the year were $7.4 billion, which are comprised primarily of contributions of $4.0 billion and investment gains of $3.4 billion.
- Deductions decreased over the prior year from $5.55 billion to $5.53 billion or 0.2%. This decrease is the result of increased pension benefit payments and administrative expenses combined with decreased contribution refunds and OPEB benefit payments.

THE STATEMENT OF PLAN FIDUCIARY NET POSITION AND THE STATEMENT OF CHANGES IN PLAN FIDUCIARY NET POSITION

This Comprehensive Annual Financial Report (CAFR) consists of two financial statements; *The Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position* (page 20) and *The Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position* (page 21). These financial statements report information about the System, as a whole, and about its financial condition that should help answer the question: Is the System, as a whole, better off or worse off as a result of this year's activities? These statements include all assets and liabilities using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, all revenues and expenses are taken into account regardless of when cash is received or paid.

The Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position presents all of the System's assets and liabilities, with the difference between the two reported as fiduciary net position. Over time, increases and decreases in fiduciary net position measure whether the System's financial position is improving or deteriorating. *The Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position* presents how the System's fiduciary net position changed during the most recent fiscal year. These two financial statements should be reviewed along with the Schedule of Net Pension Liability (page 53), Schedule of Funding Progress – Other Postemployment Benefit Plan (page 51), and Schedules of Contributions (pages 53-54) to determine whether the System is becoming financially stronger or weaker.

Management's Discussion and Analysis (Continued)

FINANCIAL ANALYSIS

System total assets as of September 30, 2016, were $51.9 billion and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased $2.4 billion or 4.9% between fiscal years 2015 and 2016, due primarily to net investment gains.

Total liabilities as of September 30, 2016, were $3.6 billion and were comprised of warrants outstanding, accounts payable, unearned revenue, and obligations under securities lending. Total liabilities increased $0.6 billion or 20.1% between fiscal years 2015 and 2016 primarily due to increased obligations under securities lending.

System assets exceeded its liabilities at the close of fiscal year 2016 by $48.3 billion. Total fiduciary net position restricted for pension and OPEB increased $1.8 billion or 3.9% from the previous year, primarily due to net investment gains.

Plan Fiduciary Net Position
(in thousands)

	2016	2015	Increase (Decrease)
Assets			
Equity in common cash	$ 155,650	$ 163,640	(4.9) %
Receivables	446,907	410,520	8.9
Investments	47,919,271	46,140,381	3.9
Securities lending collateral	3,336,347	2,720,434	22.6
Total Assets	51,858,175	49,434,974	4.9
Liabilities			
Warrants outstanding	373	630	(40.8)
Unearned revenue	2,720	3,153	(13.7)
Accounts payable and other accrued liabilities	230,566	245,499	(6.1)
Obligations under securities lending	3,331,758	2,720,029	22.5
Total Liabilities	3,565,417	2,969,311	20.1
Net Position Restricted for Pension Benefits and OPEB	$ 48,292,758	$ 46,465,663	3.9 %

ADDITIONS TO PLAN FIDUCIARY NET POSITION

The reserves needed to finance pension and other postemployment benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Contributions and net investment income for fiscal year 2016 totaled approximately $7.4 billion.

Total additions for fiscal year 2016 increased approximately $2.7 billion or 56.5% from those of fiscal year 2015 due primarily to increased net investment income. Total contributions increased between fiscal years 2015 and 2016 by $261.6 million or 7.0%, while net investment income increased $2.4 billion or 241.9%. The Investment Section of this report reviews the results of investment activity for fiscal year 2016.

Management's Discussion and Analysis (Continued)

DEDUCTIONS FROM PLAN FIDUCIARY NET POSITION

The primary expenses of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental and vision benefits, refund of contributions, and the cost of administering the System. Total deductions for fiscal year 2016 were $5.5 billion, a decrease of 0.2% over fiscal year 2015 deductions.

The health, dental and vision care expenses during the year decreased $47.8 million or 6.8%, from $700.9 million to $653.1 million. The payment of pension benefits increased $140.4 million or 3.1% between fiscal years 2015 and 2016. In fiscal year 2016, the increase in pension benefit expenses resulted from an increase in retirees (3,356) and an increase in benefit payments to retirees. Administrative expenses increased $4.7 million or 2.6% between fiscal years 2015 and 2016, primarily due to increased health administrative fees. Refunds and transfers to other systems decreased $109.9 million or 80.2% between fiscal years 2015 and 2016, due to a one-time refund of overpaid university employer contributions paid in fiscal year 2015.

Changes in Plan Fiduciary Net Position
(in thousands)

	2016	2015	Increase (Decrease)
Additions			
Member contributions	$ 781,150	$ 777,353	0.5 %
Employer contributions	3,192,600	2,937,029	8.7
Other governmental contributions	2,411	213	1,033.2
Net investment income (loss)	3,384,338	989,727	241.9
Miscellaneous income	642	646	(0.6)
Total additions	7,361,142	4,704,969	56.5
Deductions			
Pension benefits	4,671,315	4,530,916	3.1
Health care benefits	653,071	700,904	(6.8)
Refunds and transfers to other systems	27,090	136,998	(80.2)
Administrative and other expenses	182,571	177,898	2.6
Total deductions	5,534,047	5,546,716	(0.2)
Net Increase (Decrease) in Net Position	1,827,095	(841,747)	317.1
Net Position Restricted for Pension Benefits and OPEB:			
Beginning of Year	46,465,663	47,307,410	(1.8)
End of Year	$ 48,292,758	$ 46,465,663	3.9 %

Management's Discussion and Analysis (Continued)

RETIREMENT SYSTEM AS A WHOLE

The System's overall Fiduciary Net Position experienced an increase in fiscal year 2016. The System's rate of return for the Pension Plan's investments increased an overall 5.0% from a 2.6% return in fiscal year 2015 to a 7.6% return during fiscal year 2016. The System's rate of return for the OPEB Plan's investments increased an overall 5.1% from a 2.5% return in fiscal year 2015 to a 7.6% return during fiscal year 2016. Management believes that the System remains financially sound and positioned to meet its ongoing benefit obligations due, in part, to a prudent investment program, cost controls, and strategic planning.

CONTACTING SYSTEM FINANCIAL MANAGEMENT

This financial report is designed to provide the Retirement Board, our membership, taxpayers, investors, and creditors with a general overview of the System's finances and to demonstrate the System's accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the Office of Retirement Services, P.O. Box 30171, Lansing, MI 48909-7671.

Basic Financial Statements

STATEMENT OF PENSION PLAN AND OTHER POSTEMPLOYMENT BENEFIT PLAN FIDUCIARY NET POSITION
As of September 30, 2016 (in thousands)

	Pension Plan	OPEB Plan	Total
Assets:			
Equity in common cash	$ 130,002	$ 25,649	$ 155,650
Receivables:			
Amounts due from members	1,595		1,595
Amounts due from employers	85,667	28,667	114,334
Amounts due from other	14	92,497	92,511
Amounts due from employer long term	151,360	35,518	186,878
Amounts due from other long term		45,455	45,455
Interest and dividends	5,568	566	6,134
Total receivables	244,204	202,703	446,907
Investments:			
Short term investment pools	1,406,212	678,233	2,084,446
Fixed income pools	5,691,196	567,209	6,258,404
Domestic equity pools	11,292,978	1,125,763	12,418,742
Real estate and infrastructure pools	4,605,048	459,185	5,064,233
Private equity pools	6,635,193	661,605	7,296,798
International equity pools	6,877,766	685,510	7,563,276
Absolute return pools	6,577,887	655,485	7,233,372
Total investments	43,086,282	4,832,990	47,919,271
Securities lending collateral	3,034,672	301,675	3,336,347
Total assets	46,495,159	5,363,016	51,858,175
Liabilities:			
Warrants outstanding	366	7	373
Unearned revenue	2,720		2,720
Accounts payable and other accrued liabilities	996	229,570	230,566
Obligations under securities lending	3,030,498	301,260	3,331,758
Total liabilities	3,034,580	530,837	3,565,417
Net Position Restricted for Pension Benefits and OPEB:	$ 43,460,579	$ 4,832,179	$ 48,292,758

The accompanying notes are an integral part of these financial statements.

Basic Financial Statements (continued)

STATEMENT OF CHANGES IN PENSION PLAN AND OTHER POSTEMPLOYMENT BENEFIT PLAN FIDUCIARY NET POSITION
For Fiscal Year Ended September 30, 2016 (in thousands)

	Pension Plan	OPEB Plan	Total
Additions:			
Contributions:			
Member contributions	$ 398,893	$ 382,257	$ 781,150
Employer contributions:			
Colleges, universities and federal	199,206	78,876	278,082
School districts and other	2,109,451	805,068	2,914,519
Other governmental contributions		2,411	2,411
Total contributions	2,707,550	1,268,611	3,976,162
Investment income (loss):			
Net increase (decrease) in fair value of investments	2,242,089	210,285	2,452,374
Interest, dividends, and other	930,325	86,451	1,016,777
Investment expenses:			
Real estate operating expenses	(1,018)	(93)	(1,111)
Other investment expenses	(142,891)	(13,278)	(156,169)
Securities lending activities:			
Securities lending income	77,899	7,306	85,205
Securities lending expenses	(11,710)	(1,026)	(12,736)
Net investment income (loss)	3,094,694	289,644	3,384,338
Miscellaneous income	484	159	642
Total additions	5,802,728	1,558,414	7,361,142
Deductions:			
Benefits paid to plan members and beneficiaries:			
- Retirement benefits	4,671,300	15	4,671,315
- Health benefits		567,215	567,215
- Dental/vision benefits		85,856	85,856
Refunds of contributions	26,994	93	27,087
Transfers to other systems	3		3
Administrative and other expenses	26,213	156,358	182,571
Total deductions	4,724,510	809,538	5,534,047
Net Increase (Decrease) in Net Position	1,078,218	748,877	1,827,095
Net Position Restricted for Pension Benefits and OPEB:			
Beginning of Year	42,382,361	4,083,302	46,465,663
End of Year	$ 43,460,579	$ 4,832,179	$ 48,292,758

The accompanying notes are an integral part of these financial statements.

NOTES TO BASIC FINANCIAL STATEMENTS
SEPTEMBER 30, 2016

NOTE 1- PLAN DESCRIPTION

ORGANIZATION

The Michigan Public School Employees' Retirement System (System) is a cost-sharing, multiple employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State) originally created under Public Act 136 of 1945, recodified and currently operating under the provisions of Public Act 300 of 1980, as amended. Section 25 of this act establishes the board's authority to promulgate or amend the provisions of the System. The board consists of twelve members – eleven appointed by the Governor and the State Superintendent of Instruction, who serves as an ex-officio member. The Governor-appointed board members consist of:

- Two active classroom teachers or other certified school personnel.
- One active member or retirant from a non-certified support position.
- One active school system superintendent.
- One active finance or operations (non-superintendent) member.
- One retirant from a classroom teaching position.
- One retirant from a finance or operations management position.
- One administrator or trustee of a community college that is a reporting unit of the System.
- Two from the general public, one with health insurance or actuarial science experience and one with institutional investment experience.
- One elected member of a reporting unit's board of control.

The System's pension plan was established by the State to provide retirement, survivor and disability benefits to public school employees. In addition, the System's health plan provides all retirees with the option of receiving health, prescription drug, dental and vision coverage under the Michigan Public School Employees' Retirement Act. There are 678 participating employers. A list of employers is provided in the Statistical Section. The System is a qualified pension trust fund under section 401(a) of the Internal Revenue Code. By statute, employees of K-12 public school districts, public school academies, district libraries, tax-supported community colleges and seven universities may be members. The seven universities are: Eastern Michigan, Central Michigan, Northern Michigan, Western Michigan, Ferris State, Michigan Technological and Lake Superior State. Employees, who first become employed by one of the seven universities on or after January 1, 1996, become members of an alternative plan.

The System's financial statements are included as a pension and other employee benefit trust fund in the State of Michigan Comprehensive Annual Financial Report.

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.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

MEMBERSHIP

At September 30, 2016, the System's membership consisted of the following:

Inactive plan members or their beneficiaries currently receiving benefits:	
Regular benefits	187,546
Survivor benefits	17,274
Disability benefits	6,187
Total	211,007
Inactive plan members entitled to but not yet receiving benefits:	17,868
Active plan members:	
Vested	104,159
Non-vested	103,486
Total	207,645
Total plan members	436,520

Enrollment in the health plan is voluntary. The number of participants is as follows:

Health, Dental and Vision Plan	
Eligible participants	208,066
Participants receiving benefits:	
Health	150,966
Dental/Vision	164,206
Active members[1,2]	191,403
Inactive vested members[2]	2,298

[1] Active member count includes Personal Healthcare Fund members eligible for the $1,000/$2,000 lump sum at termination benefit.

[2] Based on FY2015 data.

BENEFIT PROVISIONS – PENSION

Introduction

Benefit provisions of the defined benefit pension plan are established by State statute, which may be amended. Public Act 300 of 1980, as amended, establishes eligibility and benefit provisions for the defined benefit (DB) pension plan. Retirement benefits for DB plan members are determined by final average compensation and years of service. DB members are eligible to receive a monthly benefit when they meet certain age and service requirements. The System also provides disability and survivor benefits to DB plan members.

A DB member or Pension Plus plan member who leaves Michigan public school employment may request a refund of his or her member contributions to the retirement system account. A refund cancels a former member's rights to future benefits. However, returning members who previously received a refund of their contributions may reinstate their service through repayment of the refund upon satisfaction of certain requirements.

Pension Reform 2010

On May 19, 2010, the Governor signed Public Act 75 of 2010 into law. As a result, any member of the Michigan Public School Employees' Retirement System (MPSERS) who became a member of MPSERS after June 30, 2010 is a Pension Plus member. Pension Plus is a hybrid plan that contains a pension component with an employee contribution (graded, up to 6.4% of salary) and a flexible and transferable defined contribution (DC) tax-deferred investment account that earns an employer match of 50% (up to 1% of salary) on employee contributions. Retirement benefits for Pension Plus members are determined by final average compensation and years of service. Disability and survivor benefits are available to Pension Plus members.

Pension Reform 2012

On September 4, 2012, the Governor signed Public Act 300 of 2012 into law. The legislation grants all active members who first became a member before July 1, 2010 and who earned service credit in the 12 months ending September 3, 2012, or were on an approved professional services or military leave of absence on September 3, 2012, a voluntary election regarding their pension. Any changes to a member's pension are effective as of the member's transition date, which is defined as the first day of the pay period that begins on or after February 1, 2013.

Under the reform, members voluntarily chose to increase, maintain, or stop their contributions to the pension fund.

Option 1 members voluntarily elected to increase their contributions to the pension fund as noted below, and retain the 1.5% pension factor in their pension formula. The increased contribution would begin as of their transition date and continue until they terminate public school employment.

- Basic plan members: 4% contribution
- Member Investment Plan (MIP)-Fixed, MIP-Graded, and MIP-Plus members: a flat 7% contribution

Option 2 members voluntarily elected to increase their contribution to the pension fund as stated in Option 1 and retain the 1.5% pension factor in their pension formula. The increased contribution would begin as of their transition date and continue until they reach 30 years of service. If and when they reach 30 years of service, their contribution rates will return to the previous level in place as of the day before their transition date (0% for Basic plan members, 3.9% for MIP-Fixed, up to 4.3% for MIP-Graded, or up to 6.4% for MIP-Plus). The pension formula for any service thereafter would include a 1.25% pension factor.

Option 3 members voluntarily elected not to increase their contribution to the pension fund and maintain their current level of contribution to the pension fund. The pension formula for their years of service as of the day before their transition date will include a 1.5% pension factor. The pension formula for any service thereafter will include a 1.25% pension factor.

Option 4 members voluntarily elected to no longer contribute to the pension fund and therefore are switched to the Defined Contribution plan for future service as of their transition date. As a DC participant they receive a 4% employer contribution to a tax-deferred 401(k) account and can choose to contribute up to the maximum amounts permitted by the IRS to a 457 account. They vest in employer contributions and related earnings in their 401(k) account based on the following schedule: 50% at 2 years, 75% at 3 years, and 100% at 4 years of service. They are 100% vested in any personal contributions and related earnings in their 457 account. Upon retirement, if they meet age and service requirements (including their total years of service), they would also receive a pension (calculated based on years of service and final average compensation as of the day before their transition date and a 1.5% pension factor).

Members who did not make an election before the deadline defaulted to Option 3 as described above. Deferred or nonvested public school employees on September 3, 2012, who return to public school employment on or after September 4, 2012, will be considered as if they had elected Option 3 above. Returning members who made the retirement plan election will retain whichever option they chose.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

Employees who first work on or after September 4, 2012, choose between two retirement plans: the Pension Plus plan described above and a Defined Contribution (DC) plan that provides a 50% employer match (up to 3% of salary) on employee contributions. New employees are automatically enrolled as members in the Pension Plus plan as of their date of hire. They have 75 days from the last day of their first pay period, as reported to ORS, to elect to opt out of the Pension Plus plan and become a qualified participant in the DC plan; if no election is made they will remain in the Pension Plus plan. If they elect to opt out of the Pension Plus plan, their participation in the DC plan will be retroactive to their date of hire.

Regular Retirement

The pension benefit for DB and Pension Plus plan members is based on a member's years of credited service (employment) and final average compensation (FAC). The FAC is calculated based on the member's highest total wages earned during a specific period of consecutive calendar months divided by the service credit accrued during that same time period. For a MIP member, who became a member of MPSERS prior to July 1, 2010, the averaging period is 36 consecutive months. For a Pension Plus member, who became a member of MPSERS after June 30, 2010, the averaging period is 60 consecutive months. For a Basic plan member, this period is the 60 consecutive months yielding the highest total wages. The annual pension is paid monthly for the lifetime of a retiree. The calculation of a member's pension is determined by their pension election under PA 300 of 2012 and is shown below:

Option 1: FAC × total years of service × 1.5%
Option 2: FAC × 30 years of service × 1.5% + FAC × years of service beyond 30 × 1.25%
Option 3: FAC × years of service as of transition date × 1.5% + FAC × years of service after transition date × 1.25%
Option 4: FAC as of transition date × years of service as of transition date × 1.5%

A MIP member who became a member of MPSERS prior to July 1, 2010 may retire at:

- age 46 with 30 or more years of credited service; or
- age 60 with 10 or more years of credited service; or
- age 60 with 5 years of credited service provided the member has worked through his or her 60th birthday and has credited service in each of the five school fiscal years immediately preceding the retirement effective date.

A Pension Plus member who became a member of MPSERS after June 30, 2010 may retire at age 60 with 10 or more years of credited service.

A Basic plan member may retire at:

- age 55 with 30 or more years of credited service; or
- age 60 with 10 or more years of credited service.

There is no mandatory retirement age.

Early Retirement

A MIP or Basic member may retire with an early permanently reduced pension:

- after completing at least 15 but less than 30 years of credited service; and
- after attaining age 55; and
- with credited service in each of the 5 school years immediately preceding the pension effective date.

The early pension is computed in the same manner as a regular pension, but is permanently reduced 0.5% for each full and partial month between the pension effective date and the date the member will attain age 60.

Deferred Retirement

If a member terminates employment before attaining the age qualification, but after accruing 10 or more years of credited service, the member becomes a deferred member and is eligible for a pension at the time the age qualification is attained.

Nonduty Disability Benefit

Any member with 10 or more years of credited service who becomes totally and permanently disabled due to any non-duty related cause and who has not met the age requirement for a regular pension is eligible for a non-duty disability pension computed in the same manner as an age and service pension, upon recommendation from the member's personal physician and the Retirement Board physician and the approval of the Retirement Board. An Annual Certification of Disability is conducted each January. Upon prior approval, total disability benefits plus authorized outside earnings are limited to 100% of final average compensation (increased by 2% for each year retired; first year 100%, next year 102%, etc.).

Duty Disability Benefit

Any member who becomes totally and permanently disabled as a result of a duty-related cause, who has not met the age and service requirement for a regular pension, and who is in receipt of weekly workers' compensation is eligible for a duty disability pension computed in the same manner as an age and service pension (but based upon a minimum of 10 years of service) upon recommendation from the member's personal physician and the Retirement Board physician and the approval of the Retirement Board. An Annual Certification of Disability is conducted each January. Upon prior approval, total disability benefits plus authorized outside earnings are limited to 100% of final average compensation (increased by 2% for each year retired; first year 100%, next year 102%, etc.).

Forms of Payment

The election of a pension option is made at the time of application. Once a member has retired, the option choice is irrevocable. The pension effective date is the first of the calendar month following the date the member has satisfied the age and service requirements, has terminated public school employment and has the completed application forms on file with the System for a period of 15 days. A retroactive pension can be paid for no more than 12 calendar months. Thus, delay in filing the application can result in a loss of some retroactive pension benefits. An applicant may select only one of the following options.

Straight Life Pension – The Straight Life Pension pays the largest level pension a retiree can receive during his or her lifetime and stops with the month of a retiree's death. There are no monthly benefits for a beneficiary. The pension benefit is computed with no beneficiary rights. If the retiree made contributions while an employee and has not received the total accumulated contributions before death, a refund of the balance of the contributions is made to the beneficiary of record. If the retiree did not make any contributions, there will not be payments to any beneficiaries.

Survivor Options – Under the Survivor Options, 100% Survivor Pension, 100% Equated, 75% Survivor Pension, 75% Equated, 50% Survivor Pension and 50% Equated, the reduction is an actuarial determination dependent upon the combined life expectancies of a retiree and a beneficiary, and varies from case to case. A beneficiary may only be a spouse, brother, sister, parent or child (including an adopted child) of a retiring member. If the beneficiary pre-deceases a retiree, the pension will revert to either the Straight Life or Straight Life Equated amount ("pop-up" provision). If, however, a retiree was single at the time of retirement and subsequently married, the retiree can request to nominate a new spouse if they elected the straight life option at retirement. Also, if a retiree was married at the time of retirement and has since been widowed and remarried, the retiree can request to nominate a new spouse as a pension beneficiary as long as they elected a survivor option for the spouse at the time of retirement.

100% Survivor Pension – pays a reduced pension to a retiree. The month after a retiree's death, the same amount will be paid to a designated beneficiary for the remainder of his or her lifetime.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

75% Survivor Pension – pays a reduced pension to a retiree. The month after a retiree's death, 75% of the pension amount will be paid to a designated beneficiary for the remainder of his or her lifetime.

50% Survivor Pension – pays a reduced pension to a retiree. The month after a retiree's death, 50% of the pension amount will be paid to a designated beneficiary for the remainder of his or her lifetime.

Equated Plan – For MIP and Basic plan members, the Equated plan may be combined with the Straight Life, 100% Survivor, 75% Survivor, or 50% Survivor Pension by any member under age 61, except a disability applicant. The Equated Plan provides a higher pension every month until age 62, at which time the monthly pension is permanently decreased to a lower amount than the Straight Life, 100%, 75%, or 50% Survivor alone would provide.

The intent of the Equated Plan is for the retiree's pension to decrease at age 62 by approximately the same amount as that person's Social Security benefit will provide. The System pension until age 62 should be about the same as the combined System pension and Social Security after age 62.

The projected Social Security pension the retiring member obtains from the Social Security Administration and furnishes to the System is used in the Equated Plan calculation. The actual Social Security pension may vary from the estimate.

NOTE: The reduction in the pension at age 62 pertains to the Equated Plan only and affects only the retiree. A beneficiary under 100% Equated, 75% Equated or 50% Equated will receive the 100%, 75%, or 50% Survivor amount the month following the retiree's death as if the Equated Plan had not been chosen. A beneficiary does not participate in the Equated Plan.

Survivor Benefit

A non-duty survivor pension is available if a MIP member has 10 years of credited service or, if age 60 or older, with five years of credited service; the date they became a MIP member does not matter. The Basic plan provides a survivor pension with 15 years of credited service or, if age 60 or older, with 10 years of credited service. The Pension Plus plan provides for a survivor pension with 10 years of credited service. An active member may nominate as a survivor beneficiary a spouse, child(ren) (including adopted child(ren)), brother, sister, or parent. If other than the spouse is nominated and a spouse exists, the spouse must waive this benefit. If no beneficiary has been nominated, the beneficiary is automatically the spouse; or, if there is no spouse, unmarried children under age 18 share the benefit equally until age 18. The benefit is computed as a regular pension but reduced in accordance with a 100% survivor pension factor. The pension begins the first of the month following the member's death. In the event of the death of a deferred member, the System begins payment to the nominated beneficiary at the time the member would have attained the minimum age qualification.

A duty survivor pension is payable if weekly workers' compensation is being paid to the eligible beneficiary due to the member's death. A spouse receives the benefit (based on a minimum of 10 years of service credit) reduced in accordance with a l00% survivor pension factor. If there is no spouse, unmarried children under age 18 share the benefit equally until age 18; if there is no spouse or child(ren), a disabled and dependent parent is eligible.

Postretirement Adjustments

A retiree who became a MIP member prior to July 1, 2010, receives an annual postretirement non-compounded increase of 3% of the initial pension in the October following twelve months of retirement. Basic plan members do not receive an annual postretirement increase, but are eligible to receive a supplemental payment in those years when investment earnings exceed actuarial assumptions. Pension Plus members do not receive an annual postretirement increase.

