

**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, 2012**



**M P S E R S**

**Prepared by:  
Financial Services  
for  
Office of Retirement Services  
P.O. Box 30171  
Lansing, Michigan 48909-7671  
517-322-5103  
1-800-381-5111**

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# INTRODUCTORY SECTION

Certificate of Achievement  
Public Pension Standards Award  
Letter of Transmittal  
Retirement Board Members  
Advisors and Consultants  
Organization Chart



# INTRODUCTORY SECTION

## Certificate of Achievement

### 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, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Christopher P. Morinell*

President

*Jeffrey R. Emer*

Executive Director

**Public Pension Standards Award**



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2012***

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)

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle  
Program Administrator

# **INTRODUCTORY SECTION**

## **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 2, 2013

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 2012.

### **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 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.

# INTRODUCTORY SECTION

## **Letter of Transmittal (continued)**

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 net assets 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, 2011. 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.

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.

## **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 13.5% for the pension Plan and 13.3% for the Other Post Employment Benefits (OPEB) Plan. For the last five years, the System has experienced an annualized rate of return of 1.6%. A summary of asset allocation and rates of return can be found in the Investment Section of this report.

### ***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

# INTRODUCTORY SECTION

## Letter of Transmittal (continued)

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 net assets over deductions from plan net assets. 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. Effective in fiscal year 2001, the System uses the valuation from the previous fiscal year for this report in accordance with Governmental Accounting Standards Board (GASB) Statement No. 25. Consistent with this approach, the most recent actuarial valuation was performed as of September 30, 2011. The actuarial value of the assets and actuarial accrued liability were \$41.0 billion and \$63.4 billion, respectively, resulting in a funded ratio of 64.7% at September 30, 2011. An historical perspective of funding levels for the System is presented on the Schedule of Funding Progress in the Required Supplementary Information in the Financial Section of this report.

### *Postemployment Benefits*

An actuarial valuation is completed annually to determine the actuarial accrued liability if the postemployment benefits were to be pre-funded. As of September 30, 2011, the actuarial accrued liability for postemployment benefits based on pay as you go is \$27.0 billion. If these benefits were pre-funded, the actuarial accrued liability as of September 30, 2011, would be \$16.9 billion. GASB Statement No. 43 (implemented in fiscal year 2007) does not require retroactive application of the reporting changes. Therefore, only six valuation years are presented and included in the required supplementary information in this report.

## **MAJOR GOALS ACCOMPLISHED**

The Michigan Department of Technology, Management and Budget, Office of Retirement Services (ORS) is an innovative retirement organization driven to empower our customers for a successful today and a secure tomorrow. During fiscal year 2012, we refreshed our strategic plan, using input from across the organization. We captured business plan successes and goals for the future, so we can offer our members the highest level of customer service. Below are some of the highlights from the last fiscal year.

Public School Employees Retirement System Reform - In preparation for the retirement reforms for 2012, ORS ensured that public school employees were informed, prepared, and had access to the most up-to-date information about their options for the future of their healthcare and pension plans. Before the election window began, we verified employees’ contact information with 100 percent of public school employers. On the day PA 300 of 2012 was signed, over 214,000 active public school employees were sent an initial letter. Additionally, via our secure online tool miAccount, members had access to a Reform Tools webpage with full bill information, frequently asked questions, a legislative summary, sign-up for webinars and seminars, calculators, and more. To provide accurate election choices to those who were eligible, we developed and managed a new process to validate employment information with the employers for over 214,000 members.

Reporting Instruction Manual Redesigned - Public school employers were given a redesigned Reporting Instruction Manual. The new manual has a cleaner look and better usability that allows employers to search easily, bookmark the most frequently used information, and allows ORS staff to make content updates quickly and easily.

Direct Deposit Campaign - To ensure retirees receive their pension payments in the most secure, timely manner possible, ORS launched a communication campaign to move all recipients of paper pension checks to direct deposit. All new pension inceptions are required to be established as EFT. Additionally, 11,500 paper check recipients switched to direct deposit this year. Nearly 98% of ORS’ 266,000 retirees are paid by EFT as of September 30, 2012.

# INTRODUCTORY SECTION

## **Letter of Transmittal (continued)**

Improvements in call center operations - Customers calling the ORS call center during peak hours now receive the option to request a return phone call through Virtual Hold Technology rather than remain on hold. Customers can also enter identifying information which sorts the calls by topic and directs the call to the staff who have been specifically trained for that topic. These improvements deliver our callers to the right agent faster and allow ORS to train call center staff quickly and efficiently.

Online applications - Public school employees joined state employees in processing retirement applications primarily online. With few exceptions, pending retirees can now submit the application online, generate an immediate pension estimate as well as a printable checklist which confirms their choices. This change streamlines the application process and minimizes any chances for error.

Improved customer communication and education - To provide customers with personalized directed communications quickly, ORS began using GovDelivery to send emails to customers with important retirement information. The GovDelivery system provides a cost-effective, timely way for ORS to keep both employers and members informed. As part of ORS's goal to empower our customers, pre-recorded tutorials, accessible 24 hours a day, were launched on the website. To date, over 46,000 customers have taken advantage of the tutorials.

### **HONORS**

Thomson Reuters award - The Office of Retirement Services received the 2012 Health Care Advantage Award from Thomson Reuters (Truven Health Analytics) for the innovative implementation of a new prescription drug plan for public school retirees.

NAGDCA recognition - The Office of Retirement Services received the 2012 Leadership Recognition Award from the National Association of Government Defined Contribution Administrators (NAGDCA) for the Missing Your Match? Campaign. The campaign encouraged participants in the defined contribution plan to take full advantage of their employer matching contribution.

Public Pension Standards Award - The Public Pension Coordinating Council awarded the retirement system with the 2012 Public Pension Standards Award for Funding and Administration.

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 2011 Comprehensive Annual Financial Report (CAFR). This marks the 21st consecutive year ORS has received this prestigious award.

# ***INTRODUCTORY SECTION***

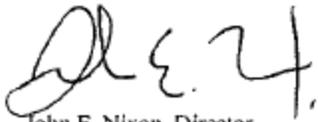
## **Letter of Transmittal (continued)**

### *Acknowledgements*

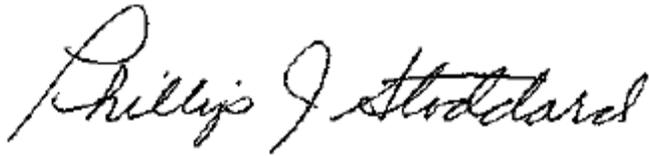
The preparation of this report was accomplished with the dedication and cooperation of many people. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible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



John E. Nixon, Director  
Department of Technology, Management & Budget



Phillip J. Stoddard, Director  
Office of Retirement Services

# INTRODUCTORY SECTION

## Administrative Organization

### Retirement Board Members\*

Ivy Bailey  
Active Classroom Teacher  
Term Expired March 30, 2012

Scott Koenigsnecht  
Active Superintendent  
Term Expires March 30, 2013

Jonathon Fielbrandt  
Active Classroom Teacher  
Term Expires March 30, 2013

Charles Thomas  
Retired Finance/Operations  
Term Expires March 30, 2015

Stephen Epstein  
General Public - Investments  
Term Expires March 30, 2016

Michael Ringuette  
General Public -  
Actuary/Health Insurance  
Term Expires March 30, 2014

Timothy Nelson  
Community College Trustee  
Term Expires March 30, 2016

Kevin Philipps  
Active Finance/Operations,  
Non-Superintendent  
Term Expires March 30, 2016

John Olekszyk, Vice Chair  
Retired Teacher  
Term Expires March 30, 2014

Diana Osborn, Chair  
Active Non-Certified Support  
Term Expires March 30, 2013

Larry Ward  
Reporting Unit Board of  
Control  
Term Expires March 30, 2016

Michael P. Flanagan  
Ex-officio Member  
Representing State  
Superintendent of Education

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

## Administrative Organization

### Department of Technology, Management & Budget

Office of Retirement Services  
P.O. Box 30171  
Lansing, Michigan 48909-7671  
517-322-5103  
1-800-381-5111

### Advisors and Consultants

#### Actuaries

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

#### Independent Auditors

Thomas H. McTavish, C.P.A.  
Auditor General  
State of Michigan

#### Investment Manager and Custodian

Andy Dillon  
State Treasurer  
State of Michigan

#### Legal Advisor

Bill Shuette  
Attorney General  
State of Michigan

#### Medical Advisors

Gabriel Roeder Smith & Co.  
Southfield, Michigan

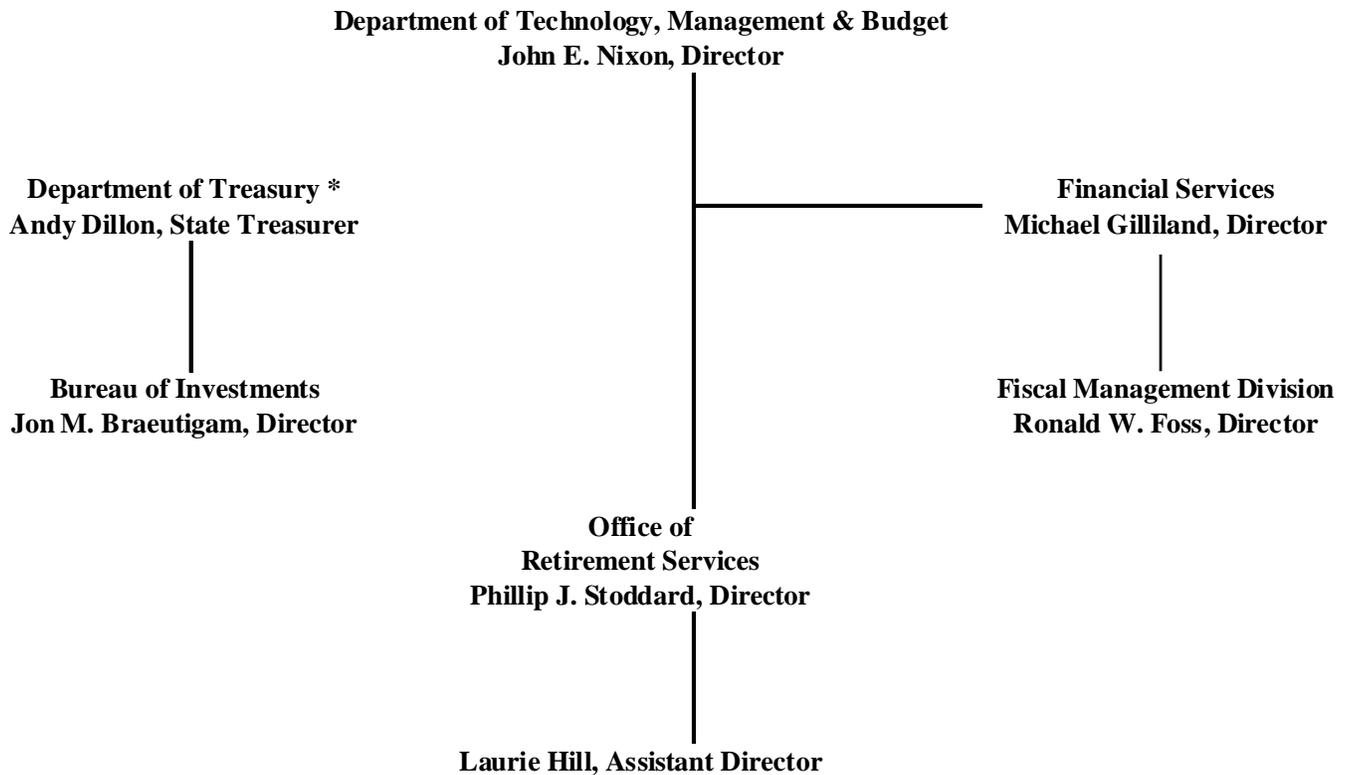
#### Investment Performance Measurement

State Street Corporation  
State Street Investment Analytics  
Boston, MA

# INTRODUCTORY SECTION

## Administrative Organization (continued)

### Organization Chart



\*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.

# 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

# FINANCIAL SECTION

## Independent Auditor's Report



STATE OF MICHIGAN  
OFFICE OF THE AUDITOR GENERAL  
201 N. WASHINGTON SQUARE  
LANSING, MICHIGAN 48913  
(517) 334-8050  
FAX (517) 334-8079

THOMAS H. McTAMISH, C.P.A.  
AUDITOR GENERAL

### Independent Auditor's Report on the Financial Statements

Ms. Diana Osborn, Chair  
Michigan Public School Employees' Retirement System Board  
General Office Building  
and  
John E. Nixon, C.P.A., Director  
Department of Technology, Management, and Budget  
George W. Romney Building  
and  
Mr. Phillip J. Stoddard, Director  
Office of Retirement Services  
Department of Technology, Management, and Budget  
General Office Building  
Lansing, Michigan

Dear Ms. Osborn, Mr. Nixon, and Mr. Stoddard:

We have audited the accompanying basic financial statements of the Michigan Public School Employees' Retirement System as of and for the fiscal years ended September 30, 2012 and September 30, 2011, as listed in the table of contents. These financial statements are the responsibility of the Michigan Public School Employees' Retirement System's management. 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 of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to in the first paragraph present fairly, in all material respects, the plan net assets of the Michigan Public School Employees' Retirement System as of September 30, 2012 and September 30, 2011 and the changes in its plan net assets for the fiscal years then ended in conformity with accounting principles generally accepted in the United States of America.

## Independent Auditor's Report (continued)

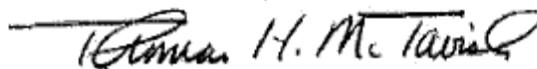
In accordance with *Government Auditing Standards*, we will also issue a report on our consideration of the Michigan Public School Employees' Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant 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 the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 16 through 20 and the schedules of funding progress and schedules of employer and other contributions on pages 48 through 50 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.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements of the Michigan Public School Employees' Retirement System. The supporting schedules on pages 51 through 57 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The supporting schedules have 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 taken as a whole.

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. These 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.