On January 1, 1990, pre-October 1, 1981 retirees received an increase that ranged from 1% to 22% dependent upon the pension effective date. On October 1, 1990, the base pension of all retirees with an effective pension date of January 1, 1987, or earlier was increased to include all prior postretirement adjustments.

On January 1, 1986, all recipients through calendar year 1985 received a permanent 8% increase that established the 1986 base pension. In addition, each October, retirees with a pension effective date of January 1, 1987, or earlier receive a fixed increase equal to 3% of the base pension. Both increases are deducted from the distribution of excess investment income, if any. Beginning in 1983, eligible recipients receive an annual distribution of excess investment income, if any.

Member Contributions

Mandatory member contributions were phased out between 1974 and 1977, with the plan remaining noncontributory until January 1, 1987, when the Member Investment Plan (MIP) was enacted. MIP members enrolled prior to January 1, 1990, contribute at a permanently fixed rate of 3.9% of gross wages. The MIP contribution rate was 4.0% from January 1, 1987, the effective date of the MIP, until January 1, 1990, when it was reduced to 3.9%. Members first hired between January 1, 1990 and June 30, 2008, and returning members who did not work between January 1, 1987, through December 31, 1989, contribute at the following graduated permanently fixed contribution rates: 3% of the first $5,000; 3.6% of $5,001 through $15,000; 4.3% of all wages over $15,000. Members first hired July 1, 2008, or later including Pension Plus plan members, contribute at the following graduated permanently fixed contribution rates: 3% of the first $5,000; 3.6% of $5,001 through $15,000; 6.4% of all wages over $15,000.

For a limited period ending December 31, 1992, an active Basic plan member could enroll in the MIP by paying the contributions that would have been made had enrollment occurred initially on January 1, 1987, or on the date of hire, plus interest. MIP contributions at the rate of 3.9% of gross wages begin at enrollment. Actuarial rate of interest is posted to member accounts on July 1 on all MIP monies on deposit for 12 months. If a member leaves public school service and no pension is payable, the member's accumulated contributions plus interest, if any, are refundable.

Under Public Act 300 of 2012, eligible members voluntarily chose between increasing, maintaining, or stopping their contributions to the pension fund as of the transition date. Their options are described in detail under Pension Reform 2012 beginning on page 24. Members who elected to increase their level of contribution contribute 4% (Basic plan) or 7% (MIP); by doing so they maintain a 1.5% pension factor in their pension formula. Members who elected to maintain their level of contribution will receive a 1.25% pension factor in their pension formula for their years of service as of their transition date. Their contribution rates are described above. Members who elected to stop their contributions became participants in the Defined Contribution plan as of their transition date.

Employer Contributions

Each school district or reporting entity is required to contribute the full actuarial funding contribution amount to fund pension benefits.

BENEFIT PROVISIONS – OTHER POSTEMPLOYMENT

Introduction

Benefit provisions of the postemployment healthcare plan are established by State statute, which may be amended. Public Act 300 of 1980, as amended, establishes eligibility and benefit provisions. Retirees have the option of health coverage, which, through 2012, was funded on a cash disbursement basis. Beginning fiscal year 2013, it is funded on a prefunded basis. The System has contracted to provide the comprehensive group medical, prescription drug, dental and vision coverage for retirees and beneficiaries. A subsidized portion of the premium is paid by the System with the balance deducted from the monthly pension of each retiree healthcare recipient. For members who first worked before July 1, 2008, (Basic, MIP-Fixed, and MIP-Graded plan members) the subsidy is the maximum allowed by statute. To limit future liabilities of Other Postemployment Benefits, members who first worked on or after July 1, 2008, (MIP-Plus plan members) have a graded premium subsidy based on career length where they accrue credit towards their insurance premiums in retirement, not to exceed the maximum allowable by statute. Public Act 300 of 2012 sets the

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

maximum subsidy at 80% beginning January 1, 2013; 90% for those Medicare eligible and enrolled in the insurances as of that date.

Public Act 75 of 2010 requires each actively employed member of MPSERS after June 30, 2010, to annually contribute 3% of their compensation to offset employer contributions for healthcare benefits of current retirees.

Dependents are eligible for healthcare coverage if they meet the dependency requirements set forth in Public Act 300 of 1980, as amended.

The number of participants and other relevant financial information are as follows:

	2016
Health, Dental and Vision Plan	
Eligible participants	208,066
Participants receiving benefits:	
Health	150,966
Dental/Vision	164,206
Active members[1,2]	191,403
Inactive vested members[2]	2,298
Expenses for the year (in thousands)	$809,538
Employer payroll contribution rates	6.4 - 8.78%

[1] Active members count includes Personal Healthcare Fund members eligible for the $1,000/$2,000 lump sum at termination benefit.
[2] Based on FY2015 data.

Applications for enrollment after retirement are accepted anytime during the year, with coverage effective six months following the receipt of the application.

Retiree Healthcare Reform of 2012

Public Act 300 of 2012 granted all active members of the Michigan Public School Employees Retirement System, who earned service credit in the 12 months ending September 3, 2012, or were on an approved professional services or military leave of absence on September 3, 2012, a voluntary election regarding their retirement healthcare. Any changes to a member’s healthcare benefit are effective as of the member’s transition date, which is defined as the first day of the pay period that begins on or after February 1, 2013.

Under Public Act 300 of 2012, members were given the choice between continuing the 3% contribution to retiree healthcare and keeping the premium subsidy benefit described above, or choosing not to pay the 3% contribution and instead opting out of the subsidy benefit and becoming a participant in the Personal Healthcare Fund (PHF), a portable, tax-deferred fund that can be used to pay healthcare expenses in retirement. Participants in the PHF are automatically enrolled in a 2% employee contribution into their 457 account as of their transition date, earning them a 2% employer match into a 401(k) account. Members who selected this option stop paying the 3% contribution to retiree healthcare as of the day before their transition date, and their prior contributions were deposited into their 401(k) account.

Members who did not make an election before the deadline retain the premium subsidy benefit and continue making the 3% contribution toward retiree healthcare. Deferred or nonvested members on September 3, 2012 who are rehired on or after September 4, 2012, will contribute 3% to retiree healthcare and will retain the premium subsidy benefit. Returning members who made the retirement healthcare election will retain whichever option they chose.

Those who elected to retain the premium subsidy continue to annually contribute 3% of compensation into the healthcare funding account. A member or former member age 60 or older, who made the 3% healthcare contributions but who does not meet eligibility requirements may request a refund of their contributions. Similarly, if a retiree dies before the total value of the insurance subsidy paid equals the total value of the contributions the member made, and there are no eligible dependents, the beneficiary may request a refund of unused funds. Refunds of member contributions to the healthcare funding account are issued as a supplemental benefit paid out over a 60-month period.

- Retirees with at least 21 years of service, who terminate employment after October 31, 1980, with vested deferred benefits, are eligible for subsidized employer-paid health benefit coverage.
- A delayed premium subsidy applies to retirees who became a member of the retirement system before July 1, 2008 and who purchased service credit on or after July 1, 2008. Such individuals are eligible for premium subsidy benefits at age 60 or when they would have been eligible to retire without having made a service purchase, whichever comes first. They may enroll in the insurances earlier, but are responsible for the full premium until the premium subsidy begins.

Under Public Act 300 of 2012, the state no longer offers an insurance premium subsidy in retirement for public school employees who first work on or after September 4, 2012. Instead, all new employees will be placed into the Personal Healthcare Fund where they will have support saving for retirement healthcare costs in the following ways:

- They will be automatically enrolled in a 2% employee contribution into a 457 account as of their date of hire, earning them a 2% employer match into a 401(k) account.
- They will receive a credit into a Health Reimbursement Account (HRA) at termination if they have at least 10 years of service at termination. The credit will be $2,000 for participants who are at least 60 years of age at termination or $1,000 for participants who are less than 60 years of age at termination.

Participants in the Personal Healthcare Fund who become disabled for any reason are not eligible for any employer-funded health insurance premium subsidy. If a PHF participant suffers a nonduty-related death, his or her health benefit dependents are not eligible to participate in any employer funded health insurance premium subsidy. If a PHF participant suffers a duty death, the state will pay the maximum health premium allowed by statute for the surviving spouse and health benefit dependents. The spouses' insurance subsidy may continue until his or her death, the dependents' subsidy may continue until their eligibility ends (through marriage, age, or other event). Upon eligibility for a duty death benefit, the 2% employer matching contributions and related earnings in the member's 401(k) are forfeited and the state will pay for the subsidy. The beneficiaries receive the member's personal contributions and related earnings in the member's 457 account.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting and Presentation

The System's financial statements are prepared using the accrual basis of accounting. Contributions from the employers 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 reserves are described below and details are provided in the supporting schedules.

Governmental Accounting Standards Board (GASB) Statement No. 67, which was adopted during the year ended September 30, 2014, addresses accounting and financial reporting requirements for pension plans. The requirements for GASB Statement No. 67 require changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive note disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB Statement No. 67 did not significantly impact the accounting for accounts receivable and investment balances. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note 4 and in the Required Supplementary Information on page 51.

As of September 30, 2016, the System applied GASB Statement No. 72, *Fair Value Measurement and Application*. GASB Statement No. 72 provides guidance for determining a fair value measurement for reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements.

Reserves

Reserve for Employee Contributions – This reserve represents active member contributions and interest less amounts transferred to the Reserve for Retired Benefit Payments for regular and disability retirement, amounts refunded to terminated members, and amounts transferred to the Reserve for Employer Contributions representing unclaimed funds. Members no longer contribute to this reserve except to purchase eligible service credit or repay previously refunded contributions. At September 30, 2016, the balance in this reserve was $1.5 billion.

Reserve for Pension Plus Employee Contributions – This reserve represents active member contributions and interest less amounts transferred to the Reserve for Pension Plus Retired Benefit Payments for regular retirement, amounts refunded to terminated members, and amounts transferred to the Reserve for Pension Plus Employer Contributions representing unclaimed funds. This reserve was established under the provisions of Public Act 75 of 2010. At September 30, 2016, the balance in this reserve was $138.8 million.

Reserve for Member Investment Plan – This reserve represents MIP contributions and interest less refunds and transfers to the Reserve for Retired Benefit Payments. At September 30, 2016, the balance in this reserve was $5.8 billion.

Reserve for Employer Contributions – This reserve represents all reporting unit contributions, except payments for health benefits. Interest from the Reserve for Undistributed Investment Income is credited annually. Amounts are transferred annually to the Reserve for Retired Benefit Payments to bring the balance of that reserve into balance with the actuarial present value of retirement allowances. At September 30, 2016, the balance in this reserve was ($20.9) billion.

Reserve for Pension Plus Employer Contributions – This reserve represents all reporting unit contributions for Pension Plus members, except payments for health benefits. Interest from the Reserve for Undistributed Investment Income is credited annually at a rate of 7%. Amounts are transferred annually to the Reserve for Retired Pension Plus Benefit Payments to bring the balance of that reserve into balance with the actuarial present value of retirement allowances. This reserve was established under the provisions of Public Act 75 of 2010. At September 30, 2016, the balance in this reserve was $100.4 million.

Reserve for Retired Benefit Payments – This reserve represents payments of future retirement benefits to current retirees. At retirement, a member's accumulated contributions plus interest are transferred into this reserve. Monthly benefits, which are paid to the retiree, reduce this reserve. At the end of each fiscal year, an amount, determined by an annual actuarial valuation, is transferred from the Reserve for Employer Contributions to bring the balance of this reserve into balance with the actuarial present value of retirement allowances. At September 30, 2016, the balance in this reserve was $43.5 billion.

Reserve for Retired Pension Plus Benefit Payments – This reserve represents payments of future retirement benefits to current Pension Plus retirees. At retirement, a member's accumulated contributions plus interest are transferred into this reserve. Monthly benefits, which are paid to the retiree, reduce this reserve. At the end of each fiscal year, an amount, determined by an annual actuarial valuation, is transferred from the Reserve for Pension Plus Employer Contributions to bring the balance of this reserve into balance with the actuarial present value of retirement allowances. This reserve was established under the provisions of Public Act 75 of 2010. At September 30, 2016, the balance in this reserve was $40 thousand.

Reserve for Undistributed Investment Income – This reserve represents all investment earnings. Interest is transferred annually to the other reserves. Administrative expenses of the System are paid from the Reserve for Administrative Expenses, which is credited with amounts from the Reserve for Undistributed Investment Income to cover the expenses. For ease of reporting and understanding, the two reserves are presented as one reserve in the supporting schedules. Public Act 143 of 1997 established a stabilization subaccount within the Reserve for Undistributed Investment Income to which any over funding is credited. As of September 30, 2016, the balance in the subaccount was $0. At September 30, 2016, the balance in this reserve was $13.2 billion.

Reserve for Health (OPEB) Related Benefits – This reserve is credited with employee and employer contributions for retirees' health, dental, and vision benefits. Starting in fiscal year 2013, the employer contribution is based on a prefunded basis and represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liability (or funding excess) over a period not to exceed 30 years. In addition, in fiscal year 2016, federal funding for Medicare Part D and Employer Group Waiver Plan (EGWP) was paid directly to a third party vendor. The third party vendor uses the EGWP funding for any claims submitted and bills the system for any remaining claims outstanding. Premiums for health, dental and vision benefits are paid from this reserve. At September 30, 2016, the balance in this reserve was $4.8 billion.

Reporting Entity

The System is a pension and other employee benefit trust fund of the State. As such, the System is considered part of the State and is included in the State's Comprehensive Annual Financial Report as a pension and other employee benefit trust fund. The System and its Board are not financially accountable for any other entities or other organizations. Accordingly, the System is the only entity included in this financial report.

Benefit Protection

Public Act 100 of 2002 was passed by the Michigan Legislature to protect pension benefits of public employees from alienation (being transferred). Alienation is attachment, garnishment, levy, execution, bankruptcy or other legal process except for divorce orders or eligible domestic relation orders. The statutes governing the System contained an "anti-alienation" clause to provide for this protection; however, many smaller public pension systems did not have the benefit of this protection. Therefore, Public Act 100 of 2002 was passed to establish legal protection of pension assets that encompasses all public employees.

Investments

Generally, investments are reported at fair value, consistent with the provisions of GASB Statement No. 72, *Fair Value Measurement and Application.* Short-term, highly liquid debt instruments including commercial paper are reported at amortized cost. Additional disclosures describing investments are provided in Note 5.

Investment Income

Dividend and interest income is recognized on the accrual basis. Fair value changes are recorded as investment income or loss. Purchases and sales of investments are recorded as of the trade date (the date upon which the transaction is initiated), except for purchase and sale of mortgages, real estate, and private equity investments which are recorded as of the settlement date (the date upon which the transaction is ultimately completed). The effect of recording such transactions as of the settlement date does not materially affect the financial statements.

Costs of Administering the System

Each year a restricted general fund appropriation is requested to fund the ongoing business operations of the System. These administrative costs are ultimately funded by the System through the regular transfer of funds from the System to the State's general fund based on either a direct cost or allocation basis depending on

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

the nature of the expense. Costs of administering the System are financed by undistributed investment income of the System.

Property and Equipment

Office space is leased from the State on a year-to-year basis. Office equipment is capitalized if the value exceeds $5,000. These assets are recorded at cost and are reported net of depreciation in the Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position. Such assets are depreciated on a straight-line basis over 10 years. As of September 30, 1998, all capitalized equipment was fully depreciated. No additional equipment has been capitalized for the System since that date.

Related Party Transactions

Leases and Services – The System leases operating space and purchases certain administrative, data processing, legal and investment services from the State. The space and services are not otherwise available by competitive bid. The schedule below summarizes costs incurred by the System for such services.

	2016 (in thousands)
Building Rentals	$ 911
Technological Support	11,152
Attorney General	413
Investment Services	13,465
Personnel Services	10,162

Cash – At September 30, 2016, the System had $155.7 million in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings (Losses) from these activities amounted to $213.6 thousand for the year ended September 30, 2016.

NOTE 3 – CONTRIBUTIONS AND FUNDED STATUS

Contributions

The majority of the members currently participate on a contributory basis. Reporting units are required by Public Act 300 of 1980, as amended, to contribute amounts necessary to finance the coverage of member and retiree OPEB. Contribution provisions are specified by State statute and may be amended only by action of the State Legislature.

Employer contributions to the System are determined on an actuarial basis using the entry age normal actuarial cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the service of the individual between entry age and assumed exit age. The portion of this cost allocated to the current valuation year is called the normal cost. The remainder is called the actuarial accrued liability. Normal cost is funded on a current basis. For retirement and OPEB benefits, the unfunded (overfunded) actuarial accrued liability as of the September 30, 2016 valuation will be amortized over a 20 year period for the 2016 fiscal year. The schedule on the following page summarizes pension contribution rates in effect for fiscal year 2016.

Pension Contribution Rates

Benefit Structure	Member	Employer
Basic	0.0 - 4.0 %	18.95 - 22.60 %
Member Investment Plan	3.0 - 7.0	18.95 - 22.60
Pension Plus	3.0 - 6.4	17.73
Defined Contribution	0.0	14.56 - 17.73

Actual employer contributions for other postemployment benefits (OPEB) were $883.9 million for fiscal year 2016. The fiscal year 2016 annual covered payroll is not yet available. Required employer contributions based on previous year actuarial valuations for OPEB included:

- $31.9 million for fiscal year 2016 for the normal cost of OPEB representing 0.4% of annual covered payroll for fiscal year 2015.
- $879.8 million for fiscal year 2016 for amortization of unfunded actuarial accrued liability representing 10.6% (before reconciliation, if any) of annual covered payroll for fiscal year 2015.

The System may reconcile with actuarial requirements annually. If the system reconciles in a year, any funding excess or deficiency for pension benefits is smoothed over a maximum of five years, with at least one-fifth (20%) of the funding excess or deficiency included in the subsequent year's contribution. This payment is not recognized as a payable or receivable in the accounting records. If the System does not reconcile in a year, any funding excess or deficiency for pension benefits is accounted for in subsequent required contributions over the remaining amortization period. For fiscal year 2016, the System did not reconcile.

In May 1996, the Internal Revenue Service issued a private letter ruling allowing the System's members to purchase service credit and repay refunds using tax-deferred (pre-tax) dollars. The program was implemented in fiscal year 1998, and payments began in fiscal year 1999.

The program allows members to purchase service credit and repay refunds on a tax-deferred basis. Members sign an irrevocable agreement that identifies the contract duration, monthly payment, total contract amount and years of service credit being purchased. The duration of the contract can range from 1 to 20 years. The payment amounts are withheld from members' paychecks and are treated as employer pick-up contributions pursuant to Internal Revenue Code Section 414(h). At September 30, 2016, there were 11,113 agreements. The agreements were discounted using the assumed actuarial rate of return of 8% for September 30, 2016. The average remaining length of a contract was approximately 5.7 years for 2016. The short-term receivable was $20.7 million and the discounted long-term receivable was $52.8 million at September 30, 2016.

Funded Status – Other Postemployment Benefits

Participating employers are required to contribute at an actuarially determined rate for OPEB. For fiscal year 2015, the actuarial accrued liability (AAL) for OPEB was $12.8 billion, and the actuarial value of assets was $3.5 billion, resulting in an unfunded actuarial accrued liability (UAAL) of $9.3 billion and a funded ratio of 27.5%. The covered payroll (annual payroll of active employees covered by the plan) was $8.3 billion, and the ratio of the UAAL to the covered payroll was 112.6%.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

NOTE 4 – NET PENSION LIABILITY

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the fair value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Net Pension Liability (in thousands)

Total Pension Liability	$	68,970,001
Plan Fiduciary Net Position		43,460,579
Net Pension Liability	$	25,509,422
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		63.01%
Net Pension Liability as a percentage of Covered Payroll		299.75%
Total Covered Payroll	$	8,510,200

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2016, are summarized in the following table:

Asset Allocation

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Domestic Equity Pools	28.0 %	5.9 %
Private Equity Pools	18.0	9.2
International Equity Pools	16.0	7.2
Fixed Income Pools	10.5	0.9
Real Estate and Infrastructure Pools	10.0	4.3
Absolute Return Pools	15.5	6.0
Short-Term Investment Pools	2.0	0.0
TOTAL	**100.0 %**	

* Long-term rates of return are net of administrative expenses and 2.1% inflation.

Rate of Return

For the fiscal year ended September 30, 2016, the annual money-weighted rate of return on pension plan investment, net of pension plan investment expense, was 5.91%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

A discount rate of 8.0% was used to measure the total pension liability (7.0% for the Pension Plus plan). This discount rate was based on the long-term expected rate of return on pension plan investments of 8.0% (7.0% for the Pension Plus plan). 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. 67, the following presents the plan's net pension liability, in thousands, calculated using a discount rate of 8.0% (7.0% for the Pension Plus plan), as well as what the plan's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher:

1% Decrease 7.0% / 6.0%	**Current Discount Rate Assumption** 8% / 7.0%	**1% Increase** 9.0% / 8.0%
$32,782,914	$25,509,422	$19,375,168

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the pension plan'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 both the pension and OPEB plans 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, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions (ARC) are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The Schedule of Funding Progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets for the OPEB plan is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

The Schedules of Contributions in Required Supplementary Information present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement No. 67 for pension contributions and GASB Statement No. 43 for OPEB contributions.

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.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Summary of Actuarial Assumptions

Valuation Date	September 30, 2015
Actuarial Cost Method	Entry Age, Normal
Amortization Method - OPEB	Level Percent of Payroll, Closed
Remaining Amortization Period - OPEB	21 years[1]
Asset Valuation Method - OPEB	Fair Value
Actuarial Assumptions:	
Wage Inflation Rate	3.5%
Investment Rate of Return - Pension	
- MIP and Basic Plans	8.0%
- Pension Plus Plan	7.0%
Investment Rate of Return - OPEB	8.0%
Projected Salary Increases	3.5 - 12.3%, including wage inflation at 3.5%
Cost-of-Living Pension Adjustments	3% Annual Non-Compounded for MIP Members
Healthcare Cost Trend Rate	7.5% Year 1 graded to 3.5% Year 12
Mortality - Pension and OPEB	RP-2000 Combined Healthy Life Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA (for men, 140% of the table rates for ages 0-79, 133% of the table rates for ages 80-84, and 121.8% of the table rates for ages over 84 were used and for women, 96% of the table rates were used).
Other Assumptions OPEB only: [2]	
Opt Out Assumption	21% of eligible participants hired before July 1, 2008 and 30% of those hired after June 30, 2008 are assumed to opt out of the retiree health plan
Survivor Coverage	80% of male retirees and 67% of female retirees are assumed to have coverage continuing after the retiree's death
Coverage Election at Retirement	75% of male and 60% of female future retirees are assumed to elect coverage for 1 or more dependents
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.

[1] Based on the provisions of GASB Statement Nos. 43 and 45 when the actuarial accrued liability for the OPEB plan is underfunded or overfunded, the difference should be amortized over a period not to exceed 30 years for the fiscal periods beginning on or after June 15, 2006.

[2] Applies to individuals hired before September 4, 2012.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

NOTE 5 – INVESTMENTS

Investment Authority

Under Public Act 380 of 1965, as amended, the authority for the purchase and the sale of investments resides with the State Treasurer. Investments are made subject to the Public Employee Retirement System Investment Act, Public Act 314 of 1965, as amended. The Public Employee Retirement System Investment Act authorizes, with certain restrictions, the investment of pension fund assets in stocks, corporate and government bonds and notes, mortgages, real estate, and certain short-term and private equity investments. Investments must be made for the exclusive purposes of providing benefits to active members, retired members and beneficiaries, and for defraying the expenses of investing the assets.

Derivatives

The State Treasurer employs the use of derivatives in the investment of the pension and other employee benefit trust funds (the trust funds).

Derivatives are used in managing the trust fund portfolios, but uses do not include speculation or leverage of investments. Less than 12% of the total trust funds' portfolio has been invested from time to time in future contracts, swap agreements, structured notes, option and forward contracts. State investment statutes limit total derivative exposure to 15% of a fund's total asset value, and restrict uses to replication of returns and hedging of assets. Swap agreements represent the largest category of derivative investments subject to this limitation. Option and Future contracts traded daily on an exchange and settling in cash daily or having a limited and fully defined risk profile at an identified, fixed cost are not subject to the derivative exposure limitation.

The derivative fair values are reported on the *Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position* as of September 30, 2016, in their respective investment pool's fair value. Derivative net increase and decrease are reported on the *Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position* for fiscal year ended September 30, 2016, under "Investment income (loss)", in "Net increase (decrease) in fair value of investments". Bond interest, swap payments, and dividends are reported under "Investment income (loss)", in "Interest, dividends, and other".

Derivative Investment Table as of September 30, 2016 (in millions):

Investment and Investment Type	Percentage of Fair Value	Notional Value	Investments At Fair Value	Net Increase (Decrease) in Fair Value	Investment Income	Fair Value Subject to Credit Risk
U.S. Treasury Bond Future Contracts Fixed Income Investments	0.0%	$ 5.4	$ 0.1	$ (0.3)		
Option Contracts Equity Investments	0.0	(92.4)		8.9		
Swap Agreements International Equity Investments	1.8	1,153.7	871.3	98.5	$ (0.2)	$ 72.8
Swap Agreements Equity Investments	0.0	1,141.7	3.6	(0.4)	18.4	36.8

To diversify the trust funds' portfolio, the State Treasurer has entered into international swap agreements with investment grade counterparties, which are tied to stock market indices in approximately forty-two foreign countries. Generally, one quarter or less of the notional amount tied to foreign stock market indices is usually hedged against foreign currency fluctuations. The swap agreements provide that the System will pay quarterly over the term of the swap agreements, interest indexed to the three month London Inter-Bank Offer Rate (LIBOR), adjusted for an interest rate spread, on the notional amount stated in the agreements. International equity swap agreement maturity dates range from October 2016 to September 2017. The U.S. Domestic LIBOR based floating rate notes and other investments are held to correspond with the notional amount of the international swap agreements. The value of the international synthetic equity structures is a combination of the value of the swap agreements and the value of the notes and other investments. The book value represents the cost of the notes and other investments. The current value represents the current value of the notes and other investments and the change in the value of the underlying indices from the inception of the swap agreements. The current value is used as a representation of the fair value based on the intention to hold all swap agreements until maturity. At the maturity of the swap agreements, the trust funds will either receive the increase in the value of the equity indices from the level at the inception of the agreements, or pay the decrease in the value of the indices. The combined swap structure generally realizes gains and losses on a rolling basis.

Domestic equity swap agreements provide that the System will pay interest monthly, quarterly, or annually over the term of the swap agreements, interest indexed to the LIBOR, adjusted for an interest rate spread, on the notional amount stated in the agreements. Domestic equity swap agreement maturity dates range from October 2016 to May 2018. Domestic equity swaps value is a combination of the value of the swap agreements and the value of short-term investments. Book value represents the cost of short-term and equity investments. Current value represents the fair value of the short-term investments and the change in the value of the underlying indices from the inception of the swap agreements. Domestic equity swaps' increase (decrease) primarily reflects the net changes in the domestic indices and short-term investments.

Counterparty credit risk is the maximum loss amount that would be incurred if the counterparties to the derivative instrument failed to perform according to the terms of the contract, without respect to any collateral or other security, or netting arrangement.

The State Treasurer traded U.S. Treasury bond future contracts to manage duration and yield curve exposure.

To provide downside protection and enhance current income, the State Treasurer traded covered equity options on single securities for the Real Return Opportunistic Investment, and Equity Investment pools. Put options are used to protect against large negative moves in single stocks, as well as, to express interest in a security that is trading well below its intrinsic value. Call options have been used to achieve current income on single equity securities that are trading near their intrinsic value.

Securities Lending

The System, pursuant to a Securities Lending Authorization Agreement, has authorized State Street Bank and Trust Company ("State Street") to act as the System's agent in lending System's securities to approved borrowers. State Street, as agent, enters into Securities Loan Agreements with borrowers.

During the fiscal year, State Street lent, on behalf of the State Treasurer, certain securities of the System held by State Street as custodian and received cash or other collateral including securities issued or guaranteed by the United States government. The types of securities lent were equity, and fixed income, which includes government and corporate bonds and notes. State Street does not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 100% of the fair value of the loaned securities.

Pursuant to the Securities Lending Authorization Agreement, State Street had an obligation to indemnify the System in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default of the Borrower.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

During the fiscal year, the System and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. As of September 30, 2016, such investment pool had an average duration of 1.6 years and an average weighted final maturity of 1.6 years for USD. Because the loans were terminable at will their duration did not generally match the duration of the investments made with cash collateral. On September 30, 2016, the System had no credit risk exposure to borrowers. The fair value of collateral held and the fair value (USD) of securities on loan for the client as of September 30, 2016, was $3,336,346,583 and $3,277,163,743, respectively.

Risk

In accordance with GASB Statement No. 40, investments require certain disclosures regarding policies and practices and the risks associated with them. The credit risk, (including custodial credit risk and concentration of credit risk), the interest rate risk, and the foreign currency risk are discussed in the following paragraphs. Amounts represent the pro rata share of the underlying investments as required by GASB Statement No. 40. These investments are held in internal investment pools and reported as such in the financial statements.

Credit Risk – Credit risk is the risk that an issuer will not fulfill its obligations.

- Short-Term Fixed Income Investments – Prime commercial paper investments must be rated A-1 or P-1 at the time of purchase as rated by two national rating services as specified in Public Act 314 of 1965, as amended. Borrowers must have at least $400.0 million in commercial paper outstanding, and the State Treasurer may not invest in more than 10% of the borrower's outstanding debt. The investments are further limited to $200.0 million in any borrower, unless the borrower has an A-1+ rating in which case the investment is not to exceed $300.0 million.

- Long-Term Fixed Income Investments – Investment grade and noninvestment grade securities may be acquired in compliance with the parameters set forth in Public Act 314 and the State Treasurer's Investment Policy Statement for the System. Public Act 314 defines investment grade as investments in the top four major grades, rated by two national rating services. At September 30, 2016, the System was in compliance with Public Act 314 and the Investment Policy Statement in all material aspects.

Rated Debt Investments
(in thousands)
As of September 30, 2016

Investment Type	Fair Value	S&P	Fair Value	Moody's
Short Term	$ 1,738,021	A-1	$ 1,738,021	P-1
Government Securities				
U.S. Agencies - Sponsored	48	AAA	182,498	Aaa
	182,451	AA	-	Aa
Corporate Bonds & Notes				
	182,817	AAA	246,107	Aaa
	343,167	AA	245,217	Aa
	698,157	A	886,289	A
	1,607,094	BBB	1,511,767	Baa
	389,568	BB	433,745	Ba
	344,696	B	418,522	B
	107,331	CCC	124,601	Caa
	3,144	CC	36,291	Ca
	-	C	2,400	C
	32,152	D	-	D
	587,940	NR	391,129	NR
International *				
	199,175	AA	199,175	Aa
	81,393	A	198,843	A
	439,197	BBB	341,115	Baa
	19,368	NR	-	NR
Securities Lending Collateral				
Short Term				
	308,996	A-1	308,996	P-1
	677,609	NR	677,609	NR
Corporate	-	BB	2,335,572	Ba
	2,335,572	NR	-	NR
Mutual Funds **				
	25,651	AAA	25,651	Aaa
	6,455	BBB	6,455	Baa
	72,010	B	72,010	B
Total	$ 10,382,012		$ 10,382,012	

NR - not rated

* International Investment types consist of domestic floating rate note used as part of a Swap strategy.
** Average Rating

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

Custodial Credit Risk – Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the State will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party.

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government and are held by either the counterparty or the counterparty's trust department or agent, but not in the government name.

The State Treasurer does not have a policy for custodial credit risk. However, the State's custodial bank had a credit rating of A at September 30, 2016. As of September 30, 2016, no securities were exposed to custodial credit risk.

Concentration of Credit Risk – Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer.

Other than obligations issued, assumed or guaranteed by the United States, its agencies or United States government sponsored enterprises, the System is prohibited by Public Act 314 of 1965, as amended, from investing more than 5% of the outstanding obligations of any one issuer or investing more than 5% of a System's assets in the obligations of any one issuer. When calculating the amount of outstanding obligations, the System includes publicly issued and privately held debt.

At September 30, 2016, there were no investments in any single issuer that accounted for more than 5% of the System's assets.

Interest Rate Risk – Fixed Income Investments – Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment.

The State Treasurer's policy states that cash equivalents are invested in short-term fixed income securities with an average weighted maturity of less than one year to provide liquidity and safety of principal from capital market and default risk. At September 30, 2016, the fair value of the System's prime commercial paper was $1,738.0 million with the weighted average maturity of 21 days.

The State Treasurer does not have a policy regarding interest rate risk for long-term debt investments. However, the trust funds are invested with a long-term strategy. The goal is to balance higher returns while accepting minimum risk for the return. Analyzing the yield curve on individual securities as compared to U.S. Treasuries determines, in part, what is an acceptable risk for the return. Therefore, market conditions such as lower interest rates result in shorter duration and higher interest rates result in longer duration.

Debt Securities
(in thousands)
As of September 30, 2016

	Fair Value	Effective Duration in Years
Government		
U. S. Treasury	$ 1,140,160	5.3
U. S. Agencies - Backed	429,787	4.0
U. S. Agencies - Sponsored	182,498	3.2
Corporate	4,400,183	4.3
International*		
Corporate	739,133	0.1
Total	$ 6,891,761	

Debt securities are exclusive of securities lending collateral.

*International contains Domestic Government and Corporate Debt Securities as a part of their derivative strategies.

The interest rates reset on a quarterly basis for these securities.

Foreign Currency Risk – Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit.

The System invests in various securities denominated in foreign currencies. Authorized global securities include equities, fixed income, mutual funds, real estate, and limited partnerships. These investments are limited to 30% of the total assets of the System with additional limits of not more than 5% of the outstanding global securities of any one issuer and no more than 5% of the System's assets in the global securities of any one issuer. In addition to these limits, the State Treasurer cannot acquire securities with companies that have active business operations in the state sponsors of terror as identified by the United States Secretary of State. At September 30, 2016, the total amount of foreign investment subject to foreign currency risk was $8,904.1 million, which amounted to 18.5% of total investments (exclusive of securities lending collateral) of the System.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

Foreign Currency Risk
(in thousands)
As of September 30, 2016

Region	Country	Currency	Private Equity, Real Estate, & Infrastructure Fair Value in U.S. $	International & Absolute Return Fair Value in U.S. $	Fixed Income Fair Value in U.S. $	Equity Fair Value in U.S. $ *
AMERICA						
	Brazil	Real			$ 8,335	
	Canada	Dollar		$ 81,421	5,759	$ 1,004
	Mexico	Peso		5,061	11,033	
	Peru	Sol			1,044	
EUROPE						
	Denmark	Krone		21,182	1,706	
	European Union	Euro		129,575	35,882	112,803
	Hungary	Forint			6,532	
	Norway	Krone		19,059		
	Poland	Zloty			1,182	
	Romania	Leu			1,020	
	Switzerland	Franc		74,707		12,272
	Sweden	Krona		28,410	2,547	474
	U.K.	Sterling		113,699	10,635	45,498
PACIFIC						
	Australia	Dollar		32,955		599
	China	Renminbi	$ 26,719			11,467
	Hong Kong	Dollar		35,351		
	India	Rupee			469	
	Indonesia	Rupiah			2,223	
	Japan	Yen		300,537	10,667	3,512
	Malaysia	Ringgit			4,479	
	New Zealand	Dollar		4,667		
	Philippines	Peso			954	
	Singapore	Dollar		18,965		
	South Korea	Won		6,738		
MIDDLE EAST						
	Israel	Shekel		15,451		2,127
AFRICA						
	South Africa	Rand			4,317	333
OTHER	Various		2,219,319	5,462,803		8,688
	Total		$ 2,246,038	$ 6,350,582	$ 108,784	$ 198,777

* International includes derivatives whose fair value exposure to foreign currency risk is the net amount of unrealized gains and unrealized losses. Maturity dates on these investments range from October 2016 through September 2017 with an average maturity of 0.4 years.

Fair Value Measurements

The Retirement System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Not all investments held by the Retirement System are recorded at fair value. GASB 72 allows for certain investments to be recorded at cost (or amortized cost or any other valuation method), and therefore, they are not presented in the fair value hierarchy table. Equity and fixed income securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Equity Swaps and Fixed Income securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique and other significant observable inputs. Equity and fixed income securities classified as Level 3 of the fair value hierarchy are valued using a third party data and reports that are unobservable. Securities reported at Net Asset Value (NAV) are valued using the most recent third party statement adjusted for cash flows as of September 30, 2016. Investments that are measured at fair value using the Net Asset Value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy on the following page.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Retirement System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

Investments by fair value level:	Balance at September 30, 2016	Fair Value Measurement Using: Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Total cash and cash Equivalents	$ 43,206,587	$ 43,206,587		
Equity				
Depository Receipts	100,580,198	100,580,198		
Warrants	2,659,470	2,596,815		$ 62,656
Publicly Traded Partnerships	52,545,700	52,545,700		
Common Stocks	12,137,620,914	12,136,280,756		1,340,158
Preferred Stocks	980,779	980,779		
Equity Swaps	61,620,195		$ 53,427,813	8,192,382
Commingled Funds and ETF's	5,763,980,033	5,763,980,033		
Real Estate Investment Trusts	492,619,140	492,619,140		
Total Equity	18,612,606,429	18,549,583,421	53,427,813	9,595,195
Fixed Income				
Asset Backed	329,358,245		329,061,374	296,872
Corporate Bonds	4,088,494,245		4,063,875,255	24,618,989
Commercial mortgage-backed	774,672,756		774,672,756	
Government Issues	1,264,871,462	1,140,159,569	116,976,467	7,735,425
US Agency Issues	307,789,850		307,789,850	
Convertible Bonds	433,821		433,821	
Futures on Fixed Income	5,457,442	5,457,442		
Total Fixed Income	6,771,077,821	1,145,617,011	5,592,809,523	32,651,286
Total investments by fair value level	**$ 25,426,890,837**	**$ 19,738,407,019**	**$ 5,646,237,336**	**$ 42,246,481**
Investments measured at the net asset value (NAV)				
Private Equity	7,173,459,183			
Real Return & Opportunistic	4,005,971,572			
Absolute Return	3,060,266,306			
Real Estate & Infrastructure	5,038,194,941			
Other Limited Partnerships	562,298,930			
Total investments measured at the NAV	**19,840,190,931**			
Total investments measured at fair value	**$ 45,267,081,768**			

Additional disclosures for fair value measurements of investments in certain entities that calculate the Net Asset Value per Share (or its equivalent)

Private Equity funds

Total investments measured at the NAV	$ 7,173,459,183
Unfunded commitments	4,842,933,599

Private Equity funds includes investments in approximately *216* partnerships that invest in leveraged buyouts, venture capital, mezzanine debt, distressed debt, secondary funds and other investments. These types of investments can never be redeemed with the funds, but distributions are received through the liquidation of the underlying assets of the fund. It's expected that the underlying assets of the fund are liquidated over a period of five to eight years. However, as of September 30, 2016, it is probable that all of the investments in this group will be sold at an amount different from the NAV per share (or its equivalent).

Therefore, the fair values of the investments in this type have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. As of September 30, 2016, a buyer for these investments has not been identified.

Real Estate and Infrastructure

Total investments measured at the NAV	$	5,038,194,941
Unfunded commitments		1,208,510,702

Real Estate and Infrastructure funds include approximately 96 accounts (limited partnerships, limited liability companies, etc.) that invest in real estate or infrastructure related assets. The fair value of the Real Estate and Infrastructure funds have been determined in accordance with generally accepted accounting principles using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These types of investments cannot be redeemed with the funds. Distributions from these funds will be received as the underlying investments are sold and liquidated over time. It is expected that the underlying assets will be sold over the next 5 – 15 years. However, buyers have not been determined so the fair value has been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital.

Absolute Return Portfolio

Total investments measured at the NAV	$	3,060,266,306
Unfunded commitments		28,416,601

This type invests in hedge funds and hedge fund of funds that pursue multiple strategies to diversify risks and reduce volatility. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the investments. For 97.9% of the investments, Investors may redeem at various dates between January 1, 2017 and April 1, 2019. The remaining 2.10% is not redeemable on demand.

Real Return & Opportunistic Portfolio

Total investments measured at the NAV	$	4,005,971,572
Unfunded commitments		1,919,702,664

This type includes 62 funds that invest in private credit, tangible and intangible real assets, or other real return and opportunistic strategies. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 5 to 10 years. This type also includes one fund that offers quarterly redemptions with 65 day notice.

All Other Investments

Total investments measured at the NAV	$	562,298,930
Unfunded commitments		104,359,192

NOTES TO BASIC FINANCIAL STATEMENTS (CONTINUED)

The balance of plan assets reported at fair value includes:

- one limited partnership (lp) that invests in the equity of Japanese companies. This lp permits partners to withdraw funds quarterly with 180 days of advanced notice.
- two limited partnerships that invest in senior secured debt financing of a 3rd party investment fund. This investment cannot be redeemed by limited partners. The debt has a 10 year maturity, with partnership distributions to include principal as the loan collateral matures four years after the initial investment.
- one limited partnership permitting partners to redeem its debt securities quarterly with 60 days of advanced notice.

NOTE 6 – ACCOUNTING CHANGES

GASB Statement No. 72, *Fair Value Measurement and Application*, was established to provide guidance for determining a fair value measurement for financial reporting purposes. This statement also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This statement was implemented in fiscal year 2016.

NOTE 7 – NEW ACCOUNTING PRONOUNCEMENTS

The Governmental Accounting Standards Board (GASB) issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement replaces Statements No. 43, *Financial Reporting for Postemployment Benefit Plans other than Pension Plans*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. It also includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, as amended, Statement 43, and Statement No. 50, *Pension Disclosures*. This Statement is effective for financial statements for fiscal years beginning after June 15, 2016.

GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The objective of this Statement is to address accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement is effective for participating employers for the fiscal years beginning after June 15, 2017.

GASB issued Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68 and No. 73*. This statement addresses issues regarding: 1) the presentation of payroll-related measures in required supplementary information; 2) the selection of assumptions and the treatment of deviations from the guidance in an actuarial standard of practice for financial reporting purposes; and 3) the classification of payments made by employers to satisfy employee (member) contribution requirements. This Statement is effective for financial statements for fiscal years beginning after June 15, 2016.

NOTE 8 – COMMITMENTS AND CONTINGENCIES

Under the Administrative Procedures Act, members may appeal a decision made by the Board. Once the administrative procedure has been exhausted, the decision may be appealed in Michigan's court system. Various cases that have exhausted the administrative procedures have been appealed in the court system. These cases are in the normal course of business and the System does not anticipate any material loss as a result of the contingent liabilities.

Pending Litigation

Michigan Supreme Court No. 145924

These cases are consolidated and are pending on the second application for leave in the Michigan Supreme Court (MSC). The first application for leave resulted in the case being remanded to the Court of Appeals (COA). Plaintiffs are contesting the 3% contribution required by MCL 38.1343e, as enacted by Public Act 75 of 2010, to be made by members of the Michigan Public School Employees' Retirement System. Plaintiffs allege that the underlying retiree healthcare contribution is unconstitutional on grounds that it allegedly violates the contracts, takings, and substantive due process clauses of the State and Unites States Constitutions. The trial court ruled in Plaintiffs' favor and entered a preliminary injunction requiring that the Plaintiffs' contributions not be applied toward the funding of retiree healthcare, but instead to be placed in an interest bearing account. The trial court ruling was affirmed by the COA. On the first application for leave to the MSC, the MSC ordered that the COA's decision be vacated and that the constitutionality of Public Act 75 be reexamined in light of the enactment of Public Act 300 of 2012 and MSC's April 2015 decision regarding the same. In June 2016, the COA reaffirmed its earlier decision and a second application for leave to the MSC was made in July 2016 and remains pending. The 3% contribution collected under Public Act 75, which continues to be held in escrow, totals approximately $553 million (including interest).

Required Supplementary Information

Schedule of Funding Progress – Other Postemployment Benefit Plan

Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the OPEB Plan's funding status. Analysis of this percentage over time indicates whether the Plan is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Plan. Trends in unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded or overfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the Plan.

Other Postemployment Benefits ($ in millions)

Valuation Date Sept 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2006	$ 630	$ 25,387	$ 24,757	2.5 %	$ 9,806	252.5 %
2007	776	25,733	24,957	3.0	9,851	253.3
2008	832	26,811	25,979	3.1	9,958	260.9
2009	713	28,295	27,582	2.5	9,884	279.1
2010	999	28,627	27,627	3.5	8,845	312.4
2011	1,156	27,046	25,890	4.3	9,156	282.8
2012 [1]	1,348	14,788	13,440	9.1	8,649	155.4
2013	2,041	14,534	12,493	14.0	8,273	151.0
2014 [2]	2,982	14,161	11,180	21.1	8,167	136.9
2015	3,531	12,832	9,302	27.5	8,264	112.6

[1] Revised investment rate of return from 4% to 8% due to prefunding.

[2] Revised actuarial assumptions and/or methods.

Required Supplementary Information (continued)

Schedule of Changes in Net Pension Liability

(in thousands)

	Fiscal Year 2016	2015	2014
Total Pension Liability			
Service Cost	$ 682,608	$ 674,943	$ 738,574
Interest	5,226,021	5,137,527	4,959,187
Changes of benefit terms			
Differences between expected and actual experience	401,202	(75,932)	
Changes of assumptions			1,054,479
Benefit payments, including refunds of member contributions	(4,695,818)	(4,555,349)	(4,417,169)
Net Change in Total Pension Liability	1,614,013	1,181,190	2,335,070
Total Pension Liability - Beginning	67,355,988	66,174,798	63,839,728
Total Pension Liability - Ending (a)	$ 68,970,001	$ 67,355,988	$ 66,174,798
Plan Fiduciary Net Position			
Contributions - Employer	$ 2,308,657	$ 1,967,611	$ 1,600,375
Contributions - Member	398,893	395,722	405,444
Net Investment Income	3,095,178	938,143	6,192,711
Benefit payments, including refunds of member contributions	(4,695,818)	(4,555,349)	(4,417,169)
Administrative and Other Expenses	(26,213)	(24,487)	(23,711)
Other [1]	(2,479)	(112,468)	
Net Change in Plan Fiduciary Net Position	1,078,218	(1,390,828)	3,757,649
Plan Fiduciary Net Position - Beginning	42,382,361	43,773,189	40,015,540
Plan Fiduciary Net Position - Ending (b)	$ 43,460,579	$ 42,382,361	$ 43,773,189
Net Pension Liability - Ending (a) - (b)	$ 25,509,422	$ 24,973,627	$ 22,401,609
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	63.01%	62.92%	66.15%
Covered Employee Payroll	$ 8,510,200	$ 8,426,755	$ 8,895,091
Net Pension Liability as a Percentage of Covered Employee Payroll	299.75%	296.36%	251.84%

[1] University employer contribution refund.

Required Supplementary Information (Continued)

Schedule of Net Pension Liability

(in thousands)

Fiscal Year Ended Sept. 30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as % of Total Pension Liability	Covered Payroll	Net Pension Liability as % of Covered Payroll
2014	$ 66,174,798	$ 43,773,189	$ 22,401,609	66.15%	$ 8,895,091	251.84%
2015	67,355,988	42,382,361	24,973,627	62.92	8,426,755	296.36
2016	68,970,001	43,460,579	25,509,422	63.01	8,510,200	299.75

Schedules of Contributions

Pension Benefits
(in thousands)

Fiscal Year Ended Sept. 30	Annual Required Contribution (ARC)[1]		Actual Employer Contribution[2]	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2007	$ 919,561	3	$ 835,366	$ 84,195	$ 9,851,471	8.5 %
2008	904,409	3	999,375	(94,966)	9,958,132	10.0
2009	989,150		1,000,375	(11,225)	9,883,674	10.1
2010	1,182,164		1,001,252	180,912	8,845,019	11.3
2011	1,418,355		1,156,061	262,294	9,155,691	12.6
2012	1,744,512		1,454,439	290,073	8,649,029	16.8
2013	1,931,894		1,364,136	567,758	8,225,140	16.6
2014	2,117,097		1,600,375	516,722	8,895,091	18.0
2015	2,184,029		1,967,611	216,418	8,426,755	23.4
2016	2,312,223		2,308,657	3,566	8,510,200	27.1

[1] The ARC has been recalculated for all years presented in order to reflect only the employer's share of the annual required contributions and current assumptions.

[2] Differences between the ARC and the actual contributions are the result of a timing difference between when the actuarial valuation is completed and the contributions are made. In addition, for fiscal year 2006, a transfer from the stabilization sub-account in the amount of $54.2 million was made to intentionally stabilize the contribution rates. The sub-account has no balance or activity since 2006.

[3] Pursuant to Public Act 15 of 2007, the System's assets were revalued to their actual fair value as of September 30, 2006. The five-year smoothing began again in fiscal year 2008.

Required Supplementary Information (continued)

Schedules of Contributions (continued)

Other Postemployment Benefits
(in thousands)

Fiscal Year Ended Sept. 30	Annual Required Contribution (ARC)	Actual Employer Contributions[2]	Other Governmental Contributions	Percentage Contributed
2007	$ 2,497,158	$ 671,680	$ 63	26.9 %
2008	2,425,677	649,571	102	26.8
2009	2,501,980	705,464	55	28.2
2010	2,363,039	675,117	39,980	30.3
2011	2,149,489	794,840	163,949	44.6
2012	2,038,873	795,595	17,406	39.9
2013 [1]	1,466,840	973,003	9	66.3
2014	944,571	1,000,032	138	105.9
2015	974,957	969,419	213	99.5
2016	911,687	883,943	2,411	97.2

[1] Revised investment rate of return from 4% to 8% due to prefunding.

[2] Differences between the ARC and the actual contributions are the result of a timing difference between when the actuarial valuation is completed and the contributions are made.