Sincerely,



Thomas H. McTavish, C.P.A.  
Auditor General  
December 29, 2012

# FINANCIAL SECTION

## 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, 2012. 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 2012 by \$39.6 billion (reported as *net assets*). Net assets are held in trust to meet future benefit payments.
- The System's funding objective is to meet long-term benefit obligations through contributions and investment income. As of September 30, 2011, the funded ratio for pension benefits was approximately 64.7% and the funded ratio for other postemployment benefits (OPEB) was approximately 4.3%.
- Additions for the year were \$8.6 billion, which are comprised primarily of contributions of \$3.0 billion and investment gains of \$5.6 billion.
- Deductions increased over the prior year from \$5.0 billion to \$5.1 billion or 1.9%. Most of this increase represented increased pension and administrative expenses.

### THE STATEMENT OF PLAN NET ASSETS AND THE STATEMENT OF CHANGES IN PLAN NET ASSETS

This Comprehensive Annual Financial Report (CAFR) consists of two financial statements; *The Statements of Pension Plan and Other Postemployment Benefit Plan Net Assets* (page 22) and *The Statements of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets* (page 23). 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 Net Assets* presents all of the System's assets and liabilities, with the difference between the two reported as net assets. Over time, increases and decreases in net assets measure whether the System's financial position is improving or deteriorating. *The Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets* presents how the System's net assets changed during the most recent fiscal year. These two financial statements should be reviewed along with the Schedules of Funding Progress (page 48) and Schedules of Employer and Other Contributions (page 49) to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

# FINANCIAL SECTION

## Management's Discussion and Analysis (continued)

### FINANCIAL ANALYSIS

System total assets as of September 30, 2012, were \$43.8 billion and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased \$2.1 billion or 4.9% between fiscal years 2011 and 2012, due primarily to net investment gains. Total assets decreased \$0.4 billion or 0.9% between fiscal years 2010 and 2011 due to net investment losses.

Total liabilities as of September 30, 2012, were \$4.2 billion and were comprised of warrants outstanding, accounts payable, deferred revenue, and obligations under securities lending. Total liabilities decreased \$1.4 billion or 25.1% between fiscal years 2011 and 2012 primarily due to decreased accounts payables and obligations under securities lending. Total liabilities increased \$0.3 billion or 6.3% between fiscal years 2010 and 2011 due to increased obligations under securities lending.

System assets exceeded its liabilities at the close of fiscal year 2012 by \$39.6 billion. Total net assets held in trust for pension and OPEB benefits increased \$3.5 billion or 9.6% from the previous year, primarily due to net investment gains. This compares to fiscal year 2011, when net assets decreased by \$0.7 billion or 2.0% from the prior year.

#### Net Assets (in thousands)

	2012	Increase (Decrease)		2011	Increase (Decrease)		2010
<b>Assets</b>							
Cash	\$ 152,975	26.3	%	\$ 121,129	128.0	%	\$ 53,116
Receivables	354,391	2.1		347,205	(35.6)		539,253
Investments	43,300,862	4.9		41,278,590	(0.6)		41,548,173
<b>Total Assets</b>	43,808,228	4.9		41,746,924	(0.9)		42,140,542
<b>Liabilities</b>							
Warrants outstanding	3,519	(19.7)		4,381	(36.9)		6,948
Deferred revenue	2,497	100.0					
Accounts payable and other accrued liabilities	284,071	(13.3)		327,750	222.3		101,694
Obligations under securities lending	3,921,029	(25.8)		5,287,823	2.1		5,177,097
<b>Total Liabilities</b>	4,211,116	(25.1)		5,619,954	6.3		5,285,739
<b>Total Net Assets</b>	\$ 39,597,112	9.6	%	\$ 36,126,969	(2.0)	%	\$ 36,854,803

# **FINANCIAL SECTION**

## **Management's Discussion and Analysis (continued)**

### **ADDITIONS TO PLAN NET ASSETS**

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 2012 totaled approximately \$8.6 billion.

Total additions for fiscal year 2012 increased approximately \$4.3 billion or 99.9% from those of fiscal year 2011 due primarily to increased net investment income. Total additions decreased approximately \$1.6 billion or 27.6% from fiscal year 2010 to fiscal year 2011 due primarily to decreased net investment income. Total contributions increased between fiscal years 2011 and 2012 by \$158.4 million or 5.6%, while net investment income increased \$4.1 billion or 282.1%. Total contributions increased between fiscal years 2010 and 2011 by \$612.7 million or 27.6%, while net investment income decreased \$2.2 billion or 60.6%. The Investment Section of this report reviews the results of investment activity for fiscal year 2012.

### **DEDUCTIONS FROM PLAN NET ASSETS**

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 to former members, and the cost of administering the System. Total deductions for fiscal year 2012 were \$5.1 billion, an increase of 1.9% over fiscal year 2011 deductions. Total deductions for fiscal year 2011 were \$5.0 billion, which was an increase of 17.1% over fiscal year 2010 deductions.

The health, dental, and vision care expenses during the year decreased by \$124.1 million or 13.6%, from \$910.0 million to \$785.9 million. This compares to an increase of \$259.3 million or 39.9%, from \$650.7 million to \$910.0 million between fiscal years 2010 and 2011. The payment of pension benefits increased by \$140.2 million or 3.6% between fiscal years 2011 and 2012 and increased by \$417.0 million or 11.8% from fiscal year 2010 to fiscal year 2011. In fiscal year 2012, the increase in pension benefit expenses resulted from an increase in retirees (4,226) and an increase in benefit payments to retirees. In fiscal year 2011, the increase in pension benefit expenses resulted from an increase in retirees (4,713) and an increase in benefit payments to retirees. In fiscal year 2012, the write off of an uncollectible receivable was recorded as the federal Early Retiree Reinsurance Program (ERRP) funds are currently unavailable. Administrative expenses increased by \$42.1 million or 30.8% between fiscal years 2011 and 2012, primarily due to an increase in pension and OPEB plan administrative expenses. The pension plan administrative and other expense increase is due to a probable loss related to the guarantee of bonds for a Michigan motion picture studio (see Note 7). Administrative and other expenses increased by \$56.3 million or 70.0% between fiscal years 2010 and 2011, primarily due to an increase in OPEB plan administrative expenses.

# FINANCIAL SECTION

## Management's Discussion and Analysis (continued)

Changes in Plan Net Assets (in millions)							
	<u>2012</u>	<u>Increase (Decrease)</u>		<u>2011</u>	<u>Increase (Decrease)</u>		<u>2010</u>
<b>Additions</b>							
Member contributions	\$ 723.0	0.8 %	\$	717.2	42.6 %	\$	502.9
Employer contributions	2,250.0	15.3		1,950.9	16.4		1,676.4
Other governmental contributions	17.4	(89.4)		163.9	310.1		40.0
Net investment income (loss)	5,597.1	282.1		1,464.7	(60.6)		3,713.1
Miscellaneous income	1.4	73.6		0.8	1.0		0.8
<b>Total additions</b>	<u>8,589.0</u>	<u>99.9</u>		<u>4,297.6</u>	<u>(27.6)</u>		<u>5,933.1</u>
<b>Deductions</b>							
Pension benefits	4,082.2	3.6		3,942.0	11.8		3,525.0
Health care benefits	785.9	(13.6)		910.0	39.9		650.7
Refunds and transfers to other systems	34.3	(6.3)		36.7	7.8		34.0
Uncollectible receivables	37.6	100.0					
Administrative and other expenses	178.8	30.8		136.7	70.0		80.4
<b>Total deductions</b>	<u>5,118.8</u>	<u>1.9</u>		<u>5,025.4</u>	<u>17.1</u>		<u>4,290.1</u>
<b>Net increase (decrease)</b>	3,470.1	576.8		(727.8)	(144.3)		1,643.1
<b>Net Assets - Beginning of Year</b>	<u>36,127.0</u>	<u>(2.0)</u>		<u>36,854.8</u>	<u>4.7</u>		<u>35,211.7</u>
<b>Net Assets - End of Year</b>	<u>\$ 39,597.1</u>	<u>9.6 %</u>	\$	<u>\$ 36,127.0</u>	<u>(2.0) %</u>	\$	<u>\$ 36,854.8</u>

# ***FINANCIAL SECTION***

## **Management's Discussion and Analysis (continued)**

### **RETIREMENT SYSTEM AS A WHOLE**

The System's combined net assets experienced an increase in 2012, after an increase in 2011 and a decrease in 2010. The System's rate of return for the Pension Plan increased an overall 6.9% from a 6.6% return in fiscal year 2011 to a 13.5% return during fiscal year 2012. The system's rate of return for the OPEB Plan in 2012 was 13.3%. 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.

# ***FINANCIAL SECTION***

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# FINANCIAL SECTION

## Statements of Pension Plan and Other Postemployment Benefit Plan Net Assets

As of September 30, 2012 and 2011

	September 30, 2012			September 30, 2011		
	Pension Plan	OPEB Plan	Total	Pension Plan	OPEB Plan	Total
<b>Assets:</b>						
Equity in common cash	\$ 39,252,333	\$ 113,722,180	\$ 152,974,513	\$ 115,573,063	\$ 5,555,457	\$ 121,128,520
Receivables:						
Amounts due from member	903,874		903,874	524,868		524,868
Amounts due from employer	128,240,465	49,706,519	177,946,984	99,181,151	28,695,072	127,876,223
Amounts due from federal agencies					62,646,622	62,646,622
Amounts due from other		19,264,734	19,264,734			-
Amounts due from employer long term	125,702,272	1,088,442	126,790,714	149,912,192		149,912,192
Amounts due from other long term		23,357,880	23,357,880			
Interest and dividends	5,896,319	230,903	6,127,222	6,009,433	235,353	6,244,786
Total receivables	260,742,930	93,648,478	354,391,408	255,627,644	91,577,047	347,204,691
Investments:						
Short term investment pools	1,747,923,377	588,217,984	2,336,141,361	1,246,540,091	354,629,547	1,601,169,638
Fixed income pools	5,068,036,240	198,484,092	5,266,520,332	5,411,702,431	211,943,404	5,623,645,835
Domestic equity pools	10,414,415,293	407,833,344	10,822,248,637	10,173,927,306	398,450,731	10,572,378,037
Real estate and infrastructure pools	3,963,596,567	148,677,879	4,112,274,446	3,716,827,115	145,565,467	3,862,392,582
Alternative investment pools	8,261,100,965	323,536,979	8,584,637,944	8,129,287,277	318,374,641	8,447,661,918
International equity pools	5,391,998,639	185,608,292	5,577,606,931	4,421,424,526	173,160,254	4,594,584,780
Absolute return pools	3,423,827,194	134,090,444	3,557,917,638	2,245,174,519	87,929,803	2,333,104,322
Securities lending collateral	2,928,820,142	114,694,723	3,043,514,865	4,083,718,870	159,934,381	4,243,653,251
Total investments	41,199,718,417	2,101,143,737	43,300,862,154	39,428,602,135	1,849,988,228	41,278,590,363
<b>Total assets</b>	<b>41,499,713,680</b>	<b>2,308,514,395</b>	<b>43,808,228,075</b>	<b>39,799,802,842</b>	<b>1,947,120,732</b>	<b>41,746,923,574</b>
<b>Liabilities:</b>						
Warrants outstanding	3,517,038	1,540	3,518,578	4,215,803	165,107	4,380,910
Deferred revenue	2,497,383		2,497,383			
Accounts payable and other accrued liabilities	20,021,672	264,049,079	284,070,751	32,397,230	295,352,811	327,750,041
Obligations under securities lending	3,773,265,626	147,763,821	3,921,029,447	5,088,536,414	199,286,961	5,287,823,375
<b>Total liabilities</b>	<b>3,799,301,719</b>	<b>411,814,440</b>	<b>4,211,116,159</b>	<b>5,125,149,447</b>	<b>494,804,879</b>	<b>5,619,954,326</b>
<b>Net Assets Held in Trust for Pension and OPEB Benefits</b>	<b>\$ 37,700,411,961</b>	<b>\$ 1,896,699,955</b>	<b>\$ 39,597,111,916</b>	<b>\$ 34,674,653,395</b>	<b>\$ 1,452,315,853</b>	<b>\$ 36,126,969,248</b>

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

## Statements of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets

For Fiscal Years Ended September 30, 2012 and 2011

	September 30, 2012			September 30, 2011		
	Pension Plan	OPEB Plan	Total	Pension Plan	OPEB Plan	Total
<b>Additions:</b>						
Contributions:						
Member contributions	\$ 335,470,879	\$ 387,566,872	\$ 723,037,751	\$ 332,209,134	\$ 384,978,107	\$ 717,187,241
Employer contributions:						
Colleges, universities and federal	124,407,026	78,768,769	203,175,795	95,860,639	82,554,711	178,415,350
School districts and other	1,330,031,881	716,826,599	2,046,858,480	1,060,200,264	712,284,900	1,772,485,164
Other governmental contributions		17,406,468	17,406,468		163,948,595	163,948,595
<b>Total contributions</b>	<b>1,789,909,786</b>	<b>1,200,568,708</b>	<b>2,990,478,494</b>	<b>1,488,270,037</b>	<b>1,343,766,313</b>	<b>2,832,036,350</b>
Investment income (loss):						
Net appreciation (depreciation) in fair value of investments	4,721,486,310	183,273,891	4,904,760,201	670,314,955	26,523,048	696,838,003
Interest, dividends, and other	726,712,472	29,355,315	756,067,787	730,519,918	109,203,369	839,723,287
Investment expenses:						
Real estate operating expenses	(1,424,410)	(63,550)	(1,487,960)	(1,962,422)	(77,649)	(2,040,071)
Other investment expenses	(132,227,968)	(4,973,696)	(137,201,664)	(122,942,825)	(4,864,606)	(127,807,431)
Securities lending activities:						
Securities lending income	82,644,859	3,467,680	86,112,539	71,619,453	2,833,841	74,453,294
Securities lending expenses	(10,694,376)	(417,207)	(11,111,583)	(15,805,411)	(625,389)	(16,430,800)
<b>Net investment income (loss)</b>	<b>5,386,496,887</b>	<b>210,642,433</b>	<b>5,597,139,320</b>	<b>1,331,743,668</b>	<b>132,992,614</b>	<b>1,464,736,282</b>
Transfers from other systems						
Miscellaneous income	579,168	790,068	1,369,236	4,583	84,753	4,583
				703,962		788,715
<b>Total additions</b>	<b>7,176,985,841</b>	<b>1,412,001,209</b>	<b>8,588,987,050</b>	<b>2,820,722,250</b>	<b>1,476,843,680</b>	<b>4,297,565,930</b>
<b>Deductions:</b>						
Benefits and refunds paid to plan members and beneficiaries:						
Retirement benefits	4,082,242,506		4,082,242,506	3,942,027,101		3,942,027,101
Health benefits		690,268,502	690,268,502		815,311,950	815,311,950
Dental/vision benefits		95,627,854	95,627,854		94,711,184	94,711,184
Refunds of contributions	31,865,139	2,461,527	34,326,666	36,591,037	39,133	36,630,170
Transfers to other systems				2,169		2,169
Uncollectible receivable write off		37,550,850	37,550,850			
Administrative and other expenses	37,119,630	141,708,374	178,828,004	22,926,393	113,790,777	136,717,170
<b>Total deductions</b>	<b>4,151,227,275</b>	<b>967,617,107</b>	<b>5,118,844,382</b>	<b>4,001,546,700</b>	<b>1,023,853,044</b>	<b>5,025,399,744</b>
<b>Net Increase (Decrease)</b>	<b>3,025,758,566</b>	<b>444,384,102</b>	<b>3,470,142,668</b>	<b>(1,180,824,450)</b>	<b>452,990,636</b>	<b>(727,833,814)</b>
<b>Net Assets Held in Trust for Pension and OPEB Benefits:</b>						
<b>Beginning of Year</b>	<b>34,674,653,395</b>	<b>1,452,315,853</b>	<b>36,126,969,248</b>	<b>35,855,477,845</b>	<b>999,325,217</b>	<b>36,854,803,062</b>
<b>End of Year</b>	<b>\$ 37,700,411,961</b>	<b>\$ 1,896,699,955</b>	<b>\$ 39,597,111,916</b>	<b>\$ 34,674,653,395</b>	<b>\$ 1,452,315,853</b>	<b>\$ 36,126,969,248</b>

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

# FINANCIAL SECTION

## Notes to Basic Financial Statements September 30, 2012 and 2011

### 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 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, dental and vision coverage under the Michigan Public School Employees' Retirement Act. There are 711 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 who serves as Executive Secretary to the System's Board, with whom the general oversight of the System resides. The State Treasurer serves as the investment officer and custodian for the System.

#### MEMBERSHIP

At September 30, 2012 and 2011, the System's membership consisted of the following:

Retirees and beneficiaries currently receiving benefits:		
Regular benefits	<u>174,651</u>	<u>170,961</u>
Survivor benefits	16,036	15,654
Disability benefits	<u>5,974</u>	<u>5,820</u>
<b>Total</b>	<u>196,661</u>	<u>192,435</u>
Current Employees:		
Vested	113,519	114,680
Non-vested	<u>110,250</u>	<u>121,980</u>
<b>Total</b>	<u>223,769</u>	<u>236,660</u>
Inactive employees entitled to benefits and not yet receiving them	<u>16,167</u>	<u>15,090</u>
<b>Total all members</b>	<u><u>436,597</u></u>	<u><u>444,185</u></u>

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

<b>Health, Dental and Vision Plan</b>	<b>2012</b>	<b>2011</b>
Eligible participants	194,381	190,309
Participants receiving benefits:		
Health	145,874	142,863
Dental/Vision	156,765	153,822

### 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 hybrid 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 (MPERS) who became a member of MPERS 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 December 1, 2012.

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
- MIP-Fixed, MIP-Graded, and MIP-Plus members: a flat 7% contribution

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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.

Employees who first work on or after September 4, 2012, choose between two retirement plans: the Pension Plus hybrid 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 to elect to opt out of the Pension Plus hybrid plan and become a qualified participant in the DC plan; if no election is made they will remain in the Pension Plus hybrid plan. If they elect to opt out of the Pension Plus hybrid plan, their participation in the DC plan will be retroactive to their date of hire.

### ***Regular Retirement***

The retirement benefit for DB and Pension Plus hybrid 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 Member Investment Plan (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:  $FAC \times \text{total years of service} \times 1.5$

Option 2:  $FAC \times 30 \text{ years of service} \times 1.5 + FAC \times \text{years of service beyond 30} \times 1.25$

Option 3:  $FAC \times \text{years of service as of transition date} \times 1.5 + FAC \times \text{years of service after transition date} \times 1.25$

Option 4:  $FAC \text{ as of transition date} \times \text{years of service as of transition date} \times 1.5$

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

1. any age with 30 or more years of credited service; or
2. age 60 with 10 or more years of credited service; or
3. 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:

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

There is no mandatory retirement age.

### ***Early Retirement***

A member may retire with an early permanently reduced pension:

1. after completing at least 15 but less than 30 years of credited service; and
2. after attaining age 55; and
3. 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.

### ***Non-Duty Disability Benefit***

A 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 two percent for each year retired; first year 100%, next year 102%, etc).

### ***Duty Disability Benefit***

A 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

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

approval, total disability benefits plus authorized outside earnings are limited to 100% of final average compensation (increased by two percent 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.

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 - 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

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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 Member Investment Plan (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. 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 an Option 2 (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 100% 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.

### *Post Retirement Adjustments*

A retiree who became a Member Investment Plan (MIP) member prior to July 1, 2010, receives an annual post-retirement non-compounded increase of three percent of the initial pension in the October following twelve months of retirement. Basic Plan members do not receive an annual post-retirement 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 post-retirement 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 post-retirement 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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### *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.

Basic Plan members make no contributions. 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 1st 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 25. 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, is currently funded on a cash disbursement basis. Beginning fiscal year 2013, it will be funded on a prefunded basis. The System has contracted to provide the comprehensive group medical, hearing, 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 health care 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 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 health care benefits of current retirees.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Dependents are eligible for health care 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:

	<u>2012</u>	<u>2011</u>
<b>Health, Dental and Vision Plan</b>		
Eligible participants	194,381	190,309
Participants receiving benefits:		
Health	145,874	142,863
Dental/Vision	156,765	153,822
Expenses for the year	\$ 967,617,107	\$ 1,023,853,044
Employer payroll contribution rate	8.50%	8.50%

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 December 1, 2012.

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 will be deposited into their 401(k) account no later than their first pay date after February 1, 2013.

Members who did not make an election before the deadline retain the 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% contribution to retiree healthcare and will retain the 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 health care 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.

1. 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.
2. 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

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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 non-duty 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 PHF 401(k) are forfeited and the state will pay for the subsidy payments. The beneficiaries receive the member's personal contributions and related earnings in the PHF 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.

### *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, 2012, and 2011, the balance in this reserve was \$1.5 billion and \$1.5 billion, respectively.

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, 2012, and 2011, the balance in this reserve was \$17.3 million and \$6.3 million, respectively.

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, 2012, and 2011, the balance in this reserve was \$4.4 billion and \$4.3 billion, respectively.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Reserve for Employer Contributions – This reserve represents all reporting unit contributions, except payments for health benefits. Interest from the Reserve for Undistributed Investment Income reserve 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, 2012, and 2011, the balance in this reserve was (\$26.8) billion and (\$25.9) billion, respectively.

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 reserve 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, 2012, and 2011, the balance in this reserve was \$9.6 million and \$3.6 million, respectively.

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, 2012, and 2011, the balance in this reserve was \$39.8 billion and \$38.7 billion, respectively.

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. Currently, there are no participants qualified to retire under this program. At September 30, 2012, and 2011, the balance in this reserve was \$0 and \$0, respectively.

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, 2012, the balance in the subaccount was zero. At September 30, 2012, and 2011, the balance in this reserve was \$18.8 billion and \$16.1 billion, respectively.

Reserve for Health (OPEB) Benefits - This reserve represents employee and employer contributions for retirees' health, dental and vision benefits. In fiscal year 2011, this reserve includes revenue from the federal government for early retiree reinsurance program (ERRP). Beginning January 1, 2012, the System now participates in a Medicare Part D Employer Group Waiver Plan (EGWP) and receives funding as an offset against claims. The System continues to participate in Retiree Drug Subsidy (RDS) for a small segment of its population, and thus this reserve also includes revenue from the federal government for RDS pursuant to the provisions of Medicare Part D. In 2012, the write off of an uncollectible receivable for \$37.6 million was recorded due to ERRP funds being currently unavailable. In addition to member contributions representing 3% of the member's compensation, the required employer contribution is based on pay-as-you-go funding. It 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 thirty years. However, the actual contributions have been less than the annual required contributions (the ARC). Interest is allocated based on the beginning balance of the reserve. Health, dental and vision benefits are paid from this reserve. The System pays 90% of the monthly premium, membership, or subscription fee for dental, vision and hearing benefits. At September 30, 2012, and 2011, the balance in this reserve was \$1.9 billion and \$1.5 billion, respectively.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### *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.

### *Fair Value of Investments*

Plan investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Corporate bonds not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. Real estate debt is valued on the basis of future principal and interest payments, and is discounted at prevailing interest rates for similar instruments. The fair value of real estate investments is based on independent appraisals. Securities purchased with cash collateral under securities lending activities are recorded at estimated fair value. Other investments not having an established market are recorded at estimated fair value.

### *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 alternative 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 on-going 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 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 Post-employment Benefit Plan Net Assets. 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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### *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.

	<u>2012</u>	<u>2011</u>
Building Rentals	\$ 748,210	\$ 898,134
Technological Support	4,867,260	7,683,860
Attorney General	336,584	333,757
Investment Services	10,823,951	9,672,298
Personnel Services	10,124,617	9,281,670

Cash - At September 30, 2012, and 2011, the System had \$153.0 million and \$121.1 million, respectively, 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 from these activities amounted to \$36.7 thousand and \$51.0 thousand for the years ended September 30, 2012, and 2011, respectively.

## 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 members 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 will be amortized over a 24 year period for the 2012 fiscal year and is amortized over a 25 year period for the 2011 fiscal year.

Actual employer contributions for retirement benefits were \$1,454.4 million and \$1,156.1 million for fiscal years 2012 and 2011, respectively, representing 12.6% of annual covered payroll for the year ended September 30, 2011. The fiscal year 2012 annual covered payroll is not yet available. Required employer contributions based on previous year actuarial valuations for pensions included:

1. \$370.7 million and \$364.8 million for fiscal years 2012 and 2011, respectively, for the normal cost of pensions representing 4.0% and 4.1% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.
2. \$1,628.1 million and \$1,306.3 million for fiscal years 2012 and 2011, respectively, for amortization of unfunded actuarial accrued liability representing 17.8% and 14.8% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.

Actual employer contributions for other postemployment benefits (OPEB) were \$795.6 million and \$794.8 million for fiscal years 2012 and 2011, respectively, representing 8.7% of annual covered payroll for the year ended September 30, 2011. The fiscal year 2012 annual covered payroll is not yet available. Required employer contributions based on previous year actuarial valuations for OPEB included:

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

1. \$920.6 million and \$999.4 million for fiscal years 2012 and 2011, respectively, for the normal cost of OPEB representing 10.1% and 11.3% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.
2. \$1,118.2 million and \$1,150.1 million for fiscal years 2012 and 2011, respectively, for amortization of unfunded actuarial accrued liability representing 12.2% and 13.0% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.

The System is required to reconcile with actuarial requirements annually. Any funding excess or deficiency for pension benefits is smoothed over 5 years. One-fifth (20%) of the funding excess or deficiency is included in the subsequent year's contribution, and is not recognized as a payable or receivable in the accounting records.

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 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, 2012, and 2011, there were 23,394 and 27,485 agreements, respectively. The agreements were discounted using the assumed actuarial rate of return of 8% for September 30, 2012, and 2011. The average remaining length of a contract was approximately 6.5 years and 6.9 years for 2012 and 2011. The short-term receivable was \$41.0 million and the discounted long-term receivable was \$124.0 million at September 30, 2012. At September 30, 2011, the short-term receivable was \$47.5 million and the discounted long-term receivable was \$150.8 million.

### *Funded Status*

Participating employers are required to contribute at an actuarially determined rate for both pension benefits and OPEB. For fiscal year 2011, the actuarial accrued liability (AAL) for pension benefits was \$63.4 billion, and the actuarial value of assets was \$41.0 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$22.4 billion and a funded ratio of 64.7%. The covered payroll (annual payroll of active employees covered by the plan) was \$9.2 billion, and the ratio of the UAAL to the covered payroll was 244.5%.

For fiscal year 2011, the actuarial accrued liability (AAL) for OPEB benefits was \$27.0 billion, and the actuarial value of assets was \$1,155.9 million, resulting in an unfunded actuarial accrued liability (UAAL) of \$25.9 billion and a funded ratio of 4.3%. The covered payroll (annual payroll of active employees covered by the plan) was \$9.2 billion, and the ratio of the UAAL to the covered payroll was 282.8%.

### *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 both pension and OPEB plans is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedules of employer contributions 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. 25 for pension contributions and GASB Statement No. 43 for OPEB contributions.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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.

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	9/30/2011
Actuarial Cost Method	Entry Age, Normal
Amortization Method - Pension	Level Percent of Payroll, Closed
Amortization Method - OPEB	Level Percent of Payroll, Closed
Remaining Amortization Period - Pension	25 years*
Remaining Amortization Period - OPEB	25 years
Asset Valuation Method - Pension	5-Year Smoothed Market
Asset Valuation Method - OPEB	Market
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	4.0%
Projected Salary Increases	3.5 - 15.9%
Cost-of-Living Pension Adjustments	3% Annual Non-Compounded for MIP Members
Healthcare Cost Trend Rate	8.5% Year 1 graded to 3.5% Year 12
Other Assumptions OPEB only:	
Opt Out Assumption	21% of eligible participants hired before 7/1/2008 and 30% of those hired after 6/30/2008 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

\*Based on the provisions of GASB Statement Nos. 25, 43 and 45 when the actuarial accrued liability for a defined benefit pension plan is underfunded or overfunded, the difference should be amortized over a period not to exceed thirty years for the fiscal periods beginning on or after June 15, 2006.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### NOTE 4 - 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 alternative 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.

Under Public Act 314 of 1965, as amended, the State Treasurer may invest up to 5% of the System's assets in small businesses having more than one-half of assets or employees in Michigan as described in section 20(a) of the Act and up to 20% of the System's assets in investments not otherwise qualified under the Act as described in section 20(d).