Schedule of Investment Returns

Fiscal Year	Annual Return[1]
2014	12.58%
2015	(0.02)
2016	5.91

[1] Annual money-weighted rate of return, net of investment expenses

NOTE TO REQUIRED SUPPLEMENTARY INFORMATION

NOTE A – DESCRIPTION

Ten year historical trend information designed to provide information about the System's progress made in accumulating sufficient assets to pay benefits when due is presented in the preceding schedules. Other ten year historical trend information related to the System is presented in the Statistical and Actuarial Sections of the report. This information is presented to enable the reader to assess the progress made by the System in accumulating sufficient assets to pay pension and other postemployment benefits as they become due.

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension and other postemployment benefit obligations as a factor.

The Schedule of Funding Progress and Schedules of Contributions are reported as historical trend information. The Schedule of Funding Progress is presented to measure the progress being made to accumulate sufficient assets to pay benefits when due. The Schedules of Contributions are presented to show the responsibility of the Employer in meeting the actuarial requirements to maintain the System on a sound financial basis.

The Schedule of Changes in Net Pension Liability, Schedule of Net Pension Liability, Schedule of Contributions, and Schedule of Investment Returns are schedules that are required in implementing GASB Statement No. 67. These schedules are required to show information for ten years; additional years will be displayed as it becomes available. The two schedules of the Net Pension Liability represents in actuarial terms, the accrued liability less the fair value of assets. The Schedule of Contributions is a comparison of the employer's contributions to the actuarially determined contributions. The Schedule of Investment Returns represents a money-weighted rate of return that expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested.

The information presented in the Schedule of Contributions was used in the actuarial valuation for purposes of determining actuarially determined contribution rate. Additional information as of the latest actuarial valuation for the pension plan follows.

Valuation:

Actuarially determined contribution amounts as of September 30 each year, which is two years and one day prior to the beginning of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contributions for Fiscal Year 2016:

Actuarial Cost Method	Entry Age, Normal
Amortization Method	Level Percent of Payroll, Closed
Remaining Amortization Period	23 Years (attributable to non-window unfunded actuarial accrued liability) and 7 Years (attributable to window unfunded actuarial accrued liability).
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation	2.5%
Salary Increases	3.5% Wage Inflation
Investment Rate of Return	
(net of investment and administrative expenses)	
- MIP and Basic Plans	8.0%
- Pension Plus Plan	7.0%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility conditions.
Mortality	RP-2000 Combined Healthy Life Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA (for men, 140% of the table rates for ages 0-79, 133% of the table rates for ages 80-84, and 121.8% of the table rates for ages over 84 were used and for women, 96% of the table rates were used).

Supporting Schedules

Summary Schedule of Pension Plan Administrative and Other Expenses

For Fiscal Year Ended September 30, 2016
(in thousands)

Personnel Services:	
Staff Salaries	$ 2,344
Retirement and Social Security	4,049
Other Fringe Benefits	1,467
Total	7,860
Professional Services:	
Accounting	1,612
Actuarial	484
Attorney General	413
Audit	366
Consulting	36
Medical	304
Total	3,214
Building and Equipment:	
Building Rentals	911
Equipment Purchase, Maintenance, and Rentals	139
Total	1,050
Miscellaneous:	
Travel and Board Meetings	32
Office Supplies	76
Postage, Telephone, and Other	2,591
Printing	237
Technological Support	11,152
Total	14,089
Total Administrative and Other Expenses	$ 26,213

Summary Schedule of
OPEB Plan Administrative and Other Expenses
For Fiscal Year Ended September 30, 2016
(in thousands)

Staff Salaries	$ 2,302
Health Fees	148,620
Dental Fees	4,757
Vision Fees	679
Total Administrative and Other Expenses	$ 156,358

Supporting Schedules (continued)

Schedule of Investment Expenses

For Fiscal Year Ended September 30, 2016
(in thousands)

Real Estate Operating Expenses	$	1,111
Securities Lending Expenses		12,736
Other Investment Expenses[1]		
ORS-Investment Expenses[2]		13,465
Custody Fees		1,237
Management Fees		138,018
Research Fees		3,449
Total Investment Expenses	$	170,017

[1] Refer to the Investment Section for fees paid to investment professionals

[2] Does not exclude Treasury Civil Service fees recorded as a pass through in the Schedule of Investment Fees - State Treasurer. As of September 30, 2016, fees totaled $190,953.

Schedule of Payments for Professional Services

For Fiscal Year Ended September 30, 2016
(in thousands)

Accounting	$	1,612
Actuary		484
Attorney General		413
Independent Auditors		366
Consulting		36
Medical Advisor		304
Total Payments	$	3,214

Supporting Schedules (Continued)

DETAIL OF CHANGES IN PLAN FIDUCIARY NET POSITION (PENSION AND OTHER POSTEMPLOYMENT BENEFITS)

For the Fiscal Year Ended September 30, 2016 (in thousands)

	Employee Contributions	Employee Contributions Pension Plus	Member Investment Plan	Employer Contributions
Additions:				
Contributions:				
Member contributions	$ 24,915	$ 38,104	$ 335,875	
Employer contributions:				
Colleges, universities and federal				$ 196,805
School districts and other				2,086,128
Other governmental contributions				
Total contributions	24,915	38,104	335,875	2,282,933
Investment income (loss):				
Net increase (decrease) in fair value of investments				
Interest, dividends, and other				
Investment expenses:				
Real estate operating expenses				
Other investment expenses				
Securities lending activities:				
Securities lending income				
Securities lending expenses				
Net investment income (loss)	-	-	-	-
Transfers from other systems				
Miscellaneous income				
Total additions	24,915	38,104	335,875	2,282,933
Deductions:				
Benefits paid to plan members and beneficiaries:				
Retirement benefits				
Health benefits				
Dental/vision benefits				
Refund of contributions	2,981	1,309	20,217	2,479
Transfers to other systems			3	
Administrative and other expenses				
Total deductions	2,981	1,309	20,220	2,479
Net Increase (Decrease) before other changes	21,934	36,795	315,654	2,280,455
Other Changes in Net Position:				
Interest allocation	67,939	7,041	490,471	
Transfers upon retirement	(92,720)	(44)	(305,978)	
Transfers of employer shares				1,775,738
Total other changes in net position	(24,780)	6,997	184,493	1,775,738
Net Increase (Decrease) in Net Position	(2,847)	43,792	500,147	4,056,192
Net Position Restricted for Pension Benefits and OPEB:				
Beginning of Year	1,539,737	95,053	5,308,677	(24,922,787)
End of Year	$ 1,536,891	$ 138,844	$ 5,808,824	$ (20,866,595)

Supporting Schedules (continued)

Employer Contributions Pension Plus	Retired Benefit Payments	Retired Benefit Payments Pension Plus	Undistributed Investment Income	OPEB	Total
				$ 382,257	$ 781,150
$ 2,401				78,876	278,082
23,323				805,068	2,914,519
				2,411	2,411
25,724	-	-	-	1,268,611	3,976,162
			$ 2,242,089	210,285	2,452,374
			930,325	86,451	1,016,777
			(1,018)	(93)	(1,111)
			(142,891)	(13,278)	(156,169)
			77,899	7,306	85,205
			(11,710)	(1,026)	(12,736)
-	-	-	3,094,694	289,644	3,384,338
					-
	$ 483			159	642
25,724	483	-	3,094,694	1,558,414	7,361,142
	4,671,296	$ 4		15	4,671,315
				567,215	567,215
				85,856	85,856
	8			93	27,087
					3
			26,213	156,358	182,571
-	4,671,303	4	26,213	809,538	5,534,047
25,724	(4,670,820)	(4)	3,068,481	748,877	1,827,095
4,884	1,256,158		(1,826,494)		
	398,698	44			
	(1,775,738)				
4,884	(120,882)	44	(1,826,494)	-	-
30,608	(4,791,702)	40	1,241,988	748,877	1,827,095
69,773	48,313,771		11,978,137	4,083,302	46,465,663
$ 100,380	$ 43,522,070	$ 40	$ 13,220,124	$ 4,832,179	$ 48,292,758

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INVESTMENT SECTION

Prepared by Michigan Department of Treasury, Bureau of Investments
Jon M. Braeutigam, Chief Investment Officer

Report on Investment Activity

INTRODUCTION

The State Treasurer reports investment activity quarterly to the Investment Advisory Committee (Committee), which reviews the investments, goals, and objectives of the retirement funds and may submit recommendations regarding them to the State Treasurer. The Investment Advisory Committee may also, by a majority vote, direct the State Treasurer to dispose of any holdings that, in the Committee's judgment, are not suitable for the funds involved, and may, by unanimous vote, direct the State Treasurer to make specific investments.

The Investment Advisory Committee was created by Act 380 of the Public Acts of 1965. The three public members of the five-member committee are appointed by the Governor with the advice and consent of the Senate for three-year terms. The Director of the Department of Licensing and Regulatory Affairs and the Director of the Department of Technology, Management and Budget are ex-officio members. As of September 30, 2016, members of the Committee were as follows: James B. Nicholson (public member), L. Erik Lundberg, CFA (public member), Reginald G. Sanders, CFA, CAIA (public member), Shelly Edgerton (ex-officio member), and David Behen (ex-officio member). The public members serve without pay, but may be paid actual and necessary travel and other expenses.

INVESTMENT POLICY & GOALS

Investment policy states that the fiduciary will operate within standard investment practices of the prudent person and in accordance with Public Employee Retirement System Investment Act 314 of 1965. The fiduciary is authorized to invest in government obligations, corporate obligations, various short-term obligations, corporate (domestic and international) stocks, private equity interests, mutual funds, real estate interests, and other investments subject to specific parameters. Above all, trust fund assets are to be invested for the exclusive benefit of the members of the System, in a fiduciary capacity.

The System's Proxy Voting Policy sets forth directives on various issues including: Boards of Directors, corporate governance, social issues, corporate restructurings and defenses. All proxies are reviewed and voted in accordance with the System's policy.

The primary function of the System is to provide retirement, survivor and disability benefits along with health and other postemployment benefits to its members. The State Treasurer is the sole investment fiduciary and custodian of the System's investments pursuant to State law. The goals of the System are:

- Maintain sufficient liquidity to pay benefits.
- Meet or exceed the actuarial assumption over the long term.
- Perform in the top half of the public plan universe over the long term
- Diversify assets to preserve capital and avoid large losses.
- Exceed individual asset class benchmarks over the long term.

The strategy for achieving these goals is carried out by investing the assets of the System according to a five-year asset allocation model. The System currently invests in seven different asset classes, which provides for a well-diversified portfolio.

Report on Investment Activity (Continued)

Asset Allocation
(Excludes Collateral on Loaned Securities)

Investment Category	As of 9/30/16 Actual %	Five-Year Target %
Domestic Equity Pools	25.8 %	28.0 %
International Equity Pools	15.7	16.0
Private Equity Pools	15.2	18.0
Real Estate and Infrastructure Pools	10.5	10.0
Fixed Income Pools	13.0	10.5
Absolute Return Pools	15.1	15.5
Short-Term Investment Pools	4.7	2.0
TOTAL	**100.0 %**	**100.0 %**

INVESTMENT AUTHORITY

Pursuant to State Law (Section 91 of Public Act 380 of 1965, as amended, and Section 12c of Public Act 314 of 1965, as amended), the State Treasurer, State of Michigan, is the investment fiduciary for the following four State sponsored retirement systems: Michigan Public School Employees' Retirement System, Michigan State Employees' Retirement System, Michigan State Police Retirement System, and Michigan Judges' Retirement System.

Public Act 314 of 1965, as amended, authorizes the investment of assets of public employee retirement systems or plans created and established by the State or any political subdivision.

Report on Investment Activity (Continued)

INVESTMENT RESULTS

Total Portfolio Results

For the fiscal year ended September 30, 2016, the total System's rate of return was 7.6% for the Pension Plan and 7.6% for the OPEB Plan as compiled by State Street Investment Analytics. Annualized rates of return for the Pension Plan for the three, five, and ten year periods ending September 30, 2016 were: 8.5%, 10.2%, and 6.2% respectively.

At its December 2015 meeting, the Federal Open Market Committee announced the decision to raise the federal funds rate by 0.25%. This is the first change in this interest rate in over seven years, and the first hike since mid-2006. At the time, it was anticipated that there would be up to four additional rate hikes during fiscal year 2016; however, the December hike would prove to be the only one. During the early winter months of December, January, and February, risk assets were under great pressure. The U.S. equity benchmark S&P 500 Index fell more than 14% from its high and spreads on high yield bonds widened significantly, especially in companies linked to the energy sector. The price for a barrel of crude oil hit a low in mid-February, having dropped more than $80 per barrel (more than ¾'ths of its value) over the preceding eighteen months. As expected during troubled times, safe haven assets like the 10-year U.S. Treasury rallied. The rate on the U.S. Treasury dropped more than 0.8% from its 2015 high to a 1.6% level, near the lower end of the five year range.

The markets found firmer footing in the late winter months and rallied into the end of the fiscal year. The S&P 500 Index would hit an all-time closing high in August 2016, the price for a barrel of crude oil would rebound more than $20 per barrel by June and hold that level into the end of September, and high yield spreads would persistently grind lower. Paradoxically, the 10-year U.S. Treasury rate continued to fall another 0.3% through July and ended September 2016 at 1.59%.

Through the market gyrations of fiscal year 2016, the fundamentals of the U.S. economy remained modestly positive. Growth in gross domestic product averaged around 1% through the year. The consumer is continuing to do better in fiscal 2016; non-farm payrolls averaged a monthly increase over 200,000, the unemployment rate remained below 5% for most of the year, and wage growth continues to grow higher as well. Like last year, during the late fall the market is looking for a December Fed rate hike and for the interest rate policies to become more normal. Will fiscal year 2017 be a repeat of this fiscal year, or will new information sway the directions of the markets? Time will tell.

Investment return calculations are prepared using a Time-Weighted rate of return.

Domestic Equity Pools

The objective for investments made in domestic equities is to meet or exceed the total return of the S&P 1500 Super Composite for one, three, and five-year periods and a market cycle.

For active management strategies, the objective is to earn returns that exceed the most relevant S&P Index (or the most relevant Russell Index), adjusting for market capitalization and style, for one, three, and five-year periods and a market cycle. Rank above median in a universe of managers possessing a similar market cap and style characteristics.

For index, or passive return strategies, the objective is to return within 20 basis points of the S&P 500 Index, 50 basis points for the S&P 400 mid-cap, and 60 basis points for the S&P 600 small-cap over one, three, and five-year periods and a market cycle.

The pools are invested primarily in equities or equity-related securities of U.S. companies through internal and externally managed strategies. The goal is to build a portfolio of strategies that will provide excess returns relative to the S&P 1500 while providing minimal tracking error to the index. At times a portion of these pools may be invested in exchange traded funds (ETFs) and fixed-income short-term securities with maturities of less than one year.

Report on Investment Activity (Continued)

The pools invest in equities and equity related securities that are listed on U.S. national securities exchanges, including American Depository Receipts (ADRs). They may also invest in stocks that are traded over-the-counter. The pools diversify their investments by allocating their equity strategies with consideration of the capitalization weightings of the S&P 1500 Index.

The following summarizes the weightings of the pools as of September 30, 2016:

Active	52.2 %
Passive	47.8
Total	**100.0 %**

Large-Cap	67.1 %
Multi-Cap	23.5
Mid-Cap	7.5
Small-Cap	1.9
Total	**100.0 %**

The System's Domestic Equity pools total rate of return was 12.2% for the Pension and OPEB Plans for fiscal year 2016. This compared with 15.5% for the S&P 1500 Index.

At the close of fiscal year 2016, the Domestic Equity pools represented 25.8% of total investments. The following summarizes the System's 77.2% ownership share of the Domestic Equity pools at September 30, 2016:

Domestic Equity Pools
(in thousands)

Short-Term Pooled Investments	$ 46,225
Equities	12,172,254
Fair Value of Equity Contracts	(4,207)
Settlement Principal Payable	(17,998)
Settlement Proceeds Receivable	209,124
Accrued Dividends	13,344
Total	**$ 12,418,742**

International Equity Pools

The objective for investments made in International Equity pools is to meet or exceed the total return of the MSCI ACWI Ex-US Net for one, three, and five-year periods and a market cycle.

For active management strategies, the objective is to earn returns that exceed the most relevant S&P Index (or the most relevant Russell Index), adjusting for market capitalization, style and geography for one, three, and five-year periods and a market cycle. Rank above median in a universe of managers possessing a similar market capitalization, style and geography characteristics.

Report on Investment Activity (Continued)

For index, or passive return strategies, the objective is to return within 250 basis points of the S&P/Citigroup BMI-EPAC Index with 25% of the currency hedged for one, three, and five-year periods and a market cycle. Return within 400 basis points of the MSCI Emerging Markets Index, for one, three, and five-year periods and a market cycle.

Active exposure is invested primarily in equities or equity-related securities of non-U.S. companies through externally managed strategies.

Passive exposure to International Equity returns is achieved primarily by investing in a combination of fixed income LIBOR notes, short-term fixed income investments, and equity swap agreements on foreign stock indices in developed markets. Interest on the dedicated notes and short-term fixed income investments is exchanged for international stock returns, and the total notional amount of the swap agreements is invested in the approximate proportions of the S&P Broad Market Index (BMI) Europe and Pacific Composite (EPAC) country weightings in related indices. Use of swap agreements for a core position began in 1993, an American Depository Receipts (ADR) and index-related security portfolio was added in June of 1999 to increase portfolio management flexibility, and a multiple country fund portfolio with smaller capitalization stocks was added in September of 2002 to improve exposure to the smallest companies in the BMI index. Use of futures as an investment to hedge cash flows and balances began in December of 2008, and this use is expected to continue in the future. The combined Swap agreements, notes and short-term investments together continue to perform like a stock index fund that realizes all gains and losses on a rolling three year basis.

The pools diversify their investments by allocating their equity strategies with consideration of the economic development status weightings of the S&P/Citigroup BMI -World ex-US Index.

The following summarizes the weightings of the pool as of September 30, 2016:

Active	51.2 %
Passive	48.8
Total	**100.0 %**

Developed	82.2 %
Emerging	17.8
Total	**100.0 %**

The System's International Equity pools total rate of return was 9.9% for the Pension and OPEB Plans for fiscal year 2016. This compared with 9.3% for the MSCI ACWI Ex US Net.

At the close of fiscal year 2016, the International Equity pools represented 15.7% of total investments. The following summarizes the System's 76.9% ownership share of the International Equity Pools at September 30, 2016:

Report on Investment Activity (Continued)

International Equity Pools
(in thousands)

Short-Term Pooled Investments	$ 103,244
Equities	6,653,185
Fixed Income Securities	739,133
Fair Value of Equity Contracts	65,306
Accrued Dividends and Interest	2,408
Total	**$ 7,563,276**

Private Equity Pools

The Private Equity pools objective is to meet or exceed the benchmark for all private equity investments over long time periods. The benchmark is a blend of the S&P 500 Index plus 300 basis points and the 10 Year Yield plus 300 basis points using ending weights of equity and fixed income holdings within the portfolio.

Private Equity Investments are investments in the private equity market, primarily through limited partnerships. The following summarizes the weightings of the pools as of September 30, 2016:

Buyout Funds	46.9 %
Special Situation Funds	17.1
Liquidation Portfolio	15.8
Venture Capital Funds	11.4
Fund of Funds	7.0
Mezzanine Funds	1.8
Total	**100.0 %**

The Private Equity pools had a return of 3.6% for the Pension and OPEB Plans for the fiscal year ended September 30, 2016, versus the benchmark of 7.1%.

At the close of fiscal year 2016, the Private Equity pools represented 15.2% of total investments. The following summarizes the System's 77.9% ownership share of the Private Equity pools at September 30, 2016:

Private Equity Pools
(in thousands)

Short-Term Pooled Investments	$ 119,261
Equities	7,154,916
Long Term Obligations	21,502
Settlement Proceeds Receivable	251
Accrued Interest	868
Total	**$ 7,296,798**

Real Estate and Infrastructure Pools

The objective of the Real Estate and Infrastructure pools is to provide diversification and favorable risk adjusted returns primarily through income and appreciation of investments. Investments are typically held through investment entities, such as limited partnerships or limited liability companies, established for the specific purpose of owning, leasing, managing, financing, or developing real estate and infrastructure related investments.

The Real Estate and Infrastructure pools diversify its holdings by:

- **Geography** – The pools are invested globally and are diversified geographically so that it is not concentrated in a limited number of markets or geographic areas.
- **Size and Value** – The pools diversify its holdings by size so that it is not concentrated in a limited number of large investments.
- **Investment Type** – The pools are diversified by investment type as summarized below.

Multi-family apartments	34.6 %
Hotel	14.0
Commercial office buildings	15.9
Infrastructure	9.5
Industrial warehouse buildings	6.8
Retail shopping centers	5.4
For Rent Homes	6.4
For Sale Homes	5.1
Land	1.8
Short Term Investments	0.5
Total	**100.0 %**

The Real Estate and Infrastructure pools generated a return of 10.4% for the Pension and OPEB Plans for fiscal year 2016. The two benchmark returns from the National Council of Real Estate Investment Fiduciaries: the National Property Blended Index (less 130 basis points) was 7.8% and the Open-End Diversified Core Equity Index was 9.1%.

At the close of fiscal year 2016, the Real Estate and Infrastructure pools represented 10.5% of total investments. The following summarizes the System's 77.2% ownership share of the Real Estate and Infrastructure pools at September 30, 2016:

Real Estate and Infrastructure Pools
(in thousands)

Short-Term Pooled Investments	$	26,040
Real Estate Equities		4,555,448
Infrastructure Equities		482,745
Total	**$**	**5,064,233**

Fixed Income Pools

The objective for investments made in the Fixed Income pools is to meet or exceed the Barclays Aggregate Bond Index over one, three, and five-year periods and market cycles. Rank above median in a nationally recognized universe of managers possessing a similar style.

For Fixed Income sub-strategies, the objective return is to meet or exceed the most relevant Barclays benchmark index.

The pools are invested primarily in fixed income securities of U.S. companies through internal and externally managed strategies. The goal is to build a portfolio of strategies that will provide excess returns relative to the blended benchmark while providing minimal tracking error to the index. At times a portion of the pools

Report on Investment Activity (Continued)

may be invested in exchange traded funds (ETFs) and fixed-income short-term securities with maturities of less than one year.

The pools invest in fixed income and related securities in a diversified portfolio of investment grade corporate issues, treasuries, agencies, government sponsored enterprises and government guaranteed mortgages. The pools diversify its investments by allocating its strategies with consideration of credit risk.

The System's Fixed Income pools total rate of return was 7.3% for the Pension and OPEB Plans for fiscal year 2016. This compared with 5.2% for the Barclays Aggregate Bond benchmark.

At the close of fiscal year 2016, the Fixed Income pools represented 13.0% of total investments. The following summarizes the System's 76.5% ownership share of the Fixed Income pools at September 30, 2016:

Fixed Income Pools
(in thousands)

Short-Term Pooled Investments	$ 85,527
Fixed Income Securities	6,171,684
Settlement Principal Payable	(42,680)
Settlement Proceeds Receivable	21,416
Accrued interest	22,457
Total	**$ 6,258,404**

Absolute Return Pools

The Absolute Return Pools consist of the Absolute Return Strategies Pool and the Real Return and Opportunistic Investment Pool.

The primary investment objective of the Absolute Return Strategies Pool is to generate a rate of return that meets or exceeds T-bills by 400 basis points net of fees over the one, three, and five-year periods and a market cycle. Also, exceed the appropriate HFN Fund of Funds median net of fees over one, three, and five-year periods and a market cycle.

The Absolute Return Strategies pool rate of return for the fiscal year was -1.7% for the Pension and OPEB Plans versus the benchmark's -1.3%.

The primary investment objective of the Real Return and Opportunistic Pool is to generate a rate of return that meets or exceeds the increase in the CPI by at least five percent (5%) annually net of fees over one, three, and five-year periods and a market cycle. If a peer universe is available, rank above median in a nationally recognized universe of managers possessing a similar style.

For sub-strategies targeting a commodities index, the objective is to generate a rate of return that meets or exceeds the Dow Jones-AIG Total Return Commodities Index over one, three, and five year periods and a market cycle. Rank above median in a nationally recognized universe of managers possessing a similar style.

The Real Return and Opportunistic Investments pool rate of return for the fiscal year was 5.4% for the Pension and OPEB Plans versus the benchmark's 7.3%.

Report on Investment Activity (Continued)

At the close of fiscal year 2016, the Absolute Return Pools represented 15.1% of total investments. The following summarizes the System's 77.2% ownership share of the Absolute Return Pools at September 30, 2016:

Absolute Return Pools
(in thousands)

Short-Term Pooled Investments	$ 68,225
Equities	7,085,971
Long-Term Obligations	77,081
Settlement Principal Payable	40
Accrued Interest and Dividends	2,055
Total	**$ 7,233,372**

Short-Term Investment Pools

The objective of the Short-Term Investment pools is to closely match the return performance of its benchmark, the 30 day Treasury bill. The Short-Term Investment pools return for the fiscal year was 0.7% for the Pension Plan and 0.6% for the OPEB plan versus the benchmark's 0.2%.