Alternative investments include limited partnerships and distributions from these partnerships in the form of bonds, preferred stock, common stock and direct investments.

#### *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 Statements of Pension Plan and Other Postemployment Benefit Plan Net Assets as of September 30, 2012, and 2011, in their respective investment pools market value. Derivative net appreciation and depreciation are reported on the Statements of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets for fiscal years ended September 30, 2012, and 2011, under "Investment income gain / (loss)", in "Net appreciation (depreciation) in fair value of investments". Swap interest, payments, and dividends are reported under "Investment Income", in "Interest, Dividends, and other".

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Derivative Investment Table as of September 30, 2012 (In Millions):

<b>Investment and Investment Type</b>	<b>Percentage of Market Value</b>	<b>Notational Value</b>	<b>Investments At Fair Value</b>	<b>Net Appreciation (Depreciation) in Fair Value</b>	<b>Investment Income FY2012</b>	<b>Fair Value Subject to Credit Risk</b>
Structured Notes						
Absolute Return Investments	0.7%	285.1	291.0	16.1	-	291.0
U.S. Treasury Bond Future Contracts						
Fixed Income Investments	0.0%	12.7	-	-	-	-
Option Contracts						
Equity Investments	0.0%	14.6	(0.2)	2.6	-	-
Swap Agreements						
International Equity Investments	1.8%	833.2	729.4	182.8	1.7	57.8
Swap Agreements						
Equity Investments	0.2%	825.4	86.6	44.5	(1.4)	27.4
Swap Agreements						
Currency Forward						
Opportunistic Investments	0.0%	4.1	(0.2)	0.2	-	-

Derivative Investment Table as of September 30, 2011 (In Millions) :

<b>Investment and Investment Type</b>	<b>Percentage of Market Value</b>	<b>Notational Value</b>	<b>Investments At Fair Value</b>	<b>Net Appreciation (Depreciation) in Fair Value</b>	<b>Investment Income FY2011</b>	<b>Fair Value Subject to Credit Risk</b>
Structured Notes						
Absolute Return Investments	0.7%	271.3	262.5	(12.9)	-	262.5
U.S. Treasury Bond Future Contracts						
Fixed Income Investments	0.0%	9.0	-	0.2	-	-
Option Contracts						
Absolute Return Investments	0.0%	0.7	-	0.1	-	-
Swap Agreements						
International Equity Investments	4.2%	1,423.5	1,556.6	(129.2)	14.7	178.8
Swap Agreements						
Equity Investments	0.0%	638.6	17.4	(22.4)	0.1	18.5
Swap Agreements						
Currency Forward	0.0%	8.0	0.3	0.3	-	0.3
Opportunistic Investments						

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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 twenty-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 2012 to June 2013. The U.S. Domestic LIBOR based floating rate notes and other investments earning short-term interest 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 short-term investments. The book value represents the cost of the notes and short-term investments. The current value represents the current value of the notes and short-term 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 multi-year basis.

In May 2011, domestic equity swaps were added to the trust funds' portfolio for the Domestic Equity Pools. The swap agreements provide that the System will pay interest 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 swaps value is a combination of the value of the swap agreements and the value of short-term and equity investments. Book value represents the cost of short-term and equity investments. Current value represents the fair value of the short-term and equity investments and the change in the value of the underlying indices from the inception of the swap agreements. Domestic equity swaps' appreciation/(depreciation) primarily reflects the net changes in the domestic indices and increases in short-term and equity 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.

To get enhanced passive exposure to the Dow Jones UBS Commodity Total Return Index, the State Treasurer purchased structured notes from investment grade counterparties for the Absolute Return Pools. These notes are fully collateralized and pay cash rates on the underlying collateral, as well as, providing the enhanced index return. Similar to a swap agreement with prices changing with the underlying index fluctuations, the notes differ due to their daily put option which allows the structure to end and settle before its final maturity in July 2019.

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 Absolute Return 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*

State statutes allow the System to participate in securities lending transactions, and the System has, by way of an Agreement, authorized Credit Suisse, the agent bank, to lend the System's securities to broker-dealers and banks pursuant to a form of loan agreement.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

During the fiscal years, the agent bank lent, at the direction of the State Treasurer, the System's securities and received cash (United States) as collateral. The types of securities lent were equity, and fixed income, which includes government and corporate bonds and notes. Borrowers were required to deliver collateral for each loan equal to (i) in case of loaned securities denominated in United States dollars or whose primary trading market was located in the United States or sovereign debt issued by foreign governments, 102% of the fair value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States, 105% of the fair value of the loaned securities.

The agent bank agreed to indemnify the System by purchasing replacement securities, or returning cash collateral in the event borrower failed to return the loaned security or pay distributions thereon, due to the borrower's insolvency.

Under Master Securities Lending Agreements between the System and each borrower, the System and the borrowers have the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested in assets held in a collateral account dedicated to the System. As of September 30, 2012 and 2011, such assets had an average weighted maturity to next reset of 3.8 years and 3.3 years respectively and an average weighted maturity of 13.1 years and 10.8 years respectively. Because the loans are terminable at will, their duration did not generally match the duration of the investments made with cash collateral. On September 30, 2012 and 2011, the System had no credit risk exposure to borrowers. The cash received for securities on loan for the System as of September 30, 2012 and 2011, was \$3,921,029,447 and \$5,287,823,375 respectively. The fair market value of assets held in the dedicated collateral account at the custodian for the System as of September 30, 2012 and 2011, was \$3,043,514,865 and \$4,243,653,251 respectively. The carrying amount, which is the fair market value, of securities on loan for the System as of September 30, 2012 and 2011, was \$3,826,037,942 and \$5,164,407,340 respectively.

Gross income, including capital gains and losses, from security lending for fiscal years ended September 30, 2012 and 2011 with Credit Suisse was \$86,112,539 and \$74,453,294 respectively. Expenses associated with this income were the borrower's rebate of \$3,269,611 and \$2,958,394 and fees paid to the agent bank of \$7,841,972 and \$13,472,406 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 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 the two major rating services Standard and Poor's Corporation (S&P) and Moody's Investor Service (Moody's), respectively. 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 – These investments must be investment grade or better at the time of purchase unless specific requirements are met as defined in Public Act 314 of 1965, as amended, and the State Treasurer's investment policy. Law defines investment grade as investments in the top four major grades, rated by two national rating services, S&P (AAA, AA, A, BBB) and Moody's (Aaa, Aa, A, Baa). At September 30, 2012 and 2011, the System was in compliance with the policy in all material aspects.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### Rated Debt Investments (in thousands) As of September 30, 2012, and 2011

Investment Type	2012				2011			
	Fair Value	S&P	Fair Value	Moody's	Fair Value	S&P	Fair Value	Moody's
<b>Short Term</b>	\$ 2,329,953	A-1	\$ 2,329,953	P-1	\$ 2,051,212	A-1	\$ 2,010,553	P-1
	-	A-2	-	P-2	-	A-2	40,659	P-2
<b>Government Securities</b>								
U.S. Agencies - Sponsored	-	AAA	527,828	Aaa	-	AAA	405,873	Aaa
	527,828	AA	-	Aa	405,873	AA	-	Aa
<b>Corporate Bonds &amp; Notes</b>								
	27,342	AAA	50,133	Aaa	69,053	AAA	93,236	Aaa
	573,040	AA	374,535	Aa	679,806	AA	547,187	Aa
	1,721,408	A	1,789,382	A	1,951,911	A	2,022,401	A
	1,093,657	BBB	1,171,588	Baa	1,017,209	BBB	983,243	Baa
	136,119	BB	99,794	Ba	113,936	BB	98,816	Ba
	35,359	B	38,399	B	15,817	B	21,388	B
	8,715	CCC	7,066	Caa	8,314	CCC	7,188	Caa
	-	CC	519	Ca	187	CC	835	Ca
	-	C	1	C	-	C	10	C
	30	D	-	D	317	D	-	D
	347,276	NR	411,529	NR	373,645	NR	455,891	NR
<b>International *</b>								
	321,562	AA	246,006	Aa	639,684	AA	851,963	Aa
	144,945	A	345,216	A	512,512	A	345,452	A
	-	BBB	31,360	Baa	-	BBB	143,817	Baa
	-	BB	-	Ba	74,124	BB	-	Ba
	156,075	NR	-	NR	267,054	NR	152,142	NR
<b>Securities Lending Collateral</b>								
	510,462	A-1	510,462	P-1	408,335	A-1	408,335	P-1
	10,754	AAA	282,784	Aaa	792,583	AAA	768,748	Aaa
	586,308	AA	53,590	Aa	487,841	AA	1,888,618	Aa
	53,590	A	314,278	A	281,904	A	258,453	A
	-	BBB	1,732	Baa	1,518,602	BBB	141,255	Baa
	20,383	BB	1,635,891	Ba	-	BB	23,856	Ba
	1,732	B	-	B	11,152	B	11,152	B
	230,362	CCC	175,739	Caa	220,274	CCC	171,161	Caa
	-	CC	54,623	Ca	-	CC	49,113	Ca
	1,615,508	NR	-	NR	508,100	NR	508,100	NR
<b>Mutual Funds</b>								
	-	A	-	A	4,229	A	-	A
	-	NR	-	NR	-	NR	4,229	NR
<b>Total</b>	<u>\$ 10,452,408</u>		<u>\$ 10,452,408</u>		<u>\$ 12,413,674</u>		<u>\$ 12,413,674</u>	

NR - not rated

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

# FINANCIAL SECTION

## 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, 2012. As of September 30, 2012 and September 30, 2011, 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 in 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.

At September 30, 2012 and 2011, there were no investments in any single issuer that accounted for more than 5% of the System's assets nor were there any investments totaling more than 5% of the obligations of any one issuer, other than U.S. Government Securities as described above.

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, 2012 and 2011, the fair value of the System's prime commercial paper was \$2,330.0 million and \$2,051.2 million with the weighted average maturity of 14 days and 13 days, respectively.

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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

**Debt Securities**  
(in thousands)  
As of September 30, 2012, and 2011

	2012		2011	
	Fair Value	Effective Duration in Years	Fair Value	Effective Duration in Years
<b>Government</b>				
U. S. Treasury	\$ 279,126	3.9	\$ 117,506	8.3
U. S. Agencies - Backed	664,962	3.2	932,026	3.9
U. S. Agencies - Sponsored	527,828	3.9	405,873	3.0
<b>Corporate</b>	3,942,945	3.9	4,230,195	4.3
<b>International*</b>				
Corporate	622,582	0.3	1,493,374	0.2
<b>Mutual Funds</b>	-		4,229	4.4
<b>Total</b>	\$ 6,037,443		\$ 7,183,203	

Debt securities are exclusive of securities lending collateral.

\*International contains 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. These investments are limited to 20% of the total assets of the System with an additional limit of 5% of the outstanding foreign securities of any single issuer. No investment is allowed in a country that has been identified by the United States State Department as engaging in or sponsoring terrorism. These limits are set forth in Public Act 314 of 1965, as amended. The types of foreign investments include equities, fixed income, mutual funds, real estate, and limited partnerships. At September 30, 2012, and 2011, the total amount of foreign investment subject to foreign currency risk was \$6,624.5 million and \$4,620.0 million which amounted to 16.4% and 12.4% of total investments (exclusive of securities lending collateral) of the System, respectively.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

**Foreign Currency Risk**  
(in thousands)  
As of September 30, 2012

<u>Region</u>	<u>Country</u>	<u>Currency</u>	<u>Alt. Invest.</u> <u>Market Value</u> <u>in U.S. \$</u>	<u>Equity</u> <u>Market Value</u> <u>in U.S. \$</u>	<u>Real Estate</u> <u>Market Value</u> <u>in U.S. \$</u>	<u>International</u>	
						<u>Equities</u> <u>Market Value</u> <u>in U.S. \$</u>	<u>Derivatives</u> <u>Market Value</u> <u>in U.S. \$*</u>
<b><u>AMERICA</u></b>							
	Brazil	Real		\$ 1,833			
	Canada	Dollar					\$ 407
	Mexico	Peso		2,550			
<b><u>EUROPE</u></b>							
	European Union	Euro	\$ 906,953	9,547		\$ 27,271	13,349
	Switzerland	Franc		58,625		7,160	3,036
	Sweden	Krona				7,960	328
	Denmark	Krone		2,322		1,889	
	Norway	Krone					
	U.K.	Sterling	10,543	20,706		44,667	13,039
<b><u>PACIFIC</u></b>							
	Australia	Dollar					7,878
	China	Renminbi		909			
	Hong Kong	Dollar				3,358	3,311
	Japan	Yen				259	650
	New Zealand	Dollar					121
	Singapore	Dollar				8,018	3,347
	South Korea	Won				6,940	5,699
<b><u>MIDDLE EAST</u></b>							
	Israel	Shekel		44,843			
<b><u>AFRICA</u></b>							
	South Africa	Rand		192			
<b><u>VARIOUS</u></b>							
					\$ 816,946	4,589,886	
	Total		\$ 917,496	\$ 141,527	\$ 816,946	\$ 4,697,408	\$ 51,165

\*International derivatives' market value exposure to foreign currency risk is the net amount of unrealized gains and unrealized losses. Maturity dates on these investments range from October 2012 through July 2013 with an average maturity of .4 years.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Foreign Currency Risk  
(in thousands)  
As of September 30, 2011

Region	Country	Currency	International				
			Alt. Invest. Market Value in U.S. \$	Equity Market Value in U.S. \$	Real Estate Market Value in U.S. \$	Equities Market Value in U.S. \$	Derivatives Market Value in U.S. \$*
<b>AMERICA</b>							
	Canada	Dollar					\$ 4,571
	Mexico	Peso		\$ 1,534			
<b>EUROPE</b>							
	European Union	Euro	\$ 898,489	5,968		\$ 7,792	(7,305)
	Switzerland	Franc		68,889			14,397
	Sweden	Krona				6,476	11,178
	Denmark	Krone				1,191	916
	Norway	Krone					3,769
	U.K.	Sterling	11,638	74,674		2,551	16,866
<b>PACIFIC</b>							
	Australia	Dollar					13,851
	China	Renminbi		552			
	Hong Kong	Dollar		6,465			110
	Japan	Yen	667			293	30,006
	New Zealand	Dollar					2,773
	Singapore	Dollar		7,461		7,316	(1,304)
	South Korea	Won				5,466	6,018
<b>MIDDLE EAST</b>							
	Israel	Shekel		14,089			
<b>AFRICA</b>							
	South Africa	Rand		247			
<b>VARIOUS</b>							
	Total		\$ 910,794	\$ 179,879	\$ 699,629	\$ 2,733,899	\$ 95,846

\* International derivatives' market value exposure to foreign currency risk is the net amount of unrealized gains and unrealized losses. Maturity dates on these investments range from October 2011 through July 2012 with an average maturity of .3 years.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### NOTE 5 - ACCOUNTING CHANGES

During fiscal year 2012, the System implemented GASB Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions*. The objective of this Statement is to clarify whether an effective hedging relationship continues after the replacement of a swap counterparty or a swap counterparty's credit support provider.

This statement applies to derivatives held for hedging purposes, but does not apply to derivatives held as investments. As a result of the implementation, no changes were made to the System since the derivative instruments were held and accounted for as investments.

### NOTE 6 - 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*

Three cases have been consolidated and are pending in the Michigan Supreme Court (MSC). Plaintiffs are contesting the 3% contribution required by MCL 38.1343e to be made by members of the Michigan Public School Employees' Retirement System. Plaintiffs allege a violation of Defendants' contractual obligations gleaned from Const 1963, art 9, sec 24 and impairment of their contracts as prohibited under both the Michigan and U.S. Constitutions, art 2, sec 10. The trial court ruled in Plaintiffs' favor and entered a preliminary injunction requiring that the Plaintiffs' contributions not be used and be placed in an interest bearing account. The trial court ruling was affirmed by the Michigan Court of Appeals (COA) and an application for leave to the MSC remains pending. Contributions totaled \$565.8 million at September 30, 2012.

### NOTE 7 – SUBSEQUENT EVENTS

The Michigan Department of Treasury - Bureau of Investments reported a cumulative probable loss of \$20.0 million in fiscal year 2012 related to the guarantee of bonds for a Michigan motion picture studio. The System's proportionate share of this loss is 78.1% or \$15,594,878 and is reported as an administrative and other expense on the Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets for the fiscal year ended September 30, 2012. Subsequent to September 30, 2012, the System purchased its proportionate share of the bonds in order to eliminate its future interest obligations on these bonds.

# FINANCIAL SECTION

## Required Supplementary Information

### Schedules of Funding Progress

Expressing the net assets available for benefits as a percentage of the actuarial accrued liability provides one indication of the System's funding status. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the System. Trends in unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the underfunded 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 System.

#### 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)
2002	\$ 38,382	\$ 41,957	\$ 3,575	91.5 %	\$ 9,707	36.8 %
2003	38,726	44,769	6,043	86.5	10,044	60.2
2004	<sup>1</sup> 38,784	46,317	7,533	83.7	10,407	72.4
2005	38,211	48,206	9,995	79.3	10,206	97.9
2006	39,893	49,136	9,243	81.2	9,806	94.3
2006	<sup>2</sup> 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	<sup>3</sup> 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	<sup>1</sup> 43,294	59,877	16,583	72.3	8,845	187.5
2010	<sup>3</sup> 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

<sup>1</sup> Revised actuarial assumptions

<sup>2</sup> Revised asset valuation method

<sup>3</sup> Revised benefit provisions

#### 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

## Required Supplementary Information (continued)

### Schedules of Employer and Other Contributions

#### Pension Benefits

Fiscal Year Ended Sept. 30	Annual Required Contribution (ARC) <sup>1</sup>	Actual Contribution <sup>2</sup>	Percentage Contributed
2003	\$ 812,891,416	\$ 697,906,265	85.9 %
2004	978,035,492	697,647,338	71.3
2005	1,023,336,739	774,277,778	75.7
2006	1,161,843,239	995,932,425	85.7
2007	919,560,821	835,366,382	90.8
2008	904,409,331	999,374,879	110.5
2009	989,150,149	1,000,375,355	101.1
2010	1,182,164,061	1,001,251,673	84.7
2011	1,418,354,753	1,156,060,903	81.5
2012	1,744,511,713	1,454,438,907	83.4

<sup>1</sup> 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.

<sup>2</sup> 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 years 2004, 2005, and 2006, transfers from the stabilization sub-account in the amount of \$143.0 million, \$187.4 million, and \$54.2 million, respectively, were made to intentionally stabilize the contribution rates. The sub-account has no balance or activity since 2006.

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

#### Other Postemployment Benefits

Fiscal Year Ended Sept. 30	Annual Required Contribution (ARC)	Actual Contributions	Other Governmental Contributions	Percentage Contributed
2007	\$ 2,497,157,802	\$ 671,680,400	\$ 63,054	26.9 %
2008	2,425,676,758	649,571,071	102,115	26.8
2009	2,501,979,818	705,464,357	55,243	28.2
2010	2,363,039,053	675,117,153	39,979,715	30.3
2011	2,149,488,837	794,839,611	118,255,275	42.5
2012	2,038,873,189	795,595,368	17,406,468	39.9

# **FINANCIAL SECTION**

## **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. Because this is the sixth year the System is reporting other postemployment benefits in accordance with GASB Statement No. 43, only six years of historical trend information is provided.

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

# FINANCIAL SECTION

## Supporting Schedules

### Comparative Summary Schedule of Pension Plan Administrative and Other Expenses For Fiscal Years Ended September 30, 2012, and 2011

	2012	2011
<b>Personnel Services:</b>		
Staff Salaries	\$ 6,013,670	\$ 5,936,898
Retirement and Social Security	2,719,822	1,977,027
Other Fringe Benefits	1,391,126	1,367,745
<b>Total</b>	10,124,617	9,281,670
<b>Professional Services:</b>		
Accounting	992,415	1,339,485
Actuarial	389,527	241,792
Attorney General	336,584	333,757
Audit	64,361	64,361
Consulting	322,824	513,653
Medical	362,794	377,922
<b>Total</b>	2,468,506	2,870,970
<b>Building and Equipment:</b>		
Building Rentals	748,210	898,134
Equipment Purchase, Maintenance, and Rentals	53,320	52,910
<b>Total</b>	801,529	951,044
<b>Miscellaneous:</b>		
Bond Guarantee and Other	15,959,878	
Travel and Board Meetings	20,008	24,369
Office Supplies	53,315	36,662
Postage, Telephone, and Other	2,365,414	1,610,827
Printing	459,103	466,991
Technological Support	4,867,260	7,683,860
<b>Total</b>	23,724,978	9,822,709
<b>Total Administrative and Other Expenses</b>	\$ 37,119,630	\$ 22,926,393

### Comparative Summary Schedule of OPEB Plan Administrative and Other Expenses For Fiscal Years Ended September 30, 2012, and 2011

	2012	2011
Health Fees	\$ 136,456,822	\$ 108,753,107
Dental Fees	5,251,553	5,037,670
<b>Total Administrative and Other Expenses</b>	\$ 141,708,374	\$ 113,790,777

# FINANCIAL SECTION

## Supporting Schedules (continued)

### Schedule of Investment Expenses For Fiscal Years Ended September 30, 2012, and 2011

	<u>2012</u>	<u>2011</u>
Real Estate Operating Expenses	\$ 1,487,960	\$ 2,040,071
Securities Lending Expenses	11,111,583	16,430,800
Other Investment Expenses <sup>1</sup>		
ORS-Investment Expenses <sup>2</sup>	10,823,951	9,672,298
Custody Fees	658,732	678,752
Management Fees	123,511,461	115,573,395
Research Fees	<u>2,207,520</u>	<u>1,882,986</u>
<b>Total Investment Expenses</b>	<b><u>\$ 149,801,207</u></b>	<b><u>\$ 146,278,302</u></b>

<sup>1</sup> Refer to the Investment Section for fees paid to investment professionals

<sup>2</sup> Does not exclude Treasury Civil Service fees recorded as a pass through in the Schedule of Investment Fees - State Treasurer. As of September 30, 2012 and 2011, fees totaled \$115,913 and \$116,586, respectively.

### Schedule of Payments for Professional Services For Fiscal Years Ended September 30, 2012, and 2011

	<u>2012</u>	<u>2011</u>
Accounting	\$ 992,415	\$ 1,339,485
Actuary	389,527	241,792
Attorney General	336,584	333,757
Independent Auditors	64,361	64,361
Consulting	322,824	513,653
Medical Advisor	<u>362,794</u>	<u>377,922</u>
<b>Total Payments</b>	<b><u>\$ 2,468,505</u></b>	<b><u>\$ 2,870,970</u></b>

# ***FINANCIAL SECTION***

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# FINANCIAL SECTION

## Supporting Schedules (continued)

Detail of Changes in Plan Net Assets (Pension and Other Postemployment Benefits)  
For the Year Ended September 30, 2012

	Employee Contributions	Employee Contributions Pension Plus	Member Investment Plan	Employer Contributions
<b>Additions:</b>				
Contributions:				
Member contributions	\$ 31,878,199	\$ 11,143,134	\$ 292,449,546	
Employer contributions:				
Colleges, universities and federal				\$ 123,554,192
School districts and other				1,325,128,207
Other governmental contributions				
<b>Total contributions</b>	<u>31,878,199</u>	<u>11,143,134</u>	<u>292,449,546</u>	<u>1,448,682,399</u>
Investment income (loss):				
Net appreciation (depreciation) 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				
<b>Net investment income (loss)</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Transfers from other systems				
Miscellaneous income				
<b>Total additions</b>	<u>31,878,199</u>	<u>11,143,134</u>	<u>292,449,546</u>	<u>1,448,682,399</u>
<b>Deductions:</b>				
Benefits and refunds paid to plan members and beneficiaries:				
Retirement benefits				
Health benefits				
Dental/vision benefits				
Refund of contributions	3,850,337	217,835	27,652,183	98,202
Transfers to other systems				
Uncollectible receivable write off				
Administrative and other expenses				
<b>Total deductions</b>	<u>3,850,337</u>	<u>217,835</u>	<u>27,652,183</u>	<u>98,202</u>
<b>Net Increase (Decrease) before other changes</b>	<u>28,027,862</u>	<u>10,925,299</u>	<u>264,797,363</u>	<u>1,448,584,197</u>
<b>Other Changes in Net Assets:</b>				
Interest allocation	59,006,234		23,601,560	
Transfers upon retirement	(78,859,626)		(227,863,666)	
Transfers of employer shares				(2,378,312,703)
<b>Total other changes in net assets</b>	<u>(19,853,392)</u>	<u>-</u>	<u>(204,262,106)</u>	<u>(2,378,312,703)</u>
<b>Net Increase (Decrease)</b>	8,174,470	10,925,299	60,535,257	(929,728,506)
<b>Net Assets Held in Trust for Pension and OPEB Benefits:</b>				
<b>Beginning of Year</b>	1,500,429,912	6,333,420	4,333,337,890	(25,885,331,249)
<b>End of Year</b>	<u>\$ 1,508,604,382</u>	<u>\$ 17,258,719</u>	<u>\$ 4,393,873,147</u>	<u>\$ (26,815,059,755)</u>

# FINANCIAL SECTION

## Supporting Schedules (continued)

Employer Contributions Pension Plus	Retired Benefit Payments	Retired Benefit Payments Pension Plus	Undistributed Investment Income	OPEB	Total
				\$ 387,566,872	\$ 723,037,751
\$ 852,834				78,768,769	203,175,795
4,903,674				716,826,599	2,046,858,480
				17,406,468	17,406,468
<u>5,756,508</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,200,568,708</u>	<u>2,990,478,494</u>
			\$ 4,721,486,310	183,273,891	4,904,760,201
			726,712,472	29,355,315	756,067,787
			(1,424,410)	(63,550)	(1,487,960)
			(132,227,968)	(4,973,696)	(137,201,664)
			82,644,859	3,467,680	86,112,539
			(10,694,376)	(417,207)	(11,111,583)
<u>-</u>	<u>-</u>	<u>-</u>	<u>5,386,496,887</u>	<u>210,642,433</u>	<u>5,597,139,320</u>
	\$ 578,703		465	790,068	1,369,236
<u>5,756,508</u>	<u>578,703</u>	<u>-</u>	<u>5,386,497,352</u>	<u>1,412,001,209</u>	<u>8,588,987,050</u>
	4,082,242,506				4,082,242,506
				690,268,502	690,268,502
				95,627,854	95,627,854
	46,582			2,461,527	34,326,666
				37,550,850	37,550,850
			37,119,630	141,708,374	178,828,004
<u>-</u>	<u>4,082,289,088</u>	<u>-</u>	<u>37,119,630</u>	<u>967,617,107</u>	<u>5,118,844,382</u>
5,756,508	(4,081,710,385)	-	5,349,377,722	444,384,102	3,470,142,668
252,683	2,551,850,708		(2,634,711,185)		
	306,723,292				
	2,378,312,703				
<u>252,683</u>	<u>5,236,886,703</u>	<u>-</u>	<u>(2,634,711,185)</u>	<u>-</u>	<u>-</u>
6,009,191	1,155,176,318	-	2,714,666,537	444,384,102	3,470,142,668
3,609,756	38,664,404,662	-	16,051,869,004	1,452,315,853	36,126,969,248
<u>\$ 9,618,947</u>	<u>\$ 39,819,580,980</u>	<u>\$ -</u>	<u>\$ 18,766,535,541</u>	<u>\$ 1,896,699,955</u>	<u>\$ 39,597,111,916</u>

# FINANCIAL SECTION

## Supporting Schedules (continued)

Detail of Changes in Plan Net Assets (Pension and Other Postemployment Benefits)  
For the Year Ended September 30, 2011