Potential areas of investment are:

- Obligations of the United States or its agencies.
- Banker's acceptances, commercial accounts, certificates of deposit or depository receipts.
- Repurchase agreements for the purchase of securities issued by the US government or its agencies.
- Commercial paper rated at the time of purchase within the two highest classifications established by not less than two national rating services as determined by the State Treasurer.
- Short duration investment grade corporate issues.

At the close of fiscal year 2016, the Short-Term Investment pools represented 4.7% of total investments. The following summarizes the System's 73.3% ownership share of the Short Term Investment pools at September 30, 2016:

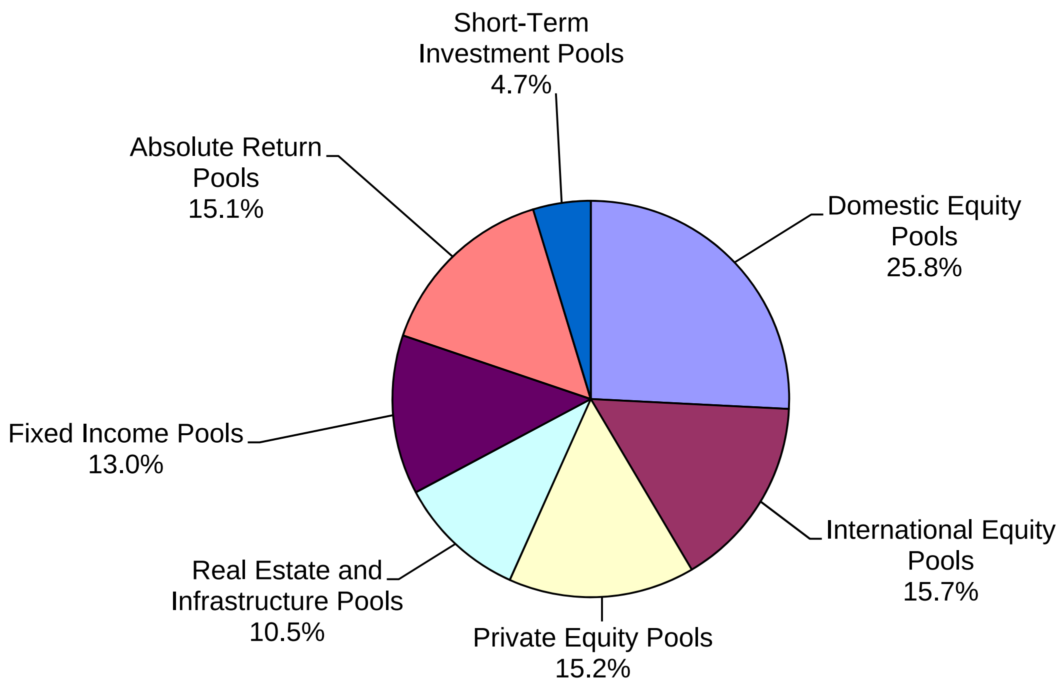
Short-Term Investment Pools
(in thousands)

Short-Term Pooled Investments	$ 1,274,521
Healthcare Contribution*	553,126
Fixed Income Securities	411,793
Accrued interest	656
Total	**$ 2,240,096**

*PA 75 of 2010 required each actively employed member of MPSERS to contribute toward healthcare benefits. Amounts contributed to this account until September 3, 2012 are held and invested separately.

Report on Investment Activity (Continued)

ASSET ALLOCATION – SECURITY TYPE ONLY



Report on Investment Activity (Continued)

Pension Plan Investment Results for the Period Ending September 30, 2016

Investment Category	Current Year	Annualized Rate of Return[1] 3 Years	5 Years	10 Years
Total Portfolio	7.6 %	8.5 %	10.2 %	6.2 %
Domestic Equity Pools	12.2	10.3	16.2	7.2
S&P 1500 Index	15.5	10.9	16.4	7.4
International Equity Pools	9.9	2.1	7.7	2.0
International Blended Benchmark [2]	9.3	0.2	6.3	1.0
Private Equity Pools	3.6	13.2	11.6	11.2
Private Equity Blended Benchmark [3]	7.1	14.8	15.2	11.2
Real Estate and Infrastructure Pools	10.4	13.9	11.7	5.2
NCREIF Property Blended Index [4]	7.8	9.9	9.8	5.9
Fixed Income Pools	7.3	5.0	4.2	5.7
Barclays Aggregate Bond	5.2	4.0	3.1	4.8
Absolute Return Pools				
Total Absolute Return	(1.7)	3.2	4.9	
HFRI Fund of Funds Cons 1 month lag	(1.3)	2.3	2.6	
Total Real Return and Opportunistic	5.4	12.1	9.8	
Real Return and Opportunistic Benchmark [5]	7.3	7.0	7.2	
Short Term Investment Pools	0.7	0.5	0.4	0.9
30 Day Treasury Bill	0.2	0.1	0.1	0.8

[1] Calculations used a time-weighted rate of return based on the market rate of return in accordance with industry standards. Excludes income and investment gains and losses from securities lending.

[2] As of 7/1/14, index is MSCI ACWI Ex-US Net. History 10/1/10 to 6/30/14 is MSCI ACWI Ex-US Gross. History 1/1/10 to 9/30/10 is S&P Developed BMI-EPAC Net 75/25. History prior to 1/1/10 is S&P Developed BMI-EPAC Net 50/50.

[3] As of 1/1/07, index is blend of S&P 500 plus 300 bps and 10 year yield plus 300 bps based on ending weights. History prior to 1/1/07 is S&P500 plus 300 bps.

[4] As of 10/1/05, index is NCREIF less 130 bp. History prior to 10/1/05 reflects NCREIF less 75 bp.

[5] Benchmark is 50% (CPI + 5%) and 50% (actuarial rate 8%).

Report on Investment Activity (Continued)

OPEB Investment Results for the Period Ending September 30, 2016

Investment Category	Current Year	Annualized Rate of Return[1] 3 Years	5 Years
Total Portfolio	7.6 %	8.4 %	10.1 %
Domestic Equity Pools	12.2	10.3	16.1
S&P 1500 Index	15.5	10.9	16.4
International Equity Pools	9.9	2.1	7.7
International Blended Benchmark [2]	9.3	0.3	6.3
Private Equity Pools	3.6	13.2	11.6
Private Equity Blended Benchmark [3]	7.1	14.8	15.2
Real Estate and Infrastructure Pools	10.4	13.9	11.7
NCREIF Property Blended Index [4]	7.8	9.9	9.8
Fixed Income Pools	7.3	5.0	4.2
Barclays Aggregate Bond	5.2	4.0	3.1
Absolute Return Pools			
Total Absolute Return	(1.7)	3.2	4.9
HFRI Fund of Funds Cons 1 month lag	(1.3)	2.3	2.6
Total Real Return and Opportunistic	5.4	12.1	9.8
Real Return and Opportunistic Benchmark [5]	7.3	7.0	7.2
Short-Term Investment Pools	0.6	0.4	0.4
30-Day Treasury Bill	0.2	0.1	0.1

[1] Calculations used a time-weighted rate of return based on the market rate of return in accordance with industry standards. Excludes income and investment gains and losses from securities lending.

[2] As of 7/1/14, index is MSCI ACWI Ex-US Net. History 10/1/10 to 6/30/14 is MSCI ACWI Ex-US Gross. History 1/1/10 to 9/30/10 is S&P Developed BMI-EPAC Net 75/25. History prior to 1/1/10 is S&P Developed BMI-EPAC Net 50/50.

[3] As of 1/1/07, index is blend of S&P 500 plus 300 bps and 10 year yield plus 300 bps based on ending weights. History prior to 1/1/07 is S&P500 plus 300 bps.

[4] As of 10/1/05, index is NCREIF less 130 bp. History prior to 10/1/05 reflects NCREIF less 75 bp.

[5] Benchmark is 50% (CPI + 5%) and 50% (actuarial rate 8%).

Largest Assets Held[1]

Largest Stock Holdings (By Fair Value)
September 30, 2016

Rank	Shares	Stocks	Fair Value
1	3,931,387	Apple Inc	$ 444,443,251
2	2,274,099	Berkshire Hawhaway Inc Class B	328,539,103
3	6,174,775	Verizon Communications Inc	320,964,781
4	4,073,396	JP Morgan Chanse & Co	271,247,458
5	5,486,404	Wells Fargo & Co	242,937,965
6	3,656,395	Microsoft Corp	210,608,367
7	2,645,009	Gilead Sciences Inc	209,273,109
8	1,433,420	Facebook Inc	183,864,739
9	2,063,129	CVS Health Corp	183,597,845
10	213,920	Alphabet Inc Class A	172,004,274

Largest Bond Holdings (By Fair Value)[2]
September 30, 2016

Rank	Par Amount	Bonds & Notes	Fair Value
1	$ 158,754,122	US Treasury N/B 0.625% Due 06/30/2018	$ 158,406,768
2	115,953,231	Apple Inc 1.947% Due 02/23/2021	119,462,671
3	93,149,984	US Treasury N/B 2.125% Due 05/15/2025	97,385,421
4	96,692,809	US Treasury N/B 1.625% Due 02/15/2026	96,859,024
5	85,089,672	US Treasury N/B 1.500% Due 03/31/2023	85,697,893
6	77,276,107	Citigroup Inc, 2.217690% FRN Due 03/30/2021	78,571,487
7	65,719,854	Morgan Stanley 2.097% FRN Due 04/21/2021	66,988,576
8	58,015,685	US Treasury N/B 2.125% Due 06/30/2022	60,683,072
9	58,015,685	US Treasury N/B 1.375% Due 05/03/2021	58,643,415
10	58,015,685	US Treasury N/B 1.125% Due 07/31/2021	57,931,853

[1] A complete list of holdings is available from the Michigan Department of Treasury.

[2] Largest Bond Holdings are exclusive of securities lending collateral.

The System's investments are commingled in various pooled accounts. Amounts, par value and number of shares represent the System's pro-rata share based on its ownership of the investment pools.

Schedule of Investment Fees

The State Treasurer is the investment fiduciary and custodian of the System's funds pursuant to State law. Outside advisors are utilized to augment the State Treasurer's internal staff. 64.49% of the total investment portfolio is managed by fully discretionary outside advisors. The Michigan Department of Treasury's cost of operations applicable to the System for the fiscal year amounted to $13,644 thousand or eight and one tenth basis points (.080%) of the fair value of the Assets under Management of the State Treasurer.

Public Act 380 of 1965 created an Investment Advisory Committee (Committee) comprised of the directors of the Department of Licensing and Regulatory Affairs and the Department of Technology, Management & Budget, or their duly authorized representatives, and three public members appointed by the Governor with the advice and consent of the Senate. The public members serve without pay, but may be paid actual and necessary travel and other expenses. The Committee meets quarterly to review investments, goals and objectives and may submit recommendations to the State Treasurer. The Committee may also, by a majority vote, direct the State Treasurer to dispose of any holding which, in the Committee's judgment, is not suitable for the fund involved, and may by unanimous vote direct the State Treasurer to make specific investments.

Schedule of Investment Fees

Investment Managers' Fees:

	Assets under Management (in thousands)	Fees (in thousands)	Basis Points*
State Treasurer	$ 17,072,655	$ 13,644	8.0
Outside Advisors for			
Fixed Income	2,415,180	7,807	32.3
Absolute Return	7,100,100	17,990	25.3
International Equity	6,322,844	11,083	17.5
Domestic Equity	2,803,111	5,871	20.9
Private Equity	7,296,798	66,110	90.6
Real Estate and Infrastructure	5,064,233	29,152	57.6
Total	**$ 48,074,922**	**$ 151,657**	

Other Investment Services Fees:

	Assets	Fees
Assets in Custody	$ 47,366,145	$ 4,690
Securities on Loan	3,277,164	3,203

* Private Equity partnership agreements that define the management fees, the asset management fees range from 75 basis points on remaining assets under management to 250 basis points of the committed capital. For Real Estate/Infrastructure, the asset management fees range from 40 to 200 basis points. For Absolute Return, the asset management fees range from 0 to 200 basis points. These fees, in most cases, are netted against income.

Schedule of Investment Commissions

	Fiscal Year Ended September 30, 2016						
	Actual Commissions Paid [1]	Actual Number of Shares Traded [1]	Average Commission Per Share	Estimated Trade Costs Per Share	Estimated Research Costs Per Share	Estimated Trade Costs	Estimated Research Costs
Investment Brokerage Firms:							
Banc Of America Securities LLC	$ 46,107	1,336,378	$ 0.03	$ 0.01	$ 0.02	$ 13,364	$ 26,728
Barclays Capital Inc.	89,873	10,868,129	0.01	0.01		108,681	
BNY Convergex Execution Solutions LLC	6,998	354,914	0.02	0.01	0.01	3,549	3,549
BTIG LLC	878,946	274,342,304	0.00	0.01		2,743,423	
Capital Institutional Services Inc.	39,222	3,922,170	0.01	0.01		39,222	
Citigroup Global Markets Inc.	26,079	1,303,969	0.02	0.01	0.01	13,040	13,040
Cow en & Company LLC	105,998	5,299,894	0.02	0.01	0.01	52,999	52,999
Credit Suisse Securities LLC	196,805	10,955,032	0.02	0.01	0.01	109,550	109,550
Drexel Hamilton	56,313	11,261,393	0.01	0.01		112,613	
Goldman, Sachs & Co.	108	10,768	0.01	0.01		108	
H. C. Wainw right & Co.	27,747	1,443,973	0.02	0.01	0.01	14,440	14,440
Jefferies & Company	58	5,838	0.01	0.01		58	
J. P. Morgan Securities Inc.	214,708	35,533,856	0.01	0.01		355,339	
Merrill Lynch, Pierce, Fenner & Smith Inc.	117	11,689	0.01	0.01		118	
Mischler Financial Group Inc.	53,601	2,680,067	0.02	0.01	0.01	26,801	26,801
Morgan Stanley & Co. Inc.	166,442	8,275,479	0.02	0.01	0.01	82,756	82,754
OTA LLC	82,937	4,009,770	0.02	0.01	0.01	40,097	40,097
Piper Jaffray & Co.	282	28,166	0.01	0.01		281	
RBC Capital Markets	39	3,860	0.01	0.01		39	
Stifel, Nicolaus & Co. Inc.	1,609	40,236	0.04	0.01	0.03	402	1,207
Total	**$ 1,993,989**	**371,687,885**	**$ 0.02** [2]	**$ 0.01**	**$ 0.01**	**$ 3,716,880**	**$ 371,165**

[1] Commissions are included in purchase and sale prices of investments. The commissions and shares represent the System's pro-rata share based on ow nership of commission and share transactions in the investment pools.

[2] The average commission per share for all brokerage firms.

Investment Summary

Fiscal Year Ended September 30, 2016

	Fair Value [1]	Percent of Fair Value	Investment & Interest Income[2]	Percent of Total Investment & Interest Income
Fixed Income Pools	$ 6,258,404,299	13.0 %	$ 415,646,087	12.0 %
Domestic Equity Pools	12,418,741,762	25.8	1,422,252,615	41.1
Real Estate and Infrastructure Pools	5,064,233,343	10.5	441,503,674	12.7
Private Equity Pools	7,296,798,061	15.2	348,270,915	10.1
International Equity Pools	7,563,276,044	15.7	655,407,616	18.9
Absolute Return Pools	7,233,372,040	15.1	174,573,480	5.0
Short Term Investment Pools	2,240,096,019 [3]	4.7	7,312,111	0.2
Total	$ 48,074,921,567	100.0 %	$ 3,464,966,498	100.0 %

[1] Fair value excludes $3,336,346,583 in securities lending collateral for fiscal year 2016.

[2] Total Investment & Interest Income excludes net security lending income of $72,468,190 and unrealized gain of $4,183,791 for securities lending collateral.

[3] Short term investment pools fair value includes $155,650,355 of equity in common cash.

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ACTUARIAL SECTION

Actuary's Certification

GRS

Gabriel Roeder Smith & Company
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October 21, 2016

Mr. David Behen, Director
Department of Technology, Management and Budget
and
The Retirement Board
Michigan Public School Employees' Retirement System
P.O. Box 30171
Lansing, Michigan 48909

Ladies and Gentlemen:

The basic financial objective of the Michigan Public School Employees' Retirement System (MPSERS) is to establish and receive contributions which when combined with present assets and future investment return will be sufficient to meet the financial obligations of the System to present and future benefit recipients. The progress toward meeting these financial objectives is illustrated in the Schedules of Funding Progress and the Schedules of Employer Contributions.

We performed actuarial valuations and issued actuarial reports for MPSERS as of September 30, 2015. The purpose of the September 30, 2015 annual actuarial valuations was to determine the annual required contributions for the fiscal year ending September 30, 2018, to measure the System's funding progress, and to provide actuarial information in connection with applicable Governmental Accounting Standards Board Statements. The valuations should not be relied upon for any other purpose. The valuation process develops employer contributions that are sufficient to fund the System's normal cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund any unfunded accrued liabilities over a reasonable period. The valuation was completed based upon population data, asset data and plan provisions in effect on September 30, 2015.

The valuation was based upon information provided by the System's administrative staff concerning System benefit provisions, financial transactions, and individual members, terminated members, retirees and beneficiaries. We checked the data for internal and year to year consistency, but did not audit the data. As a result, we do not assume responsibility for the accuracy or completeness of the data provided by the System's administrative staff. The actuary summarizes and tabulates population data in order to analyze long term trends. The System's external auditor audits the actuarial data annually.

Annual actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rate of investment return and payroll growth, eligibility for the various classes of benefits and longevity among retired lives. These assumptions are adopted by the Board and the Department after considering the advice of the actuary and other professionals. The assumptions and the methods comply with the disclosure requirements of the applicable GASB Statements. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution requirements as needed.

Actuary's Certification (continued)

Mr. David Behen
October 21, 2016
Page 2

Our firm provided the following supporting schedules for use in the Comprehensive Annual Financial Report:

Financial Section

- Note 1 - Table of System's Membership
- Note 3 - Summary of Actuarial Assumptions
- Schedules of Funding Progress
- Schedules of Employer Contributions (Annual Required Contribution)

Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Percent of Eligible Active Members Retiring Within Next Year
- Separation from Active Employment Before Age and Service Retirement and Individual Pay Increase Assumptions
- Schedule of Active Member Pension Valuation Data
- Schedule of Changes in the Retirement Rolls
- Prioritized Solvency Tests
- Schedule of Active Member OPEB Valuation Data
- Schedule of Changes in the OPEB Rolls
- Analyses of System Experience

Statistical Section

- Schedule of Retired Members by Type of Pension Benefit (Retirement Type and Option)
- Schedule of Retired Members by Type of Health Benefit
- Schedules of Average Benefit Payments – Pension, Medical and Dental/Vision

The September 30, 2015 valuations were based upon assumptions that were recommended in connection with a study of System experience covering the period from October 1, 2007 through September 30, 2012. Future actuarial measurements may differ significantly from those presented in the annual valuations due to such factors as experience differing from that anticipated by actuarial assumptions, or changes in plan provisions, actuarial assumption/methods or applicable law. Due to the limited scope of the assignment, we did not perform an analysis of the potential range of future measurements.

Gabriel Roeder Smith & Company

Actuary's Certification (continued)

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The signing actuaries are independent of the plan sponsor.

The actuarial valuations of MPSERS as of September 30, 2015 were performed by qualified actuaries in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with applicable State statutes. Mita Drazilov and Louise Gates are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the calculated employer contribution meets the financial objective of the Retirement System.

Respectfully submitted,

Mita Drazilov Louise Gates

Mita D Drazilov, ASA, MAAA Louise M. Gates ASA, MAAA

Gabriel Roeder Smith & Company

Summary of Actuarial Assumptions and Methods

1. The investment return rate used in the valuations of the MIP and Basic Pension plans was 8% per year (7% for the Pension Plus plan) net of expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. Considering other financial assumptions, this investment return rate translates to an assumed long-term real rate of return of 4.5% (3.5% for the Pension Plus plan). Adopted 2004 (2010 for the Pension Plus plan).

2. The healthy life mortality table used in evaluating allowances to be paid was the RP-2000 Combined Healthy Mortality Table adjusted for improvements to 2025 using projection scale BB. Adopted 2014.

3. Sample probabilities of regular, unreduced retirement are shown in Schedule 1 on the next page. Adopted 2014.

4. Sample probabilities of withdrawal from service and disability, together with individual pay increase assumptions, are shown in Schedule 2 on the next page of this report. Adopted 2014.

5. Total active member payroll is assumed to increase 3.5% per year. This represents the portion of the individual pay increase assumptions attributable to inflation. In effect, this assumes no change in the number of active members. Adopted 2004.

6. An individual entry age actuarial cost method of valuation was used in determining actuarial liabilities and normal cost. Adopted 1975. Unfunded actuarial accrued liabilities are financed over a declining 40-year period beginning October 1, 1996. Adopted 1996.

7. The Department of Technology, Management & Budget approved the use of fair value of assets as of September 30, 2006, for valuation purposes. For investment gains and losses that occur after that date, a 5-year smoothing technique will be used. Specifically, the excess (shortfall) of actual investment income (including interest, dividends, realized and unrealized gains or losses) over the imputed-income at the valuation interest rate is considered the gain (loss), which is spread over five years. Adopted 2007.

8. The data about persons now covered and about present assets was furnished by the System’s administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.

9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The assumptions used in the actuarial valuations were adopted by the System’s Board and the Department of Technology, Management & Budget after consulting with the actuary.

10. A 5-year experience investigation, covering the period from October 1, 2007, through September 30, 2012, was completed in 2014. The purpose of the study was to analyze the actual experience of the System versus that anticipated by actuarial assumptions then in use. Adopted 2014.

11. Gabriel Roeder Smith and Co. was awarded the actuarial and consulting services contract beginning October 4, 2006.

Summary of Actuarial Assumptions and Methods (continued)

SCHEDULE 1

Percent of Eligible Active Members Retiring Within Next Year

Retirement Ages	Basic Teachers	Basic Non-Teachers	MIP[1] and Pension Plus Teachers	MIP[1] and Pension Plus Non-Teachers	Years of Service	MIP[2] Teachers	MIP[2] Non-Teachers
55	25 %	30 %			30	25%	25 %
58	16	22			32	25	25
61	20	21	20 %	19 %	34	19	23
64	23	24	22	21	36	21	26
67	24	28	22	20	38	23	29
70	21	25	15	18	40	30	33
71	21	25	15	18	42	30	33
72	21	25	15	18	44	30	33
73	21	25	15	18	46	30	33
74	21	25	15	18	48	30	33
75 and over	100	100	100	100	50 and over	100	100

[1] Applies to MIP members with fewer than 30 years of service

[2] Applies to MIP members with 30 or more years of service.

SCHEDULE 2

Separation From Active Employment Before Age & Service Retirement & Individual Pay Increase Assumptions

Sample Ages	Years of Service	Percent of Active Members Withdrawing Within Next Year: Pay More than $20,000 Teachers	Pay More than $20,000 Non-Teachers	Pay Less than $20,000 Teachers	Pay Less than $20,000 Non-Teachers	Percent Becoming Disabled Within Next Year	Percent Increase in Pay During Next Year
All	0	21.00 %	35.00 %	40.00 %	40.00 %		
	1	11.00	14.00	28.00	26.00		
	2	7.00	8.20	21.00	17.00		
	3	6.00	6.80	20.00	14.00		
	4	5.00	5.70	19.00	12.00		
25	5 & Over	3.00	4.76	18.00	12.00	.01 %	12.30 %
35	"	2.22	3.40	16.20	10.40	.02	6.80
45	"	1.32	2.20	12.80	7.40	.10	4.80
55	"	1.20	2.00	12.00	6.00	.26	3.70
60	"	1.20	2.00	12.00	6.00	.36	3.50

Actuarial Valuation Data

Schedule of Active Member Pension Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll*	Average Annual Pay	Increase (Decrease)	Average Age	Average Service
2006	308,233	$ 9,806,452	$ 31,815	(1.4) %	44.1	9.9
2007	295,984	9,851,471	33,284	4.6	44.5	10.3
2008	278,642	9,958,132	35,738	7.4	44.9	10.8
2009	268,208	9,883,674	36,851	3.1	45.4	11.4
2010	242,568	8,845,019	36,464	(1.1)	45.2	11.1
2011	236,660	9,155,691	38,687	6.1	45.3	11.3
2012	223,769	8,649,029	38,652	(0.1)	45.7	11.9
2013	212,525	8,225,140	38,702	0.1	46.0	12.3
2014	199,674	7,943,922	39,784	2.8	46.1	12.7
2015	194,957	8,005,009	41,060	3.2	46.1	12.8

* In thousands of dollars.

Schedule of Active Member OPEB Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll*	Average Annual Pay	Increase (Decrease)	Average Age	Average Service
2012	223,769	$ 8,649,029	$ 38,652		45.7	11.9
2013	214,906	8,273,017	38,496	(0.4) %	46.0	12.3
2014	191,551	7,618,224	39,771	3.3	45.7	12.6
2015	191,403	7,780,961	40,652	2.2	45.6	12.5

* In thousands of dollars.