	Employee Contributions	Employee Contributions Pension Plus	Member Investment Plan	Employer Contributions
<b>Additions:</b>				
Contributions:				
Member contributions	\$ 27,531,703	\$ 6,351,179	\$ 298,326,252	
Employer contributions:				
Colleges, universities and federal				\$ 95,354,642
School districts and other				1,057,258,126
Other governmental contributions				
Total contributions	<u>27,531,703</u>	<u>6,351,179</u>	<u>298,326,252</u>	<u>1,152,612,768</u>
Investment income (loss):				
Net appreciation (depreciation) 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)	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Transfers from other systems	4,583			
Miscellaneous income			4,680	3,748
<b>Total additions</b>	<u>27,536,286</u>	<u>6,351,179</u>	<u>298,330,932</u>	<u>1,152,616,516</u>
<b>Deductions:</b>				
Benefits and refunds paid to plan members and beneficiaries:				
Retirement benefits				
Health benefits				
Dental/vision benefits				
Refund of contributions	3,415,667	34,159	31,799,548	1,311,729
Transfers to other systems	2,169			
Administrative and other expenses				
<b>Total deductions</b>	<u>3,417,836</u>	<u>34,159</u>	<u>31,799,548</u>	<u>1,311,729</u>
<b>Net Increase (Decrease) before other changes</b>	<u>24,118,450</u>	<u>6,317,020</u>	<u>266,531,384</u>	<u>1,151,304,787</u>
<b>Other Changes in Net Assets:</b>				
Interest allocation	56,376,302		73,139,490	
Transfers upon retirement	(87,160,689)		(226,180,694)	
Transfers of employer shares				(6,464,296,037)
<b>Total other changes in net assets</b>	<u>(30,784,387)</u>	<u>-</u>	<u>(153,041,204)</u>	<u>(6,464,296,037)</u>
<b>Net Increase (Decrease)</b>	<u>(6,665,937)</u>	<u>6,317,020</u>	<u>113,490,180</u>	<u>(5,312,991,250)</u>
<b>Net Assets Held in Trust for Pension and OPEB Benefits:</b>				
Beginning of Year	1,507,095,849	16,400	4,219,847,710	(20,572,339,999)
End of Year	<u>\$ 1,500,429,912</u>	<u>\$ 6,333,420</u>	<u>\$ 4,333,337,890</u>	<u>\$ (25,885,331,249)</u>

# FINANCIAL SECTION

## Supporting Schedules (continued)

<u>Employer Contributions Pension Plus</u>	<u>Retired Benefit Payments</u>	<u>Retired Benefit Payments Pension Plus</u>	<u>Undistributed Investment Income</u>	<u>OPEB</u>	<u>Total</u>
				\$ 384,978,107	\$ 717,187,241
\$ 505,997				82,554,711	178,415,350
2,942,138				712,284,900	1,772,485,164
				163,948,595	163,948,595
<u>3,448,135</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,343,766,313</u>	<u>2,832,036,350</u>
			\$ 670,314,955	26,523,048	696,838,003
			730,519,918	109,203,369	839,723,287
			(1,962,422)	(77,649)	(2,040,071)
			(122,942,825)	(4,864,606)	(127,807,431)
			71,619,453	2,833,841	74,453,294
			(15,805,411)	(625,389)	(16,430,800)
<u>-</u>	<u>-</u>	<u>-</u>	<u>1,331,743,668</u>	<u>132,992,614</u>	<u>1,464,736,282</u>
					4,583
	\$ 551,128		144,406	84,753	788,715
<u>3,448,135</u>	<u>551,128</u>	<u>-</u>	<u>1,331,888,074</u>	<u>1,476,843,680</u>	<u>4,297,565,930</u>
	3,942,027,101				3,942,027,101
				815,311,950	815,311,950
				94,711,184	94,711,184
	29,934			39,133	36,630,170
					2,169
			22,926,393	113,790,777	136,717,170
<u>-</u>	<u>3,942,057,035</u>	<u>-</u>	<u>22,926,393</u>	<u>1,023,853,044</u>	<u>5,025,399,744</u>
3,448,135	(3,941,505,907)	-	1,308,961,681	452,990,636	(727,833,814)
10,573	2,653,946,159		(2,783,472,524)		
	313,341,383				
	6,464,296,037				
<u>10,573</u>	<u>9,431,583,579</u>	<u>-</u>	<u>(2,783,472,524)</u>	<u>-</u>	<u>-</u>
3,458,708	5,490,077,672	-	(1,474,510,843)	452,990,636	(727,833,814)
151,048	33,174,326,990	-	17,526,379,847	999,325,217	36,854,803,062
<u>\$ 3,609,756</u>	<u>\$ 38,664,404,662</u>	<u>\$ -</u>	<u>\$ 16,051,869,004</u>	<u>\$ 1,452,315,853</u>	<u>\$ 36,126,969,248</u>

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# INVESTMENT SECTION

Prepared by Michigan Department of Treasury, Bureau of Investments  
Jon M. Braeutigam, Director

Report on Investment Activity  
Asset Allocation  
Investment Results  
List of Largest Stock Holdings  
List of Largest Bond Holdings  
Schedule of Investment Fees  
Schedule of Investment Commissions  
Investment Summary

# INVESTMENT SECTION

## 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, 2012, members of the Committee were as follows: Naif A. Khouri (public member), James B. Nicholson (public member), L. Erik Lundberg, CFA (public member), Steven H. Hilfinger (ex-officio member), and John E. Nixon, CPA (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 the following issues: 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:

1. Achieve the optimal rate of return possible within prudent levels of risk.
2. Maintain sufficient liquidity to pay benefits.
3. Diversify assets to preserve capital and avoid large losses.
4. Meet or exceed the actuarial assumption over the long term.
5. Perform in the top half of the public plan universe over the long term.
6. Exceed individual asset class benchmarks over the long term.
7. Operate in a cost-effective manner.

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.

# INVESTMENT SECTION

## Report on Investment Activity (continued)

### Asset Allocation (Excludes Collateral on Loaned Securities)

<u>Investment Category</u>	<u>As of 9/30/12 Actual %</u>	<u>Five-Year Target %</u>
Domestic Equity Pools	26.8 %	31.0 %
International Equity Pools	13.8	16.0
Alternative Investment Pools	21.2	16.0
Real Estate and Infrastructure Pools	10.2	9.0
Fixed Income Pools	13.0	15.0
Absolute Return Pools	8.8	9.0
Short Term Investment Pools	<u>6.2</u>	<u>4.0</u>
<b>TOTAL</b>	<b><u>100.0 %</u></b>	<b><u>100.0 %</u></b>

### INVESTMENT AUTHORITY

Pursuant to State Law (Section 91 of Act No. 380 of the Public Acts 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.

Act No. 314 of the Public Acts 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.

### INVESTMENT RESULTS

#### *Total Portfolio Results*

For the fiscal year ended September 30, 2012, the total System's rate of return was 13.5% for the Pension Plan and 13.3% for the OPEB Plan as compiled by State Street Investment Analytics. Annualized rates of return for the three, five, seven, and ten year periods ending September 30, 2012 were: 9.6%, 1.6%, and 7.7% respectively.

At the end of 2011, the Bureau of Economic Analysis reported after-tax corporate profits were \$1.58 trillion and that margins (percentage of GDP) hit 10.3%, both at all-time records. A key driver was the growth in profits earned outside the U.S; likely a result of the globalization efforts of American businesses. Historically, high current profit margins preceded low growth profits earned in the future. By September 2012, profits were more than 6% lower than the peak, although margins are still high by historical standards. In the meantime, consumers are not necessarily doing better. Wages as a percent of corporate sector's GDP is at an all-time low. In the 1930s this measured over 60%, but has steadily decreased over time to now represent 49%. The unemployment rate is in fact lower than a year ago by almost a full percent at 8.2%; however, this improvement is largely due to a drop in the workforce participation. According to the Bureau of Labor Statistics, there are roughly 4.7 million fewer workers today than at the peak 4.5 years ago. Finally, by September 2012, GDP growth was measured to be at the same low rate of 1.3% as it was one year prior.

In response to the slow growth in the U.S. economy and the labor market frustrations, on September 13, 2012, the Federal Reserve announced a new \$40 billion a month, open-ended, bond purchasing program of agency mortgage

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

backed securities and also stated a commitment to continue an extremely low rates policy until at least mid-2015. By targeting mortgage interest rates, it is hoped that the housing market will begin to add to GDP growth once again.

It is probable that the worst of the housing market has past. According to U.S. Commerce Department data, the low in new housing starts was 3.5 years ago, in April 2009. Because of the various programs directed at existing homes, it is difficult to say with certainty when transactions in that market bottomed. However, according to The National Association of Realtors, it would appear that transaction volumes have been improving over the past four years. The price of houses may have, finally, hit bottom during the winter of 2012. According to the S&P/Case-Shiller Home Price Index, houses nationally lost over 1/3 of their value from the peak during the summer of 2006 to the low in the winter of 2012. Time will tell if this is actually the low in national home prices, however, prices have increased 8.8% by September of 2012.

Dominating the news are three strong macroeconomic headwinds. The first is the economies of Europe. At the end of fiscal 2011, Europe was facing a liquidity crisis very similar to the financial crisis that inflicted the U.S. In response, a one trillion euro loan program called the Long-Term Refinancing Operation was implemented. With the exception of a few flare-ups, this program seems to be effective in stemming the potential liquidity crisis, however structural problems remain. Today, most countries are now in, or will likely soon be entering into a recession. The European countries are major trading partners globally and their problems will most definitely slow the world economy.

The second headwind is the Chinese economy. In recent years the Chinese economy has grown quickly to become now the second largest economy in the world. Pauses, or bumps in the growth rate are expected, however, some worry that the Chinese economic growth is slowing down too quickly (hard landing). Related to this fact, the Chinese Shanghai Composite stock market index is down almost by two-thirds since its peak in 2007. The market is more than 9% lower than it was a year ago as well.

The third major headwind can be found in the U.S. The 2013 scheduled tax increases and spending cuts are now being referred to as the impending "Fiscal Cliff". Next year, the Bush era tax cuts are scheduled to expire, which includes the 2010-11 payroll tax cuts and the emergency unemployment benefits. Automatic cuts in government spending (sequestration) that were agreed upon during the budget crisis of 2011 are also scheduled to begin. New taxes due to the 2010 Affordable Care Act are to begin next year as well. Estimates vary widely; however, the hit to GDP is expected to be a reduction between 3% and 5%. Fed Chairman Ben Bernanke warned "If no action is taken by fiscal authorities, the size of the fiscal cliff is so large that the Fed would have no ability to offset that effect on the recovery." The 2012 presidential election will likely determine how the fiscal cliff is managed. However, market volatility is expected to increase as the issues are discussed throughout the remainder of 2012.

Despite the just described negative global macro-economic environment, the returns in the capital markets for fiscal year ending September 2012 turned out to be good. The broad U.S. and international equity market indexes returned 30.2% and 15.0% respectively while the long-term fixed income benchmark index returned 5.7%. For the fiscal year the system's return was 13.5%.

### *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.

# INVESTMENT SECTION

## Report on Investment Activity (continued)

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.

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, 2012:

Active	54.2 %
Passive	45.8
<b>Total</b>	<b><u>100.0 %</u></b>
Large Cap	80.2 %
Mid Cap	9.3
Multi Cap	5.9
Small Cap	4.6
<b>Total</b>	<b><u>100.0 %</u></b>

The System's Domestic Equity pools total rate of return was 29.5 % for fiscal year 2012. This compared with 30.2% for the S&P 1500 Index.

At the close of fiscal year 2012, the Domestic Equity pools represented 26.8% of total investments. This compares to 28.5% for fiscal year 2011. The following summarizes the System's 77.4% ownership share of the Domestic Equity pools at September 30, 2012:

### Domestic Equity Pools (in thousands)

Short Term Pooled Investments	\$ 190,340
Equities	10,588,773
Market Value of Equity Contracts	27,447
Other Investments	(179)
Long Term Obligations	5,580
Settlement Principal Payable	(2,854)
Settlement Proceeds Receivable	1,532
Accrued Dividends	11,610
<b>Total</b>	<b><u>\$ 10,822,249</u></b>

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### *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 Gross 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.

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 pools as of September 30, 2012:

Active	44.3 %
Passive	55.7
<b>Total</b>	<b><u>100.0 %</u></b>
Developed	74.9 %
Emerging	25.1
<b>Total</b>	<b><u>100.0 %</u></b>

The System's International Equity pools total rate of return was 17.4% for the Pension Plan and 17.1% for the OPEB Plan for fiscal year 2012. This compared with 15.0% for the MSCI ACWI Ex US Gross.

# INVESTMENT SECTION

## Report on Investment Activity (continued)

At the close of fiscal year 2012, the International Equity pools represented 13.8% of total investments. This compares to 12.4% for fiscal year 2011. The following summarizes the System's 77.7% ownership share of the International Equity Pools at September 30, 2012:

### International Equity Pools (in thousands)

Short Term Pooled Investments	\$	48,796
Equities		4,847,012
Fixed Income Securities		622,582
Market Value of Equity Contracts		57,745
Accrued Dividends and Interest		1,472
<b>Total</b>	<b>\$</b>	<b><u>5,577,607</u></b>

### Alternative Investment Pools

The Alternative Investment 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.

Alternative Investments are investments in the private equity market, primarily through limited partnerships. The following summarizes the weightings of the pools as of September 30, 2012:

Buyout Funds	54.0 %
Special Situation Funds	20.7
Venture Capital Funds	10.6
Fund of Funds	4.9
Liquidation Portfolio	4.0
Other	3.3
Mezzanine Funds	2.5
<b>Total</b>	<b><u>100.0 %</u></b>

The Alternative Investment pools had a return of 4.0% for the fiscal year ended September 30, 2012, versus the benchmark of 8.5%.

At the close of fiscal year 2012, the Alternative Investment pools represented 21.2% of total investments. This compares to 22.7% for fiscal year 2011. The following summarizes the System's 79.8% ownership share of the Alternative Investment pools at September 30, 2012:

### Alternative Investment Pools (in thousands)

Short Term Pooled Investments	\$	146,280
Equities		8,437,772
Settlement Proceeds Receivable		586
<b>Total</b>	<b>\$</b>	<b><u>8,584,638</u></b>

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### *Real Estate and Infrastructure Pools*

The objective of the Real Estate and Infrastructure pools is to provide favorable 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 cities 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 – As summarized below, the pools are diversified by investment type including a new sub-strategy in infrastructure that was initiated during the fiscal year.

Multi-family apartments	23.2 %
Commercial office buildings	17.0
Hotel	21.2
Retail shopping centers	16.8
Industrial warehouse buildings	7.9
For Sale Housing	5.0
Infrastructure	3.5
Land	2.4
Senior Living	1.2
Short Term Investments	1.8
<b>Total</b>	<b><u>100.0 %</u></b>

The pool generated a return of 8.4% for fiscal year 2012. The two benchmark returns from the National Council of Real Estate Investment Fiduciaries: the National Property Blended Index (less 130 basis points) was 9.6% and the Open-End Diversified Core Equity Index was 10.5%.

At the close of fiscal year 2012, the Real Estate and Infrastructure pools represented 10.2% of total investments. This compares to 10.4% for fiscal year 2011. The following summarizes the System's 77.7% ownership share of the Real Estate and Infrastructure pools at September 30, 2012:

### **Real Estate and Infrastructure Pools (in thousands)**

Short Term Pooled Investments	\$ 75,576
Real Estate Equities	\$ 3,888,073
Infrastructure Equities	148,625
<b>Total</b>	<b><u>\$ 4,112,274</u></b>

# INVESTMENT SECTION

## Report on Investment Activity (continued)

### *Fixed Income Pools*

The objective for investments made in the Fixed Income pools is to meet or exceed the total blended return of 50% of the Barclays U.S. Government Index and 50% of the Barclays U.S. Credit 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 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 6.3% for fiscal year 2012. This compared with 5.7% for the blended return of 50% of the Barclays U.S. Government Index and 50% of the Barclays U.S. Credit Index.

At the close of fiscal year 2012, the Fixed Income pools represented 13.0% of total investments. This compares to 15.1% for fiscal year 2011. The following summarizes the System's 77.6% ownership share of the Fixed Income pools at September 30, 2012:

#### **Fixed Income Pools (in thousands)**

Short Term Pooled Investments	\$ 178,318
Fixed Income Securities	5,047,128
Settlement Proceeds Receivable	8,411
Settlement Principal Payable	(3,962)
Accrued interest	36,625
<b>Total</b>	<b><u>\$ 5,266,520</u></b>

### *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 4.9% versus the benchmark's 0.0%.

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.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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 6.4%.

At the close of fiscal year 2012, the Absolute Return Pools represented 8.8% of total investments. This compares to 6.3% for fiscal year 2011. The following summarizes the System's 78.8% ownership share of the Absolute Return Pools at September 30, 2012:

<b>Absolute Return Pools</b>	
<b>(in thousands)</b>	
Short Term Pooled investments	\$ 332,877
Equities	3,189,665
Long Term Obligations	34,621
Accrued Interest and Dividends	940
Market Value of Equity Contracts	(185)
<b>Total</b>	<b>\$ 3,557,918</b>

### *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 0.3% versus the benchmark's 0.0%.

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 2012, the Short Term Investment pools represented 6.2% of total investments. This compares to 4.6% for fiscal year 2011. The following summarizes the System's 68.2% ownership share of the Short Term Investment pools at September 30, 2012:

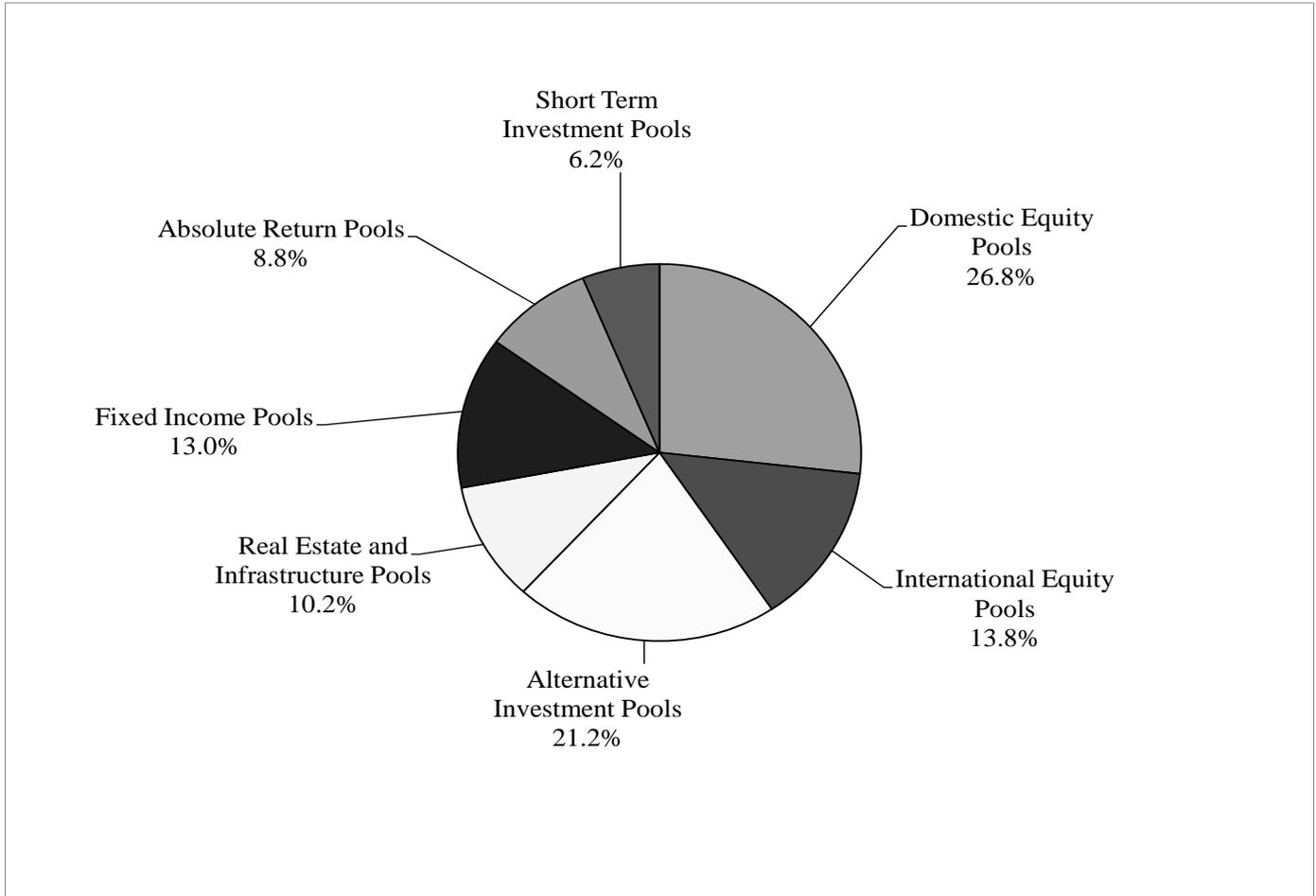
<b>Short Term Investment Pools</b>	
<b>(in thousands)</b>	
Short Term Pooled Investments	\$ 1,647,976
Healthcare Contribution*	562,283
Fixed Income Securities	278,827
Accrued interest	30
<b>Total</b>	<b>\$ 2,489,116</b>

\*PA 75 of 2010 requires each actively employed member of MPSERS to contribute toward health care benefits. Contributions to this account are held and invested separately.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### Asset Allocation – Security Type Only



# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### Pension Plan Investment Results for the Period Ending September 30, 2012

Investment Category	Current Year	Annualized Rate of Return <sup>1</sup>		
		3 Years	5 Years	10 Years
Total Portfolio	13.5 %	9.6 %	1.6 %	7.7 %
Domestic Equity Pools	29.5	12.2	1.1	8.1
S&P 1500 Index	30.2	13.4	1.4	8.3
International Equity Pools	17.4	4.2	(4.1)	8.0
International Blended Benchmark <sup>2</sup>	15.0	2.6	(4.9)	7.6
Alternative Investment Pools	4.0	17.4	5.8	12.7
Alternative Blended Benchmark <sup>3</sup>	8.5	17.8	5.3	11.7
Real Estate and Infrastructure Pools	8.4	1.9	(2.9)	5.0
NCREIF Property Blended Index <sup>4</sup>	9.6	9.5	1.0	7.1
Fixed Income Pools	6.3	7.0	7.4	5.8
Barclays Government/Credit	5.7	6.5	6.6	5.4
Absolute Return Pools				
Total Absolute Return	4.9	5.1		
HFRI Fund of Funds Cons 1 month lag	0.0	2.0		
Total Real Return and Opportunistic	6.4	8.5		
Short Term Investment Pools	0.3	0.5	0.3	1.7
30 Day Treasury Bill	0.0	0.1	0.5	1.6

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 10/1/10, index 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.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### OPEB Investment Results for the Period Ending September 30, 2012

<u>Investment Category</u>	<u>Current Year</u>
Total Portfolio	13.3 %
Domestic Equity Pools	29.5
S&P 1500 Index	30.2
International Equity Pools	17.1
International Blended Benchmark <sup>2</sup>	15.0
Alternative Investment Pools	4.0
Alternative Blended Benchmark <sup>3</sup>	8.5
Real Estate and Infrastructure Pools	8.4
NCREIF Property Blended Index <sup>4</sup>	9.6
Fixed Income Pools	6.3
Barclays Government/Credit	5.7
Absolute Return Pools	
Total Absolute Return	4.9
HFRI Fund of Funds Cons 1 month lag	0.0
Total Real Return and Opportunistic	6.4
Short Term Investment Pools	0.3
30 Day Treasury Bill	0.0

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 10/1/10, index 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.

# INVESTMENT SECTION

## Largest Assets Held<sup>1</sup>

### Largest Stock Holdings (By Market Value) September 30, 2012

<u>Rank</u>	<u>Shares</u>	<u>Stocks</u>	<u>Market Value</u>
1	721,122	Apple Inc.	\$ 481,175,769
2	286,208	Google Inc.	215,944,205
3	1,366,803	SPDR S&P 500 ETF Trust	196,723,985
4	2,661,049	Johnson & Johnson	183,372,872
5	1,950,352	Exxon Mobil Corporation	178,359,685
6	3,395,630	Merck & Company Inc.	153,142,931
7	4,958,956	Microsoft Corp	147,677,724
8	2,130,272	Abbott Laboratories	146,051,453
9	1,194,944	Chevron Corp	139,282,659
10	1,949,020	Proctor & Gamble Co	135,184,047

### Largest Bond Holdings (By Market Value)<sup>2</sup> September 30, 2012

<u>Rank</u>	<u>Par Amount</u>	<u>Bonds &amp; Notes</u>	<u>Market Value</u>
1	\$ 200,948,635	General Electric Cap Corp .60450% FRN Due 2-15-2017	\$ 193,075,266
2	90,383,474	Barclays Bank PLC Due 11-01-2018	88,675,227
3	77,899,999	Barclays Bank PLC Due 7-24-2019	81,623,619
4	78,246,463	JPMorgan Chase & Co .59460% FRN Due 11-01-2012	78,268,920
5	78,246,463	Barclays Bank PLC 1.31760% FRN Due 1-13-2014	77,860,239
6	77,899,999	Barclays Bank PLC Due 2-02-2018	72,922,189
7	59,605,417	General Electric Cap Corp .64875% FRN Due 9-15-2014	59,284,323
8	47,657,617	Dow Chemical Co 5.7% Due 5-15-2018	57,368,142
9	49,295,272	Total Capital Canada LTD .83510% FRN Due 1-17-2014	49,542,636
10	39,219,857	Target Corp 5.375% Due 5-1-2017	46,791,317

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 represents the System's pro-rata share based on its ownership of the investment pools.

# INVESTMENT SECTION

## 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. 55.07% 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 \$10,961 thousand or six basis points (.060%) of the market value of the Assets under Management of the State Treasurer.

Act 380 of the Public Acts 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.

### *Investment Managers' Fees:*

	<b>Assets under Management (in thousands)</b>	<b>Fees (in thousands)</b>	<b>Basis Points*</b>
State Treasurer	\$ 18,155,858	\$ 10,961	6.0
Outside Advisors for			
Fixed Income	1,264,145	2,136	16.9
Absolute Return	3,408,889	15,319	44.9
International Equity	2,112,106	6,421	30.4
Domestic Equity	2,772,411	17,229	62.1
Alternative	8,584,638	72,166	84.1
Real Estate and Infrastructure	4,112,274	10,264	25.0
<b>Total</b>	<b>\$ 40,410,321</b>	<b>\$ 134,496</b>	

### *Other Investment Services Fees:*

Assets in Custody	\$ 39,694,282	\$ 2,866
Securities on Loan	3,826,038	7,842

\* Alternative Investment 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 20 to 200 basis points. These fees, in most cases, are netted against income.