Actuarial Valuation Data (Continued)

Schedule of Changes in the Retirement Rolls

Year Ended Sept. 30	Added to Rolls No.	Added to Rolls Annual Allowances*	Removed from Rolls No.	Removed from Rolls Annual Allowances*	Rolls - End of Year No.	Rolls - End of Year Annual Allowances*	Increase in Annual Allowances	Average Annual Allowances
2006	9,853	$ 248,852	4,396	$ 65,092	157,163	$ 2,828,460	6.9 %	$ 17,997
2007	9,704	247,807	4,023	63,192	162,844	3,013,075	6.5	18,503
2008	9,091	234,047	4,670	75,861	167,265	3,171,261	5.3	18,960
2009	8,817	239,774	4,160	74,870	171,922	3,336,165	5.2	19,405
2010	19,946	553,900	4,146	75,310	187,722	3,814,755	14.3	20,321
2011	9,533	256,356	4,820	83,884	192,435	3,987,227	4.5	20,720
2012	9,007	236,023	4,781	89,032	196,661	4,134,218	3.7	21,022
2013	9,182	244,937	4,891	89,874	200,952	4,289,281	3.8	21,345
2014	8,852	241,473	5,292	99,689	204,512	4,431,065	3.3	21,667
2015	8,761	244,010	5,622	106,223	207,651	4,568,852	3.1	22,003

* In thousands of dollars.

Schedule of Changes in the OPEB Rolls

Year Ended Sept. 30	Added to Rolls No.	Added to Rolls Annual Allowances*	Removed from Rolls No.	Removed from Rolls Annual Allowances*	Rolls - End of Year No.	Rolls - End of Year Annual Allowances*	Increase in Annual Allowances	Average Annual Allowances
2011					154,589	$ 979,578		
2012	7,263	$ 73,106	4,401	$ 74,841	157,451	977,843	(0.2) %	$ 6,210
2013	6,996	59,203	4,695	156,890	159,752	880,156	(10.0)	5,510
2014	6,634	57,331	5,042	88,058	161,344	849,429	(3.5)	5,265
2015	6,617	65,670	5,159	69,497	162,802	845,602	(0.5)	5,194

* In thousands of dollars.

Notes:

No. refers to number of retiree health contracts

Annual allowances added to rolls includes increases due to medical inflation and contract changes.

Annual allowances removed from rolls includes decreases due to contract changes.

Prioritized Solvency Test

The System's funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due, the ultimate test of financial soundness. Testing for level contribution rates is the long-term solvency test.

A prioritized solvency test is another means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: (1) active member contributions on deposit; (2) the liabilities for future benefits to present retired lives; and (3) the liabilities for service already rendered by active and inactive members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) are normally partially covered by the remainder of present assets. Generally, if the System has been using level-cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is not necessarily a by-product of level percent of payroll funding methods.

The schedules that follow illustrate the history of the liabilities of the System and are indicative of the System's policy of following the discipline of level percent of payroll financing.

Pension Benefits
($ in millions)

	Actuarial Accrued Liability (AAL)							
	(1)	(2)	(3)					
Valuation Date Sept. 30	Active Member Contributions	Retirants and Beneficiaries	Active and Inactive Members (Employer Financed Portion)	Valuation Assets	Portion of AAL Covered by Assets (1)	(2)	(3)	(4)[1]
2006	$ 4,082	$ 29,505	$ 15,549	$ 39,893	100 %	100 %	40.6 %	81.2 %
2006 [2]	4,082	29,505	15,549	42,995	100	100	60.5	87.5
2007	4,376	31,254	15,477	45,335	100	100	62.7	88.7
2008	5,168	32,723	15,664	45,677	100	100	49.7	85.3
2008 [3]	5,168	32,723	16,717	45,677	100	100	46.6	83.6
2009	5,449	34,159	17,077	44,703	100	100	29.8	78.9
2010	5,055	38,315	15,173	43,294	100	99.8	0.0	74.0
2010 [2]	5,055	38,589	16,233	43,294	100	99.1	0.0	72.3
2010 [3]	5,055	39,639	16,233	43,294	100	96.5	0.0	71.1
2011	5,217	41,043	17,167	41,038	100	87.3	0.0	64.7
2012	5,296	42,076	16,909	38,450	100	78.8	0.0	59.8
2012 [2]	5,296	42,076	15,905	38,450	100	78.8	0.0	60.8
2012 [3]	5,296	42,076	15,344	38,450	100	78.8	0.0	61.3
2013	4,909	43,198	15,733	38,044	100	76.7	0.0	59.6
2014	5,225	44,126	15,699	39,626	100	78.0	0.0	60.9
2014 [2]	5,225	45,545	15,335	39,626	100	75.5	0.0	59.9
2015	5,738	46,538	15,452	41,006	100	75.8	0.0	60.5

[1] Percents funded on a total valuation asset and total actuarial accrued liability basis.

[2] Revised asset valuation method.

[3] Revised benefit provisions.

Prioritized Solvency Test (Continued)

Other Postemployment Benefits
($ in millions)

Valuation Date Sept. 30	Actuarial Accrued Liability (AAL) (1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active and Inactive Members (Employer Financed Portion)	Valuation Assets	Portion of AAL Covered by Assets (1)	(2)	(3)	(4)[1]
2007	$ -	$ 13,977	$ 11,755	$ 776	0.0 %	5.6 %	0.0 %	3.0 %
2008	-	14,553	12,258	832	0.0	5.7	0.0	3.1
2009	-	13,805	14,490	713	0.0	5.2	0.0	2.5
2010	-	15,591	13,036	999	0.0	6.4	0.0	3.5
2011	-	14,496	12,550	1,156	0.0	8.0	0.0	4.3
2012 [2]	-	8,848	5,940	1,348	0.0	15.2	0.0	9.1
2013	691	8,766	5,077	2,041	100	15.4	0.0	14.0
2014 [2]	874	8,829	4,458	2,982	100	23.9	0.0	21.1
2015	1,042	7,867	3,923	3,531	100	31.6	0.0	27.5

[1] Percents funded on a total valuation asset and total actuarial accrued liability basis.

[2] Revised actuarial assumptions and/or methods.

Analysis of System Experience - Pension

Gains/(Losses) in Accrued Liabilities During Year Ended September 30, 2015
Resulting from Differences Between Assumed Experience & Actual Experience

	Type of Activity	Gain/(Loss)
1.	**Retirements (including Disability Retirement).** If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	$ 12,375,280
2.	**Withdrawal From Employment** (including death-in-service). If more liabilities are released by withdrawals and deaths than assumed, there is a gain. If smaller releases, a loss.	(52,954,949)
3.	**Pay Increases.** If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(132,111,276)
4.	**Investment Income.** If there is greater investment income than assumed, there is a gain. If less income, a loss.	604,308,081
5.	**Death After Retirement**. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(66,562,272)
6.	**New Entrants/Rehires.** New entrants into the System will generally result in an actuarial loss.	8,014,786
7.	**Refund of University Employer Contributions**	(112,468,242)
8.	**Other.** Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	(149,405,930)
9.	**Composite Gain (or Loss) During Year**	$ 111,195,478

Analysis of System Experience – OPEB

Gains/(Losses) in Accrued Liabilities During Year Ended September 30, 2015
Resulting from Differences Between Assumed Experience & Actual Experience

	Type of Activity	Gain/(Loss)
1.	**Premiums** Gains and losses resulting from actual premiums in valuation year versus that assumed from prior valuation	$ 1,490,503,838
2.	**Investment Income.** If there is greater investment income than assumed, there is a gain. If less income, a loss.	(252,832,177)
3.	**Demographic and Other.** Gains and losses resulting from demographic experience, data adjustments, timing of financial transactions, etc.	215,170,520
4.	**Composite Gain (or Loss) During Year**	$ 1,452,842,181

Summary of Plan Provisions

Our actuarial valuation of the System as of September 30, 2015, is based on the present provisions of the Michigan Public School Employees' Retirement Act (Public Act 300 of 1980, as amended).

REGULAR RETIREMENT (NO REDUCTION FACTOR FOR AGE)

Eligibility – Age 55 with 30 years credited service; or age 60 with 10 years credited service. For Member Investment Plan (MIP) members, any age with 30 years credited service; or age 60 with 10 years credited service; or age 60 with 5 years of credited service provided member worked through 60th birthday and has credited service in each of the last 5 years. For Pension Plus members, age 60 with 10 years of credited service.

Mandatory Retirement Age – None.

Transition Date – February 1, 2013

Annual Amount – Total credited service as of the Transition Date × 1.5% of final average compensation (FAC),

Plus

An amount determined by the member's election of Option 1, 2, 3, or 4 described below.

- Option 1 – Credited Service after the Transition Date × 1.5% × FAC
- Option 2 – Credited Service after the Transition Date (until total service reaches 30 years) × 1.5% × FAC, PLUS Credited Service after the Transition Date and over 30 years × 1.25% × FAC.
- Option 3 – Credited Service after the Transition Date ×1.25% ×FAC.
- Option 4 – None (Member will receive benefit through a Defined Contribution plan).

Final Average Compensation – Average of highest 60 consecutive months (36 months for MIP members). FAC is calculated as of the last day worked unless the member elected option 4, in which case the FAC is calculated at the Transition Date.

EARLY RETIREMENT (AGE REDUCTION FACTOR USED)

Eligibility – Age 55 with 15 or more years credited service and earned credited service in each of the last 5 years. Pension Plus members are not eligible for early retirements.

Annual Amount – Regular retirement benefit, reduced by 0.5% for each month by which the commencement age is less than 60.

DEFERRED RETIREMENT (VESTED BENEFIT)

Eligibility – 10 years of credited service. Benefit commences at the time age qualification is met.

Annual Amount – Regular retirement benefit based on service and final average compensation at time of termination.

DUTY DISABILITY RETIREMENT

Eligibility – No age or service requirement; in receipt of workers' disability compensation.

Annual Amount – Computed as regular retirement benefit with minimum benefit based on 10 years credited service. Additional limitation such that disability benefits plus authorized outside earnings limited to 100% of final average compensation (increased by 2% each year retired).

Summary of Plan Provisions (Continued)

NONDUTY DISABILITY RETIREMENT

Eligibility – 10 years of credited service.

Annual Amount – Computed as regular retirement benefit based on credited service and final average compensation at time of disability. Additional limitation such that disability benefits plus authorized outside earnings limited to 100% of final average compensation (increased by 2% each year retired).

DUTY DEATH BEFORE RETIREMENT

Eligibility – No age or service requirement. Beneficiary is in receipt of workers' compensation. Also applies to "duty disability" retirees during first three years of disability.

Annual Amount – Spouse benefit computed as regular retirement benefit with minimum benefit based on ten years of credited service, reduced for 100% joint and survivor election. If no surviving spouse, children under 18 share in benefit; if no spouse or children, a disabled and dependent parent is eligible.

NONDUTY DEATH BEFORE RETIREMENT

Eligibility – For Basic plan members, 15 years of credited service, or age 60 and 10 years of credited service. For MIP members, 10 years of credited service, or age 60 and 5 years of credited service. For Pension Plus members, 10 years of credited service, or age 60 and 10 years of credited service.

Annual Amount – Computed as regular retirement benefit, reduced in accordance with a 100% joint and survivor election, with payments commencing first of month following death. For the beneficiary of a deferred member, benefit commences at the time a member would have attained the minimum age qualification.

POSTRETIREMENT COST-OF-LIVING ADJUSTMENTS

One-time upward adjustments have been made in 1972, 1974, 1976 and 1977 for members retired on or after July 1, 1956, and prior to July 1, 1976, who were eligible for Social Security benefits. For members who retired prior to July 1, 1956, and not eligible for Social Security benefits based upon membership service, the minimum base pension was increased in 1965, 1971, 1972, 1974 and 1981, and in 1976 and 1977 one-time upward adjustments were made.

Beginning in 1983, eligible recipients received an annual distribution of investment earnings in excess of 8% (supplemental payment). On January 1, 1986, all members who retired prior to January 1, 1986, were given a permanent 8% increase. On January 1, 1990, a one-time upward adjustment for members who retired prior to October 1, 1981, was made.

Currently members receive annual increases based on the following schedule:

- Retired before January 1, 1987: Greater of supplemental payment or automatic 3% increase.
- Retired on or after January 1, 1987 under MIP: Automatic 3% increase only.
- Retired on or after January 1, 1987 not under MIP: Supplemental payment only.
- Retired under Pension Plus: No increases.

POSTRETIREMENT HEALTHCARE BENEFITS

Members hired before July 1, 2008 are eligible for 80% System paid Master Health Plan and Dental and Vision coverage for themselves and their dependents. However, those retirees Medicare eligible at January 1, 2013 receive 90% System-paid coverage.

Members hired before July 1, 2008 who retired from deferred vested status with less than 30 years of service, who terminate employment after October 31, 1980 with vested deferred benefits, are eligible for partially System-paid health benefit coverage (no payment if less than 21 years of service, 10% of maximum employer payment for each year of service over 20 up to 80% for 28 or more years of service).

Summary of Plan Provisions (Continued)

Members hired after June 30, 2008, but before September 4, 2012, are eligible for 80% System paid Master Health Plan and Dental and Vision coverage for themselves and their dependents, but the premium subsidy is graded based on career length as described below:

a. Member is age 60 or older at retirement

- If member has 10 or more years of total service, the System pays 30% of the monthly premium for the first 10 years of total service, plus 4% × next 13 years of total service, to a maximum of 80% of the monthly premium if 22.5 years of total service or more.
- If a member has fewer than 10 years of total service, there is no System paid coverage.

b. Member is under age 60 at retirement

- If member has 25 years of actual service, the System pays 80% of the monthly premium.
- If the member has under 25 years of actual service, upon attainment of age 60 the member may apply for System paid coverage (as described by the schedule above in a.).

Dependents are eligible for 80% System paid employer health benefits (partial payments for dependents of deferred vested members who had 21 or more years of service and dependents of members hired on or after July 1, 2008, as per the above schedule).

Members hired on or after September 4, 2012 will become participants of the Personal Healthcare Fund (PHF) and will not be eligible for insurance premium subsidy in retirement. For members hired on or after September 4, 2012, the maximum insurance subsidy is payable to the surviving spouse and health dependents of members who die as a result of injury or illness resulting from job activities. For all other members hired on or after September 4, 2012, the defined benefit portion of their post-retirement health benefits coverage is limited to a credit to a Health Reimbursement Account at termination if they have at least 10 years of service. The credit will be $2,000 for participants who are at least age 60 at termination or $1,000 for participants who are less than age 60 at termination.

Public Act 300 of 2012 granted all members of the Michigan Public School Employees Retirement System, who earned service credit in the 12 months ending September 4, 2012, or were on an approved professional services or military leave of absence on September 4, 2012, a voluntary election regarding their retirement healthcare. Any changes to a member's healthcare benefit are effective as of the member's transition date, which is defined as the first day of the pay period that begins on or after February 1, 2013.

Under Public Act 300 of 2012, members were given the choice between i. and ii. below:

i. Maintaining eligibility for the premium subsidy described above, and contributing 3% of their compensation while still working, or

ii. Entering the PHF.

Members not making an election will default into the premium subsidy arrangement.

If a member who elected the subsidy terminates prior to becoming eligible for the subsidy, dies before the total value of the subsidy received equals the total value of contributions made, or retires and declines coverage, the member or beneficiary may request a refund of unused funds. Refunds of member contributions to the healthcare funding account are issued as a supplemental pension benefit (payable at age 60 and payable from the pension plan) paid out over a 60-month period.

Summary of Plan Provisions (Continued)

A delayed subsidy applies to retirees who became a member of the retirement system before July 1, 2008 and who purchased service credit on or after July 1, 2008. Such individuals are eligible for premium subsidy benefits at age 60 or when they would have been eligible to retire without having made a service purchase, whichever comes first. They may enroll in the insurances earlier, but are responsible for the full premium until the premium subsidy begins.

MEMBER CONTRIBUTIONS BEFORE TRANSITION DATE (FEBRUARY 1, 2013)

<u>Basic Participants</u> – None.

<u>MIP Participants hired before January 1, 1990</u> – 3.9% of pay.

<u>MIP Participants hired on or after January 1, 1990 and before July 1, 2008</u> – 3.0% of first $5,000 of pay, plus 3.6% of next $10,000 of pay, plus 4.3% pay in excess of $15,000.

<u>MIP and PENSION PLUS Participants hired on or after July 1, 2008</u> – 3.0% of first $5,000 of pay, plus 3.6% of next $10,000 of pay, plus 6.4% pay in excess of $15,000.

MEMBER CONTRIBUTIONS ON OR AFTER TRANSITION DATE (FEBRUARY 1, 2013)

<u>Basic and MIP Members</u> – Contributions depend on member election of Option 1, 2, or 3. Members electing Option 4 will not contribute to the Plan.

Option 1 – Basic plan members – 4%

All MIP members – 7%

Option 2 – Contributions as in Option 1 until member reaches 30 years of service. At 30 years of service, contribution reverts to pre-transition date level.

Option 3 – Post-transition date contribution is the same as the pre-transition date contribution.

<u>Pension Plus Members</u> – 3% of first $5,000 of pay, plus 3.6% of next $10,000 of pay, plus 6.4% of pay in excess of $15,000.

MEMBER CONTRIBUTIONS ATTRIBUTABLE TO THE RETIREE HEALTH PLANS

Under Public Act 300 of 2012, members were given the choice between i. and ii. Below:

i. Maintaining eligibility for premium subsidy retiree medical coverage, and contributing 3% of their compensation while still working, or

ii. Entering the Personal Healthcare Fund (PHF)

Members not making an election defaulted into the premium subsidy arrangement.

If a member who elected the subsidy terminates prior to becoming eligible for the subsidy, dies before the total value of the subsidy received equals the total value of contributions made, or retires and declines coverage, the member or beneficiary may request a refund of unused funds. Refunds of member contributions to the healthcare funding account are issued as a supplemental pension benefit (payable at age 60 and payable from the pension plan) paid out over a 60-month period.

STATISTICAL SECTION

STATISTICAL SECTION

This part of the System's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the System's overall financial health.

Contents

Financial Trends

These schedules contain trend information to help the reader understand how the System's financial performance and fiscal health has changed over time. The schedules are presented for the last ten fiscal years. Schedules included are:

- Schedule of Pension Plan Additions by Source
- Schedule of OPEB Plan Additions by Source
- Schedule of Pension Plan Deductions by Type
- Schedule of OPEB Plan Deductions by Type
- Schedule of Changes in Fiduciary Net Position – Pension Plan
- Schedule of Changes in Fiduciary Net Position – OPEB Plan
- Schedule of Pension Benefit and Refunds by Type
- Schedule of OPEB Benefits and Refunds by Type

Operating Information

These schedules contain contextual information to assist the reader's understanding of how the System's financial information relates to the combination of participating members and the benefits it provides. Schedules are presented for the last ten fiscal years, except where noted. Schedules included are:

- Schedule of Retired Members by Type of Pension Benefit
- Schedule of Retired Members by Type of Other Postemployment Benefits
- Schedule of Funding Progress – Pension Plan
- Schedule of Other Postemployment Benefits
- Schedule of Average Benefit Payments – Pension
- Schedule of Average Benefit Payments – Health
- Schedule of Average Benefit Payments – Dental/Vision
- Schedule of Principal Participating Employers
- Ten Year History of Membership
- Schedule of Participating Employers

Schedules of Additions by Source

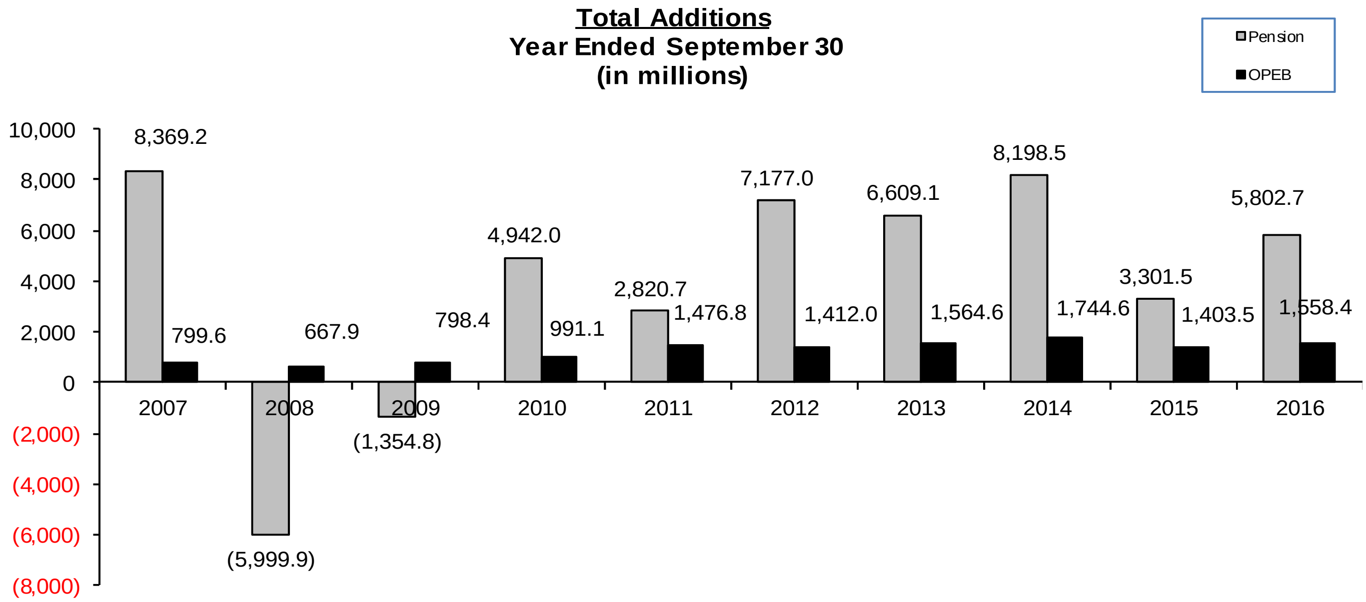
Schedule of Pension Plan Additions by Source
Last Ten Years

Fiscal Year Ended Sept. 30	Member Contributions	Employer Contributions Dollars	Employer Contributions % of Annual Covered Payroll	Net Investment & Other Income	Total
2007	$356,761,212	$ 835,366,382	8.48 %	$ 7,177,120,534	$ 8,369,248,128
2008	399,256,616	999,374,879	10.04	(7,398,546,831)	(5,999,915,336)
2009	357,249,466	1,000,375,355	10.12	(2,712,414,549)	(1,354,789,728)
2010	377,748,755	1,001,251,673	11.32	3,563,042,464	4,942,042,892
2011	332,209,134	1,156,060,903	12.62	1,332,452,213	2,820,722,250
2012	335,470,879	1,454,438,907	16.82	5,387,076,055	7,176,985,841
2013	385,007,587	1,364,136,462	16.58	4,859,919,060	6,609,063,109
2014	405,443,771	1,600,375,132	19.60	6,192,710,861	8,198,529,764
2015	395,722,292	1,967,610,696	23.81	938,143,040	3,301,476,028
2016	398,893,138	2,308,657,030	N/A	3,095,177,500	5,802,727,668

Schedule of OPEB Plan Additions by Source
Last Ten Years

Fiscal Year Ended Sept. 30	Member Contributions	Employer Contributions Dollars	Employer Contributions % of Annual Covered Payroll	Net Investment & Other Income	Total
2007	$ 77,206,778	$ 671,680,400	6.85 %	$ 50,740,885	$ 799,628,063
2008	78,088,861	649,571,071	6.52	(59,710,277)	667,949,655
2009	77,034,085	705,464,357	7.14	15,917,554	798,415,996
2010	125,160,304	675,117,153	7.63	190,860,064	991,137,521
2011	384,978,107	794,839,611	8.68	297,025,962	1,476,843,680
2012	387,566,872	795,595,368	9.20	228,838,969	1,412,001,209
2013	394,839,047	973,002,719	11.76	196,731,989	1,564,573,755
2014	390,844,206	1,000,031,808	12.24	353,732,646	1,744,608,660
2015	381,630,848	969,418,632	11.73	52,443,410	1,403,492,890
2016	382,257,166	883,943,202	N/A	292,214,037	1,558,414,405

Total Additions
Year Ended September 30
(in millions)



Schedules of Deductions by Type

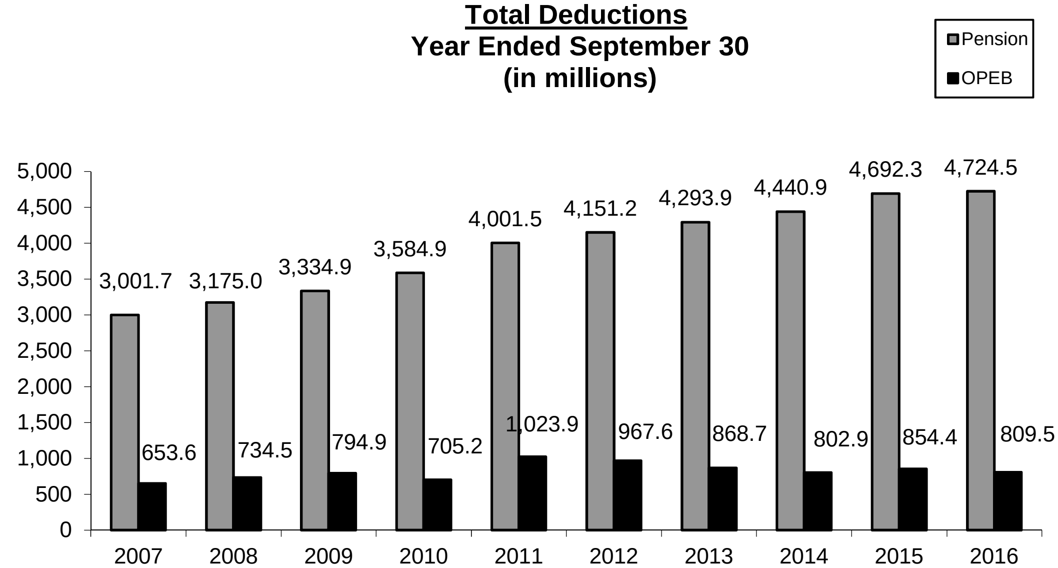
Schedule of Pension Plan Deductions by Type
Last Ten Years

Fiscal Year Ended Sept. 30	Benefit Payments	Refunds and Transfers	Administrative and Other Expenses	Total
2007	$ 2,944,920,179	$ 32,247,524	$ 24,489,202	$ 3,001,656,905
2008	3,117,434,847	32,803,284	24,740,628	3,174,978,759
2009	3,278,118,116	33,958,382	22,793,011	3,334,869,509
2010	3,525,020,341	33,923,570	26,000,699	3,584,944,610
2011	3,942,027,101	36,591,206	22,926,393	4,001,544,700
2012	4,082,242,506	31,865,139	37,119,630	4,151,227,275
2013	4,238,482,066	30,451,235	25,002,153	4,293,935,454
2014	4,388,328,517	28,840,650	23,711,249	4,440,880,415
2015	4,530,914,738	136,902,057	24,487,325	4,692,304,120
2016	4,671,299,698	26,996,969	26,213,125	4,724,509,792

Schedule of OPEB Plan Deductions by Type
Last Ten Years

Fiscal Year Ended Sept. 30	Benefit Payments	Refunds and Transfers	Administrative and Other Expenses	Total
2007	$ 590,226,465	$ 30,580	$ 63,315,419	$ 653,572,464
2008	666,380,643	41,786	68,078,508	734,500,937
2009	726,235,152	63,247	68,551,804	794,850,203
2010	650,677,457	52,545	54,431,010	705,161,012
2011	910,023,134	39,133	113,790,777	1,023,853,044
2012	785,896,356	2,461,527	179,259,224	967,617,107
2013	711,578,683	9,177,658	147,972,842	868,729,183
2014	669,240,164	68,930	133,623,320	802,932,413
2015	700,904,663	95,860	153,410,971	854,411,494
2016	653,086,198	93,387	156,358,057	809,537,642

Total Deductions
Year Ended September 30
(in millions)



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Schedules of Changes in Fiduciary Net Position

SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION – PENSION PLAN

Last Ten Years (in thousands)

	Fiscal Year			
	2007	2008	2009	2010
Member contributions	$ 356,761	$ 399,257	$ 357,249	$ 377,749
Employer contributions	835,366	999,375	1,000,375	1,001,252
Net investment income	7,174,561	(7,399,527)	(2,712,841)	3,562,452
Transfer from other systems	6	83	15	16
Miscellaneous income	2,553	897	412	574
Total Additions	8,369,247	(5,999,915)	(1,354,790)	4,942,042
Pension benefits	2,944,920	3,117,435	3,278,118	3,525,020
Refunds of contributions	32,142	32,613	33,865	33,873
Tranfer to other systems	106	190	93	50
Administrative and Other Expenses	24,489	24,741	22,793	26,001
Total Deductions	3,001,657	3,174,979	3,334,869	3,584,944
Changes in net position	$ 5,367,590	$ (9,174,894)	$ (4,689,659)	$ 1,357,099

SCHEDULE OF CHANGES IN FIDUCIARY NET POSITION – OPEB PLAN

Last Ten Years (in thousands)

	Fiscal Year			
	2007	2008	2009	2010
Member contributions	$ 77,207	$ 78,089	$ 77,034	$ 125,160
Employer contributions	671,680	649,571	705,465	675,117
Other governmental contributions	63	102	55	39,980
Net investment income	50,417	(60,190)	15,706	150,686
Miscellaneous income	261	378	156	195
Total Additions	799,628	667,950	798,416	991,138
Health care benefits	590,226	666,381	726,235	650,677
Refunds of contributions	31	42	63	53
Transfers to other systems				
Uncollectible receivables				
Administrative and Other Expenses	63,315	68,078	68,552	54,431
Total Deductions	653,572	734,501	794,850	705,161
Changes in net position	$ 146,056	$ (66,551)	$ 3,566	$ 285,977

Fiscal Year (continued)

2011	2012	2013	2014	2015	2016
$ 332,209	$ 335,471	$ 385,008	$ 405,444	$ 395,722	$ 398,893
1,156,061	1,454,439	1,364,136	1,600,375	1,967,611	2,308,657
1,331,744	5,386,497	4,858,563	6,190,449	937,663	3,094,694
5					
704	579	1,356	2,262	480	484
2,820,722	7,176,986	6,609,063	8,198,530	3,301,476	5,802,728
3,942,027	4,082,243	4,238,482	4,388,329	4,530,915	4,671,300
36,591	31,865	30,450	28,841	136,901	26,994
2		1		1	3
22,926	37,120	25,002	23,711	24,487	26,213
4,001,546	4,151,228	4,293,935	4,440,880	4,692,304	4,724,510
$ (1,180,823)	$ 3,025,758	$ 2,315,128	$ 3,757,650	$ (1,390,828)	$ 1,078,218

Fiscal Year (continued)

2011	2012	2013	2014	2015	2016
$ 384,978	$ 387,567	$ 394,839	$ 390,844	$ 381,631	$ 382,257
794,840	795,595	973,003	1,000,032	969,419	883,943
163,949	17,406	9	138	213	2,411
132,993	210,642	196,646	353,064	52,064	289,644
85	790	77	531	166	159
1,476,844	1,412,001	1,564,574	1,744,609	1,403,493	1,558,414
910,023	785,896	711,579	669,240	700,904	653,086
39	2,462	1,095	68	96	93
		8,083	1		
	37,551				
113,791	141,708	147,973	133,623	153,411	156,358
1,023,853	967,617	868,729	802,932	854,411	809,538
$ 452,991	$ 444,384	$ 695,845	$ 941,676	$ 549,081	$ 748,877

Schedules of Benefits and Refunds by Type

Schedule of Pension Benefits and Refunds by Type
Last Ten Years

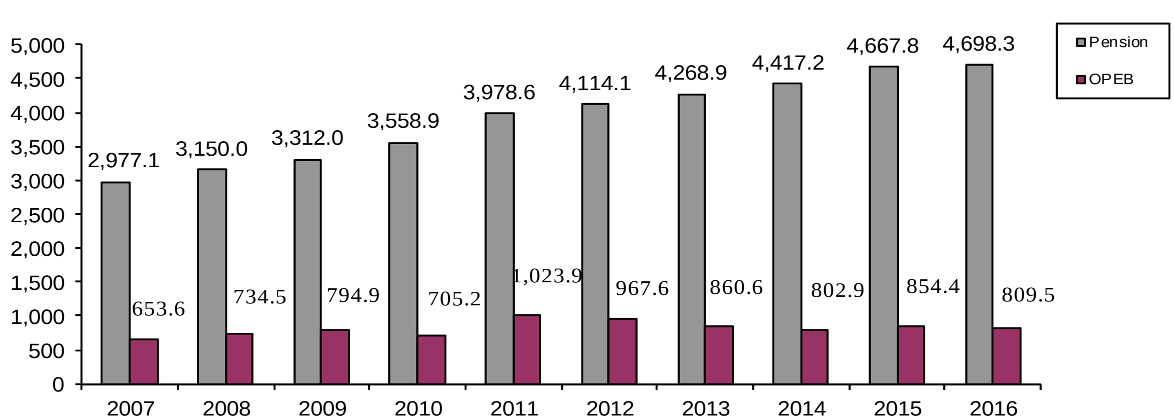
Fiscal Year Ended September 30	Regular Benefits*	Disability Benefits	Survivor Benefits	Refunds Employer	Refunds Employee	Refunds Retired Benefits	Total
2007	$ 2,717,579,495	$ 53,505,192	$ 173,835,492	$ 580,684	$ 31,547,480	$13,788	$ 2,977,062,131
2008	2,876,064,246	54,989,520	186,381,081	672,583	31,917,227	23,117	3,150,047,774
2009	3,022,567,501	56,243,731	199,306,884	383,851	33,469,331	11,792	3,311,983,090
2010	3,254,752,971	58,015,212	212,252,158	507,347	33,364,256	1,755	3,558,893,699
2011	3,655,588,461	60,232,300	226,200,505	1,311,729	35,249,374	29,934	3,978,612,303
2012	3,779,064,349	62,414,881	240,763,276	98,202	31,720,355	46,582	4,114,107,645
2013	3,919,541,949	65,421,037	253,519,080	96,131	30,340,582	13,507	4,268,932,286
2014	4,052,801,025	68,329,595	267,197,897	459,114	28,380,803	732	4,417,169,166
2015	4,179,445,527	70,240,170	281,229,041	112,468,242	24,416,139	17,016	4,667,816,135
2016	4,303,690,804	71,924,352	295,684,541	2,478,596	24,507,177	7,771	4,698,293,241

*Includes prior post retirement adjustments

Schedule of OPEB Benefits and Refunds by Type
Last Ten Years

Fiscal Year Ended Sept. 30	Health Benefits	Dental/Vision Benefits	Administrative Expenses	OPEB Refunds	Total
2007	$ 521,420,684	$ 68,805,781	$ 63,315,419	$ 30,580	$ 653,572,464
2008	588,064,545	78,316,098	68,078,508	41,786	734,500,937
2009	644,811,396	81,423,756	68,551,804	63,247	794,850,203
2010	566,550,299	84,127,158	54,431,010	52,545	705,161,012
2011	815,311,950	94,711,184	113,790,777	39,133	1,023,853,044
2012	690,268,502	95,627,854	179,259,224	2,461,527	967,617,107
2013	612,955,516	98,623,167	147,972,842	1,095,145	860,646,670
2014	582,398,966	86,841,198	133,623,320	68,141	802,931,624
2015	617,493,539	83,411,124	153,410,971	95,860	854,411,494
2016	567,230,086	85,856,112	156,358,057	93,387	809,537,642

<u>Total Benefit Deductions</u>
Year Ended September 30
(in millions)



Schedules of Retired Members by Type of Benefit

Schedule of Retired Members by Type of Pension Benefits
September 30, 2015

Monthly Pension Benefit Amt	Number of Retirees	Type of Retirement *: 1	2	3	4	5	6	Selected Option**: Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt.1E 2E,3E,4E
$ 1 - 200	12,442	10,886	1,065	73	290	3	125	6,676	2,983	1,743	202	838
201 - 400	22,486	19,418	1,381	116	1,243	2	326	12,290	4,711	3,753	529	1,203
401 - 600	17,470	14,645	1,132	94	1,245	1	353	9,144	3,648	3,217	504	957
601 - 800	13,391	11,132	866	71	969	1	352	6,815	2,697	2,532	499	848
801 - 1000	11,117	9,190	788	44	770	1	324	5,293	2,301	2,251	475	797
1001 - 1200	9,717	8,061	793	21	563		279	4,346	2,091	2,008	443	829
1201 - 1400	8,677	7,112	844	13	469		239	3,754	1,818	1,688	461	956
1401 - 1600	8,173	6,795	789	13	346		230	3,324	1,671	1,631	426	1,121
1601 - 1800	7,977	6,810	673	5	292		197	3,037	1,636	1,484	459	1,361
1801 - 2000	7,835	6,847	547	6	259	1	175	2,892	1,631	1,450	489	1,373
over 2000	88,366	83,600	3,300	9	641	2	814	38,674	16,940	17,889	6,937	7,926
Totals	**207,651**	**184,496**	**12,178**	**465**	**7,087**	**11**	**3,414**	**96,245**	**42,127**	**39,646**	**11,424**	**18,209**

* Type of Retirement
- 1 - Normal retirement for age and service
- 2 - Survivor payment – normal retirement
- 3 - Duty disability retirement (including survivors)
- 4 - Nonduty disability retirement (including survivors)
- 5 - Survivor payment – duty death in service
- 6 - Survivor payment – nonduty death in service

**Selected Option
- Opt. 1 – Straight life allowance
- Opt. 2 – 100% survivor option
- Opt. 3 – 50% survivor option
- Opt. 4 – 75% survivor option
- Opt. 1E, 2E, 3E, 4E – Equated retirement plans

Source: Gabriel Roeder Smith & Co.

Schedule of Retired Members by Type of Other Postemployment Benefits
September 30, 2015

Monthly Pension Benefit Amt	Number of Retirees	Type of Other Postemployment Benefits: Health	Dental/Vision
$ 1 - 200	12,442	5,458	6,589
201 - 400	22,486	11,400	13,418
401 - 600	17,470	10,367	11,931
601 - 800	13,391	8,749	9,861
801 - 1,000	11,117	7,692	8,528
1,001 - 1,200	9,717	7,037	7,693
1,201 - 1,400	8,677	6,496	7,079
1,401 - 1,600	8,173	6,350	6,798
1,601 - 1,800	7,977	6,280	6,736
1,801 - 2,000	7,835	6,318	6,742
Over 2,000	88,366	73,594	77,130
Totals	207,651	149,741	162,505

Source: Gabriel Roeder Smith & Co.

Schedule of Funding Progress – Pension Plan

Last Ten Years

Pension Benefits ($ in millions)

Valuation Date Sept 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) Accrued Liability (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2006	$ 39,893	$ 49,136	$ 9,243	81.2 %	$ 9,806	94.3 %
2006 [2]	42,995	49,136	6,141	87.5	9,806	62.6
2007	45,335	51,107	5,771	88.7	9,851	58.6
2008	45,677	53,555	7,878	85.3	9,958	79.1
2008 [3]	45,677	54,608	8,931	83.6	9,958	89.7
2009	44,703	56,685	11,982	78.9	9,884	121.2
2010	43,294	58,543	15,250	74.0	8,845	172.4
2010 [1]	43,294	59,877	16,583	72.3	8,845	187.5
2010 [3]	43,294	60,927	17,633	71.1	8,845	199.4
2011	41,038	63,427	22,389	64.7	9,156	244.5
2012	38,450	62,716	24,266	61.3	8,649	280.6
2013	38,044	63,840	25,796	59.6	8,273	311.8
2014	39,626	65,050	25,424	60.9	8,167	311.3
2014 [1]	39,626	66,105	26,479	59.9	8,167	324.2
2015	41,006	67,728	26,721	60.5	8,264	323.3

[1] Revised actuarial assumptions
[2] Revised asset valuation method
[3] Revised benefit provisions

Source: Gabriel Roeder Smith & Co.

Schedule of Other Postemployment Benefits

For Year Ended September 30, 2016

Claims	
Health insurance	$ 391,274,150
Vision insurance	4,818,829
Dental insurance	79,202,046
Total Claims	475,295,025
Estimated Claims Liability	
Health insurance	175,940,880
Vision insurance	253,886
Dental insurance	1,581,351
Total Estimated Claims Liability	177,776,117
Administrative Fees	
Staff Salaries	2,302,339
Health insurance	148,620,058
Vision insurance	679,098
Dental insurance	4,756,561
Total Administrative Fees	156,358,057
Subtotal	809,429,199
Refunds	93,387
Retirement benefits	15,056
Grand Total	$ 809,537,642

Schedules of Average Benefit Payments

Schedule of Average Benefit Payments - Pension
Last Ten Years

Payment Periods	Credited Service (Years) as of September 30							
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total
Period 10/1/05 to 9/30/06								
Average Monthly Benefit	$ 388	$ 176	$ 308	$ 557	$ 912	$ 1,381	$ 2,419	$ 1,500
Average Final Average Salary	8,395	17,286	17,447	23,464	29,324	35,216	53,049	38,048
Number of Active Retirants	406	4,921	18,378	23,204	21,814	17,107	71,333	157,163
Period 10/1/06 to 9/30/07								
Average Monthly Benefit	$ 643	$ 186	$ 318	$ 574	$ 938	$ 1,419	$ 2,481	$ 1,542
Average Final Average Salary	18,219	18,069	18,125	24,255	30,284	36,138	54,189	39,069
Number of Active Retirants	540	5,266	19,007	23,933	22,390	17,478	74,230	162,844
Period 10/1/07 to 9/30/08								
Average Monthly Benefit	$ 1,112	$ 194	$ 328	$ 591	$ 966	$ 1,457	$ 2,537	$ 1,580
Average Final Average Salary	30,583	18,574	18,753	25,023	31,222	37,076	55,184	39,973
Number of Active Retirants	1,199	5,586	19,514	24,309	22,791	17,673	76,193	167,265
Period 10/1/08 to 9/30/09								
Average Monthly Benefit	$ 1,095	$ 201	$ 337	$ 606	$ 994	$ 1,494	$ 2,590	$ 1,617
Average Final Average Salary	32,482	19,036	19,343	25,731	32,097	37,379	56,113	40,843
Number of Active Retirants	1,515	5,875	19,988	24,746	23,314	17,912	78,572	171,922
Period 10/1/09 to 9/30/10								
Average Monthly Benefit	$ 1,205	$ 209	$ 351	$ 630	$ 1,039	$ 1,561	$ 2,669	$ 1,693
Average Final Average Salary	37,222	19,559	20,269	26,822	33,777	40,271	57,785	42,731
Number of Active Retirants	1,909	6,421	20,817	25,838	25,368	20,058	87,311	187,722
Period 10/1/10 to 9/30/11								
Average Monthly Benefit	$ 1,296	$ 219	$ 363	$ 647	$ 1,068	$ 1,602	$ 2,720	$ 1,727
Average Final Average Salary	38,093	20,161	21,020	27,580	34,720	41,391	58,505	43,471
Number of Active Retirants	2,389	6,632	21,460	26,403	25,886	20,654	89,011	192,435
Period 10/1/11 to 9/30/12								
Average Monthly Benefit	$ 1,385	$ 226	$ 375	$ 667	$ 1,096	$ 1,639	$ 2,766	$ 1,752
Average Final Average Salary	39,388	20,586	21,774	28,601	35,728	42,408	59,109	44,113
Number of Active Retirants	2,941	6,824	22,030	27,276	26,604	21,049	89,937	196,661
Period 10/1/12 to 9/30/13								
Average Monthly Benefit	$ 1,266	$ 234	$ 390	$ 687	$ 1,122	$ 1,671	$ 2,808	$ 1,779
Average Final Average Salary	35,857	21,024	22,588	29,490	36,703	43,385	59,676	44,771
Number of Active Retirants	832	7,145	22,991	28,363	27,684	21,754	92,183	200,952
Period 10/1/13 to 9/30/14								
Average Monthly Benefit	$ 141	$ 219	$ 396	$ 699	$ 1,139	$ 1,689	$ 2,846	$ 1,806
Average Final Average Salary	10,750	20,617	23,263	30,235	37,612	44,258	60,156	45,423
Number of Active Retirants	200	6,971	23,668	29,017	28,219	22,022	94,415	204,512
Period 10/1/14 to 9/30/15								
Average Monthly Benefit	$ 140	$ 223	$ 405	$ 715	$ 1,162	$ 1,718	$ 2,891	$ 1,834
Average Final Average Salary	10,985	20,900	23,773	30,934	38,452	45,125	60,759	46,045
Number of Active Retirants	187	7,021	24,081	29,535	28,853	22,465	95,509	207,651

Source: Gabriel Roeder Smith & Co.

Schedules of Average Benefit Payments (continued)

Schedule of Average Benefit Payments - Health

Last Ten Years

Payment Periods	Credited Service (Years) as of September 30							
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total
Period 10/1/05 to 9/30/06								
Average Monthly Benefit	$ 174	$ 190	$ 341	$ 593	$ 952	$ 1,684	$ 2,493	$ 1,606
Average Final Average Salary	17,201	17,372	18,411	24,056	29,679	40,967	52,919	39,334
Number of Active Retirants	217	3,710	10,952	15,987	16,465	20,803	50,401	118,535
Period 10/1/06 to 9/30/07								
Average Monthly Benefit	$ 583	$ 198	$ 354	$ 611	$ 981	$ 1,718	$ 2,562	$ 1,663
Average Final Average Salary	27,114	18,084	19,129	24,906	30,751	41,666	54,256	40,602
Number of Active Retirants	284	3,857	10,787	16,158	16,680	20,990	52,577	121,333
Period 10/1/07 to 9/30/08								
Average Monthly Benefit	$ 1,270	$ 207	$ 365	$ 631	$ 1,012	$ 1,752	$ 2,626	$ 1,714
Average Final Average Salary	37,614	18,738	19,794	25,836	31,743	42,336	55,404	41,714
Number of Active Retirants	803	4,009	10,668	16,237	16,871	21,095	54,214	123,897
Period 10/1/08 to 9/30/09								
Average Monthly Benefit	$ 1,230	$ 216	$ 376	$ 647	$ 1,039	$ 1,782	$ 2,683	$ 1,757
Average Final Average Salary	38,012	19,252	20,328	26,525	32,575	42,936	56,446	42,631
Number of Active Retirants	1,053	4,212	10,757	16,602	17,376	21,419	56,377	127,796
Period 10/1/09 to 9/30/10								
Average Monthly Benefit	$ 1,318	$ 227	$ 395	$ 673	$ 1,087	$ 1,825	$ 2,767	$ 1,841
Average Final Average Salary	39,573	19,994	21,582	27,699	34,383	44,302	58,280	44,642
Number of Active Retirants	1,423	4,527	11,064	17,419	19,071	23,284	63,983	140,771
Period 10/1/10 to 9/30/11								
Average Monthly Benefit	$ 1,407	$ 238	$ 412	$ 693	$ 1,119	$ 1,860	$ 2,825	$ 1,890
Average Final Average Salary	40,812	20,557	22,546	28,618	35,375	45,063	59,127	45,605
Number of Active Retirants	1,810	4,551	10,939	17,498	19,279	23,591	65,246	142,914
Period 10/1/11 to 9/30/12								
Average Monthly Benefit	$ 1,476	$ 247	$ 430	$ 716	$ 1,149	$ 1,898	$ 2,875	$ 1,925
Average Final Average Salary	41,556	21,162	23,562	29,744	36,497	45,793	59,805	46,394
Number of Active Retirants	2,248	4,625	11,007	17,996	19,835	23,855	66,308	145,874
Period 10/1/12 to 9/30/13								
Average Monthly Benefit	$ 1,430	$ 257	$ 452	$ 738	$ 1,178	$ 1,931	$ 2,921	$ 1,968
Average Final Average Salary	41,834	21,668	24,615	30,728	37,590	46,550	60,458	47,289
Number of Active Retirants	534	4,677	11,071	18,375	20,387	24,342	67,874	147,260
Period 10/1/13 to 9/30/14								
Average Monthly Benefit	$ 137	$ 242	$ 459	$ 750	$ 1,201	$ 1,964	$ 2,965	$ 2,009
Average Final Average Salary	19,937	21,414	25,426	31,541	38,682	47,376	61,032	48,129
Number of Active Retirants	180	4,477	10,953	18,562	20,546	24,482	69,273	148,473
Period 10/1/14 to 9/30/15								
Average Monthly Benefit	$ 143	$ 247	$ 472	$ 769	$ 1,229	$ 1,997	$ 3,013	$ 2,049
Average Final Average Salary	20,324	21,674	26,017	32,333	39,632	48,032	61,695	48,900
Number of Active Retirants	173	4,379	10,840	18,687	20,835	24,764	70,063	149,741

Source: Gabriel Roeder Smith & Co.

Schedules of Average Benefit Payments (continued)

Schedule of Average Benefit Payments - Dental/Vision
Last Ten Years

Payment Periods	Credited Service (Years) as of September 30							
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total
Period 10/1/05 to 9/30/06								
Average Monthly Benefit	$ 178	$ 190	$ 340	$ 588	$ 947	$ 1,691	$ 2,489	$ 1,592
Average Final Average Salary	17,087	17,378	18,437	24,041	29,696	41,171	53,026	39,231
Number of Active Retirants	247	4,009	11,884	17,278	17,576	22,022	52,736	125,752
Period 10/1/06 to 9/30/07								
Average Monthly Benefit	$ 584	$ 198	$ 352	$ 607	$ 974	$ 1,721	$ 2,556	$ 1,643
Average Final Average Salary	27,200	18,134	19,143	24,868	30,674	41,746	54,309	40,374
Number of Active Retirants	319	4,221	11,947	17,648	17,942	22,362	55,166	129,605
Period 10/1/07 to 9/30/08								
Average Monthly Benefit	$ 1,234	$ 206	$ 363	$ 624	$ 1,003	$ 1,752	$ 2,618	$ 1,689
Average Final Average Salary	37,093	18,709	19,789	25,686	31,584	42,341	55,394	41,375
Number of Active Retirants	865	4,416	11,957	17,817	18,222	22,524	56,927	132,728
Period 10/1/08 to 9/30/09								
Average Monthly Benefit	$ 1,194	$ 215	$ 372	$ 639	$ 1,027	$ 1,779	$ 2,673	$ 1,726
Average Final Average Salary	37,407	19,216	20,292	26,357	32,340	42,861	56,379	42,185
Number of Active Retirants	1,143	4,665	12,170	18,337	18,816	22,872	59,118	137,121
Period 10/1/09 to 9/30/10								
Average Monthly Benefit	$ 1,281	$ 225	$ 389	$ 662	$ 1,072	$ 1,816	$ 2,754	$ 1,804
Average Final Average Salary	38,901	19,894	21,438	27,429	34,054	44,112	58,156	44,062
Number of Active Retirants	1,526	5,047	12,555	19,237	20,621	24,738	66,628	150,352
Period 10/1/10 to 9/30/11								
Average Monthly Benefit	$ 1,373	$ 236	$ 405	$ 681	$ 1,103	$ 1,850	$ 2,809	$ 1,846
Average Final Average Salary	40,098	20,552	22,297	28,253	35,020	44,819	58,936	44,916
Number of Active Retirants	1,943	5,143	12,672	19,538	21,050	25,226	68,305	153,877
Period 10/1/11 to 9/30/12								
Average Monthly Benefit	$ 1,449	$ 244	$ 421	$ 703	$ 1,131	$ 1,887	$ 2,858	$ 1,879
Average Final Average Salary	40,959	21,086	23,246	29,330	36,063	45,532	59,582	45,648
Number of Active Retirants	2,407	5,217	12,781	20,098	21,642	25,426	69,194	156,765
Period 10/1/12 to 9/30/13								
Average Monthly Benefit	$ 1,350	$ 253	$ 441	$ 724	$ 1,159	$ 1,918	$ 2,904	$ 1,917
Average Final Average Salary	40,355	21,515	24,190	30,282	37,083	46,244	60,205	46,448
Number of Active Retirants	597	5,363	13,021	20,696	22,399	26,065	71,011	159,152
Period 10/1/13 to 9/30/14								
Average Monthly Benefit	$ 136	$ 238	$ 449	$ 737	$ 1,181	$ 1,948	$ 2,948	$ 1,955
Average Final Average Salary	20,147	21,195	24,997	31,104	38,155	47,009	60,778	47,262
Number of Active Retirants	220	5,161	12,983	20,960	22,660	26,333	72,599	160,916
Period 10/1/14 to 9/30/15								
Average Monthly Benefit	$ 141	$ 244	$ 461	$ 755	$ 1,208	$ 1,981	$ 2,995	$ 1,994
Average Final Average Salary	20,322	21,538	25,579	31,868	39,101	47,659	61,425	48,020
Number of Active Retirants	208	5,090	12,883	21,114	23,037	26,641	73,532	162,505

Source: Gabriel Roeder Smith & Co.

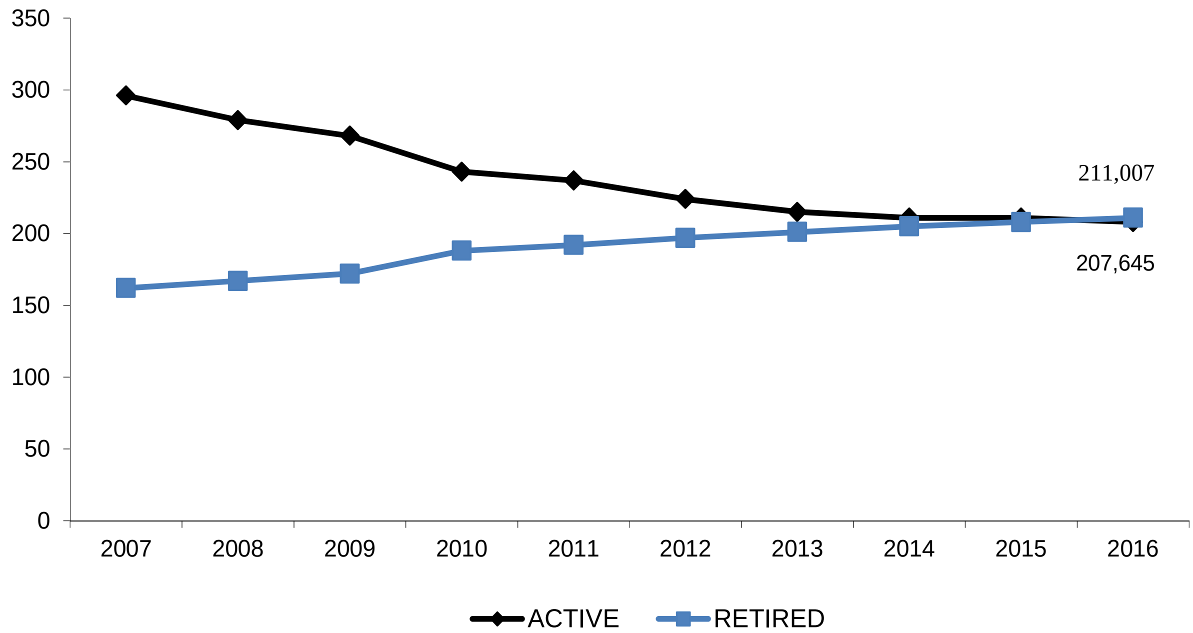
Schedule of Principal Participating Employers

For Fiscal Years Ending September 30, 2015 and 2006

	2015		2006	
Participating Employer	**Employees**	**Percentage of Total System**	**Employees**	**Percentage of Total System**
Detroit Public Schools	7,644	3.62 %	18,765	6.14 %
Utica Community Schools	3,364	1.59	5,438	1.78
Grand Rapids Public Schools	3,046	1.44	4,785	1.57
Dearborn Public Schools	2,703	1.28	3,586	1.17
Ann Arbor Public Schools	2,631	1.25	4,425	1.45
Oakland Community College	2,603	1.23	2,614	0.86
Macomb Community College	2,476	1.17	2,547	0.83
Plymouth-Canton Community SD	2,251	1.07	3,273	1.07
Kalamazoo Public Schools	2,246	1.06	3,274	1.07
Lansing Community College	2,056	0.97	2,372	0.78
All other	179,954	85.32	254,366	83.28
Total	**210,974**	**100.00 %**	**305,445**	**100.00 %**

Ten Year History of Membership (in thousands)

Fiscal Year Ended September 30



Source: Gabriel Roeder Smith & Co.

Schedule of Participating Employers at 9/30/16

Universities:

Central Michigan University
Eastern Michigan University
Ferris State University
Lake Superior State University
Michigan Technological University
Northern Michigan University
Western Michigan University

Community Colleges:

Alpena Community College
Bay De Noc Community College
Charles S Mott Community College
Delta College
Glen Oaks Community College
Gogebic Community College
Grand Rapids Community College
Henry Ford College
Jackson College
Kalamazoo Valley Community College
Kellogg Community College
Kirtland Community College
Lake Michigan College
Lansing Community College
Macomb Community College
Mid-Michigan Community College
Monroe County Community College
Montcalm Community College
Muskegon Community College
North Central Michigan College
Northwestern Michigan College
Oakland Community College
Schoolcraft Community College
Southwestern Michigan College
St Clair County Community College
Washtenaw Community College
Wayne County Community College
West Shore Community College

Intermediate School Districts:

Allegan Area Educational Service Agency
Alpena-Montmorency-Alcona ESD
Barry Intermediate School District
Bay-Arenac Intermediate School District
Berrien RESA
Branch Intermediate School District
Calhoun Intermediate School District
Charlevoix-Emmet Intermediate School District
Cheboygan-Otsego-Presque Isle ESD
Clare-Gladwin Intermediate School District
Clinton County RESA
COOR Intermediate School District
Copper Country Intermediate School District
Delta-Schoolcraft Intermediate School District
Dickinson-Iron Intermediate School District
Eastern U P Intermediate School District
Eaton Intermediate School District
Genesee Intermediate School District
Gogebic-Ontonagon Intermediate School District
Gratiot-Isabella RESD
Hillsdale Intermediate School District
Huron Intermediate School District
Ingham Intermediate School District
Ionia Intermediate School District
Iosco RESA
Jackson Intermediate School District
Kalamazoo RESA
Kent Intermediate School District
Lapeer Intermediate School District
Lenawee Intermediate School District
Lewis Cass Intermediate School District
Livingston ESA
Macomb Intermediate School District
Manistee Intermediate School District
Marquette-Alger Intermediate School District
Mecosta-Osceola Intermediate School District
Menominee Intermediate School District
Midland County Educational Service Agency
Monroe Intermediate School District
Montcalm Area Intermediate School District
Muskegon Area Intermediate School District
Newaygo County RESA
Oakland Intermediate School District
Ottawa Area Intermediate School District
Saginaw Intermediate School District
Sanilac Intermediate School District
Shiawassee Regional Educational Service District
St. Clair County RESA
St. Joseph Intermediate School District
Traverse Bay Area Intermediate School District
Tuscola Intermediate School District
Van Buren Intermediate School District
Washtenaw Intermediate School District
Wayne RESA
West Shore Educational Service District
Wexford-Missaukee Intermediate School District

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts:

Adams Township School District
Adams-Sigel #3 School
Addison Community Schools
Adrian Public Schools
Airport Community Schools
Akron-Fairgrove Schools
Alanson Public Schools
Alba Public Schools
Alcona Community Schools
Algonac Community Schools
Allegan Public Schools
Allen Park Public Schools
Allendale Public Schools
Alma Public Schools
Almont Community Schools
Alpena Public Schools
Anchor Bay School District
Ann Arbor Public Schools
Arenac-Eastern High School
Armada Area Schools
Arvon Township Schools
Ashley Community Schools
Athens Area Schools
Atherton Community Schools
Atlanta Community Schools
Au Gres-Sims School District
Autrain-Onota Public Schools
Avondale School District
Bad Axe Public Schools
Baldwin Community Schools
Bangor Public Schools
Bangor Township Schools
Baraga Township Schools
Bark River-Harris Schools
Bath Community Schools
Battle Creek Public Schools
Bay City Public Schools
Beal City Schools
Bear Lake School
Beaver Island Community Schools
Beaverton Rural School District
Bedford Public Schools
Beecher Community School District
Belding Area Schools
Bellaire Public Schools
Bellevue Community Schools
Bendle Public Schools
Bentley Community Schools
Benton Harbor Area Schools
Benzie County Central Schools
Berkley School District
Berrien Springs Public Schools
Bessemer Area School District
Big Bay De Noc School District
Big Burning-Colfax School District #1F
Big Jackson School District
Big Rapids Public Schools
Birch Run Area Schools
Birmingham Public Schools
Blissfield Community School District
Bloomfield Hills School District
Bloomingdale Public Schools
Bois Blanc Pines School District
Boyne City Public Schools
Boyne Falls Public Schools
Brandon School District
Brandywine Public Schools
Breckenridge Community Schools
Breitung Township Schools
Bridgeport-Spaulding Community School District
Bridgman Public Schools
Brighton Area Schools
Brimley Public Schools
Britton-Deerfield Schools
Bronson Community Schools
Brown City Community Schools
Buchanan Community Schools
Buckley Community Schools
Bullock Creek School District
Burr Oak Community Schools
Burt Township School District
Byron Area Schools
Byron Center Public Schools
Cadillac Area Public Schools
Caledonia Community Schools
Calumet Public Schools
Camden-Frontier School
Capac Community Schools
Carman-Ainsworth Community School District
Carney-Nadeau Public Schools
Caro Community Schools
Carrollton School District
Carson City-Crystal Area Schools
Carsonville-Port Sanilac School
Caseville Public Schools
Cass City Public Schools
Cassopolis Public Schools
Cedar Springs Public Schools
Center Line Public Schools
Central Lake-Antrim County Public Schools

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts (continued):

Central Montcalm Public Schools
Centreville Public Schools
Charlevoix Public Schools
Charlotte Public Schools
Chassell Township Schools
Cheboygan Area School District
Chelsea School District
Chesaning-Union Schools
Chippewa Hills School District
Chippewa Valley Schools
Church School
Clare Public Schools
Clarenceville School District
Clarkston Community Schools
Clawson City School District
Climax-Scotts Community Schools
Clinton Community Schools
Clintondale Community Schools
Clio Area School District
Coldwater Community Schools
Coleman Community Schools
Coloma Community Schools
Colon Community School
Columbia School District
Comstock Park Public Schools
Comstock Public Schools
Concord Community Schools
Constantine Public Schools
Coon-Berlin Township School District #3
Coopersville Public Schools
Corunna Public Schools
Covert Public Schools
Crawford-AuSable School District
Crawford-Excelsior School District #1
Crestwood School District
Croswell-Lexington Schools
Dansville Schools
Davison Community Schools
Dearborn Heights School District #7
Dearborn Public Schools
Decatur Public Schools
Deckerville Community School District
Delton-Kellogg Schools
DeTour Area Schools
Detroit Public Schools Community District
Dewitt Public Schools
Dexter Community Schools
Dollar Bay-Tamarack School District
Dowagiac-Union School District
Dryden Community Schools
Dundee Community Schools
Durand Area Schools
East China School District
East Detroit School District
East Grand Rapids Public Schools
East Jackson Public Schools
East Jordan Public Schools
East Lansing Public Schools
Eaton Rapids Public Schools
Eau Claire Public Schools
Eccles-Sigel #4 School
Ecorse Public Schools
Edwardsburg Public Schools
Elk Rapids Schools
Ellsworth Community Schools
Elm River Township Schools
Engadine Consolidated School District #4
Escanaba Area Public Schools
Essexville-Hampton Public Schools
Evart Public Schools
Ewen-Trout Creek Consolidated School District
Fairview Area Schools
Farmington Public Schools
Farwell Area Schools
Fennville Public Schools
Fenton Area Public Schools
Ferndale City School District
Fitzgerald Public Schools
Flat Rock Community Schools
Flint Community Schools
Flushing Community Schools
Forest Area Schools
Forest Hills Public Schools
Forest Park School District
Fowler Public Schools
Fowlerville Community Schools
Frankenmuth School District
Frankfort-Elberta Area Schools
Fraser Public Schools
Freeland Community Schools
Fremont Public Schools
Fruitport Community Schools
Fulton Schools
Galesburg-Augusta Community School District
Garden City Public Schools
Gaylord Community Schools
Genesee School District
Gibraltar School District
Gladstone Area Schools
Gladwin Community Schools
Glen Lake Community Schools
Glenn-Ganges School District #4

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts (continued):

Gobles Public Schools
Godfrey-Lee Public Schools
Godwin Heights Public Schools
Goodrich Area Schools
Grand Blanc Community Schools
Grand Haven Public Schools
Grand Ledge Public Schools
Grand Rapids Public Schools
Grandville Public Schools
Grant Public Schools
Grant Township School
Grass Lake Community Schools
Greenville Public Schools
Grosse Ile Township Schools
Grosse Pointe Public Schools
Gull Lake Community Schools
Gwinn Area Community Schools
Hale Area Schools
Hamilton Community Schools
Hamtramck Public Schools
Hancock Public Schools
Hanover Horton School District
Harbor Beach Community School District
Harbor Springs Public Schools
Harper Creek Community Schools
Harper Woods Public Schools
Harrison Community Schools
Hart Public Schools
Hartford Public Schools
Hartland Consolidated Schools
Haslett Public Schools
Hastings Area School District
Haynor- Easton Township School District #6
Hazel Park Public Schools
Hemlock Public Schools
Hesperia Community Schools
Highland Park School District
Hillman Community Schools
Hillsdale Community Schools
Holland Public Schools
Holly Area Schools
Holt Public Schools
Holton Public Schools
Homer Community Schools
Hopkins Public Schools
Houghton Lake Community Schools
Houghton-Portage Township School District
Howell Public Schools
Hudson Area Schools
Hudsonville Public Schools
Huron School District
Huron Valley School District
Ida Public Schools
Imlay City Community Schools
Inland Lakes Schools
Ionia Public Schools
Iron Mountain Public Schools
Ironwood-Gogebic City Area Schools
Ishpeming Public Schools
Ithaca Public Schools
Jackson Public Schools
Jefferson Schools
Jenison Public Schools
Johannesburg-Lewiston Area Schools
Jonesville Community Schools
Kalamazoo Public Schools
Kaleva Norman Dickson School District
Kalkaska Public Schools
Kearsley Community Schools
Kelloggsville Public Schools
Kenowa Hills Public Schools
Kent City Community Schools
Kentwood Public Schools
Kingsley Area Schools
Kingston Community Schools
Kipper School
L’Anse Public Schools
Laingsburg Community Schools
Lake City Area Schools
Lake Fenton Community School District
Lake Linden-Hubbell Public Schools
Lake Orion Community School #3
Lake Shore Public Schools
Laker Schools
Lakeshore Public Schools
Lakeview Community Schools
Lakeview Public Schools
Lakeview School District
Lakeville Community Schools
Lakewood School District
Lamphere Public Schools
L’Anse Creuse Public Schools
Lansing Public Schools
Lapeer Public Schools
Lawrence Public Schools
Lawton Community Schools
Leland Public Schools
Les Cheneaux Community Schools
Leslie Public Schools
Lincoln Consolidated Schools
Lincoln Park Public Schools
Linden Community Schools

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts (continued):

Litchfield Community Schools
Livonia Public Schools
Lowell Area Schools
Ludington Area Schools
Mackinaw City Public Schools
Mackinac Island Public Schools
Madison District Public Schools
Madison School District #2
Mancelona Public Schools
Manchester Community Schools
Manistee Public Schools
Manistique Area Schools
Manton Consolidated School District
Maple Valley Schools
Mar Lee School District
Marcellus Community Schools
Marion Public Schools
Marlette Community Schools
Marquette Area Public Schools
Marshall Public Schools
Martin Public Schools
Marysville Public Schools
Mason Co.-Eastern-Custer #5 School District
Mason Consolidated Schools
Mason County Central School District
Mason Public Schools
Mattawan Consolidated Schools
Mayville Community Schools
McBain Rural Agricultural School
Melvindale-Northern Allen Park School District
Memphis Community Schools
Mendon Community School
Menominee Area Public Schools
Meridian Public Schools
Merrill Community Schools
Mesick Consolidated Schools
Michigan Center School District
Mid Peninsula Schools
Midland City Schools
Milan Area Schools
Millington Community School District
Mio-AuSable Schools
Mona Shores School District #29
Monroe Public Schools
Montabella Community Schools
Montague Area Public Schools
Montrose Community Schools
Moran Township School District
Morenci Area Schools
Morley-Stanwood Community Schools
Morrice Area Schools
Mt Clemens Community Schools
Mt Morris Consolidated Schools
Mt Pleasant Public Schools
Munising Public Schools
Muskegon City Public Schools
Muskegon Heights City Public Schools
Napoleon Comm. School District
Negaunee Public Schools
New Buffalo Area Schools
New Haven Community Schools
New Lothrop Area Public Schools
Newaygo Public Schools
Nice Community Schools
Niles Public Schools
North Adams-Jerome Public Schools
North Branch Area Schools
North Central Area Schools
North Dickinson School
North Huron Schools
North LeValley School #2
North Muskegon Public Schools
Northport Public Schools
Northview Public Schools
Northville Public Schools
Northwest School District
Norway-Vulcan Area Schools
Nottawa Community Schools
Novi Community School District
Oak Park School District
Oakridge Public Schools
Okemos Public Schools
Olivet Community Schools
Onaway Area Community Schools
Onekama Consolidated Schools
Onsted Community Schools
Ontonagon Area School District
Orchard View Schools
Oscoda Area Schools
Otsego Public Schools
Ovid-Elsie Area Schools
Owendale-Gagetown Area Schools
Owosso Public Schools
Oxford Area Community Schools
Parchment School District
Paw Paw Public Schools
Peck Community Schools
Pellston Public Schools
Pennfield Public Schools
Pentwater Public Schools
Perry Public Schools
Petoskey Public Schools

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts (continued):

Pewamo-Westphalia Community School District
Pickford Public Schools
Pinckney Community Schools
Pinconning Area Schools
Pine River Area Schools
Pittsford Area Schools
Plainwell Community Schools
Plymouth-Canton Community School District
Pontiac City School District
Port Huron Area Schools
Portage Public Schools
Portland Public Schools
Posen Consolidated Schools
Potterville Public Schools
Powell Township School District
Quincy Community Schools
Rapid River Public Schools
Ravenna Public Schools #24
Reading Community Schools
Redford-Union School District #1
Reed City Public School District
Reese Public Schools
Reeths-Puffer Schools
Republic-Michigamme Schools
Richmond Community Schools
River Rouge Public Schools
River School
River Valley School District
Riverside-Hagar School District #6
Riverview Public Schools
Rochester Community Schools
Rockford Public Schools
Rogers City Area Schools
Romeo Community Schools
Romulus Community Schools
Roscommon Area Public Schools
Roseville Community Schools
Royal Oak City School District
Rudyard Public Schools
Saginaw City Schools
Saginaw Township Community Schools
Saline Area Schools
Sand Creek Community Schools
Sandusky Community Schools
Saranac Community Schools
Saugatuck Public Schools
Sault Ste Marie Public Schools
Schoolcraft Community Schools
Shelby Public Schools
Shepherd Public Schools
South Haven Public Schools
South Lake Public Schools
South Lyon Community Schools
South Redford School District
Southfield Public Schools
Southgate Community School District
Sparta Area Schools
Spring Lake Public Schools
Springport Public Schools
St Charles Community Schools
St Ignace Public Schools
St Johns Public Schools
St Joseph Public Schools
St Louis Public Schools
Standish-Sterling Community School District
Stanton Township Public Schools
Stephenson Area Public Schools
Stockbridge Community Schools
Strange-Oneida School #3
Sturgis Public Schools
Summerfield Schools
Superior Central School District
Suttons Bay Public Schools
Swan Valley School District
Swartz Creek Community Schools
Tahquamenon Area School District
Tawas Area Schools
Taylor School District
Tecumseh Public Schools
Tekonsha Community Schools
Thornapple-Kellogg School
Three Rivers Community Schools
Traverse City Public Schools
Trenton Public Schools
Tri-County Area Schools
Troy City School District
Ubly Community Schools
Union City Community Schools
Unionville-Sebewaing Area Schools
Utica Community Schools
Van Buren Public Schools
Vanderbilt Area Schools
Vandercook Lake Public Schools
Van Dyke Public Schools
Vassar Public Schools
Verona Mills School
Vestaburg Community Schools
Vicksburg Community Schools
Wakefield-Marenisco School District
Waldron Area Schools
Walkerville Public Schools
Walled Lake Consolidated Schools

Schedule of Participating Employers 9/30/2016 (Continued)

K-12 School Districts (continued):

Warren Consolidated Schools
Warren Woods Public Schools
Waterford School District
Watersmeet Township School District
Watervliet Public Schools
Waverly Community Schools
Wayland Union Schools
Wayne-Westland Community Schools
Webberville Community Schools
Wells Township School #18
West Bloomfield Schools
West Branch-Rose City Area Schools
West Iron County Public Schools
West Ottawa Public Schools
Western School District
Westwood Community Schools
Westwood Heights Schools
White Cloud Public Schools
White Pigeon Community Schools
Whitefish Township School
Whiteford Agricultural School
Whitehall District Schools
Whitmore Lake Public Schools
Whittemore-Prescott Area Schools
Williamston Community Schools
Wolverine Community Schools
Wood School District #8, Bangor Township
Woodhaven-Brownstown School District
Wyandotte Public Schools
Wyoming Public Schools
Yale Public School District
Ypsilanti Community Schools
Zeeland Public Schools

Libraries:

Ann Arbor District Library
Bacon Memorial District Library
Cheboygan Area Public Library
Flint Public Library
Grosse Pointe Public Library
Hackley Public Library
Kalamazoo Public Library
Mt Clemens Public Library
Public Libraries of Saginaw
Willard District Library

Public School Academies:

AGBU Alex & Marie Manoogian School
Arts Academy in the Woods
Bay-Arenac Community High School
Blue Water Middle College Academy
Central Academy
Countryside Charter School
Creative Technologies Academy
Da Vinci Institute
Dearborn Academy
Edison Public School Academy
El-Hajj Malik El-Shabazz Academy
Grand Rapids Child Discovery Center
Greater Heights Academy
Henry Ford Academy
Holly Academy
Honey Creek Community School
Joseph K. Lumsden Public School Academy
Macomb Academy
Martin Luther King, Jr. Public School Academy
Michigan Math and Science Academy
Muskegon Heights Public School Academy
Nah Tah Wahsh Public School Academy
North Star Academy
Outlook Academy
Presque Isle Academy II
Relevant Academy of Eaton County
Summit Academy
Summit Academy North
Three Lakes Academy
Virtual Learning Academy of St. Clair
Walden Green Day School
Washtenaw Technical Middle College
Waterford Montessori Academy
West Village Academy
Windover High School
Woodland Park Academy

ACKNOWLEDGMENTS

The *Michigan Public School Employees' Retirement System Comprehensive Annual Financial Report* is prepared by Financial Services, Fiscal Management Division. Staff of the division for the fiscal year 2016 report included:

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This report may be viewed online at: www.michigan.gov/ors