# INVESTMENT SECTION

## Schedule of Investment Commissions

Fiscal Year Ended September 30, 2012							
	Actual Commissions Paid <sup>1</sup>	Actual Number of Shares Traded <sup>1</sup>	Average Commission Per Share	Estimated Trade Costs Per Share	Estimated Research Costs Per Share	Estimated Trade Costs	Estimated Research Costs
<b>Investment Brokerage Firms:</b>							
Banc Of America Securities LLC	\$ 66,653	2,121,471	\$ 0.03	\$ 0.01	\$ 0.02	\$ 21,214	\$ 42,430
Barclays Capital Inc.	226,655	7,545,363	0.03	0.01	0.02	75,454	150,908
BNY Convergen Execution Solutions LLC	63,910	3,399,136	0.02	0.01	0.01	33,993	33,991
BTIG LLC	213,303	17,042,004	0.01	0.01		170,420	
The Buckingham Research Group Inc.	69,994	2,333,172	0.03	0.01	0.02	23,331	46,664
Cantor Fitzgerald & Co.	51,325	2,759,755	0.02	0.01	0.01	27,597	27,597
Capital Institutional Services Inc.	186,364	6,122,678	0.03	0.01	0.02	61,227	122,453
Citigroup Global Markets Inc.	184,411	6,940,767	0.03	0.01	0.02	69,408	138,816
Cowen & Company LLC	87,810	2,926,997	0.03	0.01	0.02	29,270	58,540
Credit Suisse Securities LLC	263,249	9,820,533	0.03	0.01	0.02	98,206	196,410
Dahlman Rose & Company LLC	32,242	2,588,027	0.01	0.01		25,880	
Deutsche Bank - Alex Brown	479	11,967	0.04	0.01	0.03	120	359
Deutsche Bank Securities Inc.	8,901	590,645	0.02	0.01	0.01	5,906	5,906
Drexel Hamilton	10,008	333,603	0.03	0.01	0.02	3,336	6,672
Goldman, Sachs & Co.	44,907	1,496,920	0.03	0.01	0.02	14,969	29,939
The Griswold Company Inc.	110,248	7,349,471	0.02	0.01	0.01	73,494	73,494
Guggenheim Partners LLC	54,495	1,816,446	0.03	0.01	0.02	18,165	36,329
ISI Capital LLC	190,318	6,343,930	0.03	0.01	0.02	63,440	126,879
Investment Technology Group Inc.	7,879	262,641	0.03	0.01	0.02	2,626	5,253
J. P. Morgan Securities Inc.	188,444	7,930,472	0.02	0.01	0.01	79,304	79,305
Merrill Lynch,Pierce,Fenner & Smith Inc.	69,491	2,332,704	0.03	0.01	0.02	23,327	46,654
MF Global Inc	16,326	544,212	0.03	0.01	0.02	5,442	10,884
Mischler Financial Group Inc.	57,004	1,900,122	0.03	0.01	0.02	19,002	38,003
Morgan Stanley & Co. Inc.	145,885	4,964,904	0.03	0.01	0.02	49,649	99,298
OTA LLC	58,877	1,962,575	0.03	0.01	0.02	19,626	39,253
RBC Capital Markets	69	6,822	0.01	0.01		68	
Sanford C. Bernstein & Co. LLC	177,796	5,926,474	0.03	0.01	0.02	59,265	118,530
Stifel, Nicolaus & Co. Inc.	9,916	330,537	0.03	0.01	0.02	3,305	6,611
UBS Securities LLC	591	18,384	0.03	0.01	0.02	184	368
Weeden & Co. LP	76,559	7,655,915	0.01	0.01		76,559	
Western International Securities Inc.	38,639	1,931,935	0.02	0.01	0.01	19,319	19,319
<b>Total</b>	<b>\$ 2,712,748</b>	<b>117,310,582</b>	<b>\$ 0.03</b>	<b>\$ 0.01</b>	<b>\$ 0.02</b>	<b>\$ 1,173,106</b>	<b>\$ 1,560,863</b>

<sup>1</sup> Commissions are included in purchase and sale prices of investments. The commissions and shares represent the System's pro-rata share based on ownership of commission and share transactions in the investment pools.

# INVESTMENT SECTION

## Investment Summary

Fiscal Year Ended September 30, 2012

	<u>Market Value</u> <sup>1</sup>	<u>Percent of Total Market Value</u>	<u>Investment &amp; Interest Income</u> <sup>2</sup>	<u>Percent of Total Investment &amp; Interest Income</u>
Fixed Income Pools	\$ 5,266,520,332	13.0 %	\$ 308,520,791	5.6 %
Domestic Equity Pools	10,822,248,637	26.8	2,870,712,453	52.2
Real Estate and Infrastructure Pools	4,112,274,446	10.2	322,979,112	5.9
Alternative Investment Pools	8,584,637,944	21.2	971,985,908	17.7
International Equity Pools	5,577,606,931	13.8	785,330,934	14.3
Absolute Return Pools	3,557,917,638	8.8	229,692,949	4.2
Short Term Investment Pools	<u>2,489,115,875</u>	<u>6.2</u>	<u>4,950,302</u>	<u>0.1</u>
<b>Total</b>	<u><u>\$ 40,410,321,803</u></u>	<u><u>100.0 %</u></u>	<u><u>\$ 5,494,172,449</u></u>	<u><u>100.0 %</u></u>

<sup>1</sup> Market value excludes \$3,043,514,865 in securities lending collateral for fiscal year 2012.

<sup>2</sup> Total Investment & Interest Income excludes net security lending income of \$75,000,956 and gain of \$166,655,542 for securities lending collateral.

# INVESTMENT SECTION

## Investment Summary

Fiscal Year Ended September 30, 2011

	<u>Market Value</u> <sup>1</sup>	<u>Percent of Total Market Value</u>	<u>Investment &amp; Interest Income</u> <sup>2</sup>	<u>Percent of Total Investment &amp; Interest Income</u>
Fixed Income Pools	\$ 5,623,645,834	15.1 %	\$ 244,638,235	17.0 %
Domestic Equity Pools	10,572,378,037	28.5	(78,178,173)	(5.4)
Real Estate Pool	3,862,392,582	10.4	425,249,304	29.6
Alternative Investment Pools	8,447,661,918	22.7	1,338,883,301	93.2
International Equity Pools	4,594,584,780	12.4	(515,334,872)	(35.9)
Absolute Return Pools	2,333,104,322	6.3	19,063,263	1.3
Short Term Investment Pools	<u>1,722,298,158</u>	<u>4.6</u>	<u>2,257,825</u>	<u>0.2</u>
<b>Total</b>	<u><u>\$ 37,156,065,631</u></u>	<u><u>100.0 %</u></u>	<u><u>\$ 1,436,578,883</u></u>	<u><u>100.0 %</u></u>

<sup>1</sup> Market value excludes \$4,243,653,251 in securities lending collateral for fiscal year 2011.

<sup>2</sup> Total Investment & Interest Income excludes net security lending income of \$58,022,494 and gain of \$99,982,406 for securities lending collateral.

# ACTUARIAL SECTION

Actuary's Certification  
Summary of Actuarial Assumptions and Methods  
Schedule of Active Member Valuation Data  
Schedule of Changes in the Retirement Rolls  
Prioritized Solvency Test  
Analysis of System Experience  
Summary of Plan Provisions

# ACTUARIAL SECTION

## Actuary's Certification

GRS

Gabriel Roeder Smith & Company  
Consultants & Actuaries

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248.799.9020 fax  
www.gabrielroeder.com

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October 24, 2012

Mr. John E. Nixon, 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 (MPERS) 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 purpose of the September 30, 2011 annual actuarial valuations was to determine the contribution requirements for the fiscal year ending September 30, 2012, 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, 2011.

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 otherwise 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 GASB Statement Nos. 25 and 43. 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. John E. Nixon  
October 24, 2012  
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 Valuation Data
- Schedule of Changes in the Retirement Rolls
- Prioritized Solvency Tests
- Analysis 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

Although our firm provided supporting schedules in connection with GASB Statement Nos. 43 and 45, we recommend consultation with legal counsel and the auditors to determine whether Statement No. 43 applies.

The September 30, 2011 valuations were based upon assumptions that were recommended in connection with a study of System experience covering the period from October 1, 2002 through September 30, 2007. 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

# ACTUARIAL SECTION

## Actuary's Certification (continued)

Mr. John E. Nixon  
October 24, 2012  
Page 3

The signing actuaries are independent of the plan sponsor.

The actuarial valuations of MPSERS as of September 30, 2011 were performed by qualified actuaries in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with applicable state statutes. The undersigned are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. It is our opinion that the calculated employer contribution meets the financial objective of the Retirement System.

Respectfully submitted,



Curtis Powell, EA, MAAA



Mita D Drazilov, ASA, MAAA

CP:AS:mrb

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 2020 using projection scale AA. Adopted 2010
3. Sample probabilities of regular, unreduced retirement are shown in Schedule 1 on the next page. Adopted 2010.
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 2010.
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 age and service and deferred retirement 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 market 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, 2002, through September 30, 2007, was completed in 2010. The purpose of the study was to analyze the actual experience of the System versus that anticipated by actuarial assumptions then in use. Adopted 2010.
11. Gabriel Roeder Smith and Co. was awarded the actuarial and consulting services contract beginning October 4, 2006.

# ACTUARIAL SECTION

## Summary of Actuarial Assumptions and Methods (continued)

### SCHEDULE 1

#### Percent of Eligible Active Members Retiring Within Next Year

Retirement Ages	Basic		MIP <sup>1</sup> and Pension Plus		Years of Service	MIP <sup>2</sup>	
	Teachers	Non-Teachers	Teachers	Non-Teachers		Teachers	Non-Teachers
55	25 %	30 %			30	60%	55 %
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

<sup>1</sup> Applies to MIP members with fewer than 30 years of service

<sup>2</sup> 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				Percent Becoming Disabled Within Next Year	Percent Increase In Pay During Next Year
		Pay More than \$20,000		Pay Less than \$20,000			
		Teachers	Non-Teachers	Teachers	Non-Teachers		
All	0	28.00 %	30.00 %	36.00 %	37.50 %		
	1	12.50	13.00	22.00	22.50		
	2	7.75	8.50	14.50	13.50		
	3	6.20	6.80	13.50	11.00		
	4	5.00	5.30	12.50	9.00		
25	5 & Over	3.70	4.70	12.50	9.00	.01 %	12.30 %
35		2.52	2.96	11.00	6.90	.02	7.20
45		1.46	1.85	7.40	4.70	.10	5.20
55		1.25	1.25	6.00	4.00	.26	3.80
60		1.25	1.25	6.00	4.00	.36	3.50

# ACTUARIAL SECTION

## Actuarial Valuation Data

### Schedule of Active Member Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll*	Average Annual Pay	% Increase	Average Age	Average Service
2002	326,350	\$ 9,707,281	\$ 29,745	2.3 %	43.6	9.5
2003	326,938	10,043,862	30,721	3.3	43.8	9.7
2004	322,494	10,407,072	32,271	5.0	43.8	9.7
2005	316,151	10,205,972	32,282	0.0	43.7	9.7
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

\* In thousands of dollars.

### Schedule of Changes in the Retirement Rolls

Year Ended Sept. 30	Added to Rolls		Removed from Rolls		Rolls-End of Year		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances*	No.	Annual Allowances*	No.	Annual Allowances*		
2002	8,187	\$ 154,958	3,700	\$ 4,020	135,277	\$ 2,094,382	7.8 %	\$ 15,482
2003**	8,512	163,752	3,975	6,368	139,814	2,251,766	7.5	16,105
2004	9,824	197,680	4,260	17,810	145,378	2,431,636	8.0	16,726
2005	10,165	249,907	3,837	36,843	151,706	2,644,700	8.8	17,433
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

\* In thousands of dollars.

\*\* Revised actuarial data.

# ACTUARIAL SECTION

## 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.

<b>Pension Benefits</b>									
(\$ in millions)									
<b>Actuarial Accrued Liability (AAL)</b>									
Valuation Date	(1)			(2)			(3)		
	Active Member Contributions	Retirants and Beneficiaries	Active and Inactive Members (Employer Financed Portion)	Valuation Assets	Portion of AAL Covered by Assets				
Sept. 30	(1)	(2)	(3)	Assets	(1)	(2)	(3)	(4) <sup>1</sup>	
2002	\$ 3,490	\$ 22,480	\$ 15,987	\$ 38,382	100 %	100 %	77.6 %	91.5 %	
2003	3,720	24,080	16,969	38,726	100	100	64.4	86.5	
2004	3,800	26,178	16,339	38,784	100	100	53.9	83.7	
2005	3,898	28,047	16,261	38,211	100	100	38.5	79.3	
2006	4,082	29,505	15,549	39,893	100	100	40.6	81.2	
2006 <sup>2</sup>	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 <sup>3</sup>	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 <sup>2</sup>	5,055	38,589	16,233	43,294	100	99.1	0.0	72.3	
2010 <sup>3</sup>	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	

<sup>1</sup> Percents funded on a total valuation asset and total actuarial accrued liability basis.

<sup>2</sup> Revised asset valuation method.

<sup>3</sup> Revised benefit provisions.

# ACTUARIAL SECTION

## Prioritized Solvency Test (continued)

### Other Postemployment Benefits (\$ in millions)

Valuation Date	Actuarial Accrued Liability (AAL)			Valuation Assets	Portion of AAL Covered by Assets				
	(1)	(2)	(3)		(1)	(2)	(3)	(4) <sup>1</sup>	
	Active Member Contributions	Retirants and Beneficiaries	Active and Inactive Members (Employer Financed Portion)						
Sept. 30									
2007	\$ -	\$ 13,977	\$ 11,755	\$ 776	0%	5.6%	0%	3.0%	
2008	-	14,553	12,258	832	0	5.7	0	3.1	
2009	-	13,805	14,490	713	0	5.2	0	2.5	
2010	-	15,591	13,036	999	0	6.4	0	3.5	
2011	-	14,496	12,550	1,156	0	8.0	0	4.3	

<sup>1</sup> Percents funded on a total valuation asset and total actuarial accrued liability basis.

# ACTUARIAL SECTION

## Analysis of System Experience

### Gains/(Losses) in Accrued Liabilities During Year Ended September 30, 2011 Resulting from Differences Between Assumed Experience & Actual Experience

<u>Type of Activity</u>	<u>Gain/(Loss)</u>
1. <b>Retirements (including Disability Retirement).</b> 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.	\$ 17,590,756
2. <b>Withdrawal From Employment</b> (including death-in-service). If more liabilities are released by withdrawals and deaths than assumed, there is a gain. If smaller releases, a loss.	(29,434,968)
3. <b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(255,369,513)
4. <b>Investment Income.</b> If there is greater investment income than assumed, there is a gain. If less income, a loss.	(3,129,071,573)
5. <b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.	(316,367,629)
6. <b>New entrants/Rehires.</b> New entrants into the System will generally result in an actuarial loss.	(74,608,220)
7. <b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	<u>(193,251,862)</u>
8. <b>Composite Gain (or Loss) During Year</b>	<u><u>\$ (3,980,513,009)</u></u>

## **Summary of Plan Provisions**

Our actuarial valuation of the System as of September 30, 2011, 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.

Mandatory Retirement Age - None.

Annual Amount - Total credited service times 1.5% of final average compensation.

Final Average Compensation - Average of highest 5 consecutive years (3 years for MIP members).

### ***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.

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).

### ***Non-Duty 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.

# ACTUARIAL SECTION

## Summary of Plan Provisions (continued)

### *Non-Duty Death Before Retirement*

Eligibility - 15 years of credited service, or age 60 and 10 years of credited service. 10 years of credited service, or age 60 and 5 years of credited service for MIP members.

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.

### *Post-Retirement 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

### *Post-Retirement Health Benefits*

Members in receipt of pension benefits are eligible for fully System paid Master Health Care Plan coverage (90% System paid Dental Plan, Vision Plan and Hearing Plan coverage) with the following exceptions:

1. Members not yet eligible for Medicare coverage pay an amount equal to the Medicare Part B premiums.
2. Members 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 System payment if less than 21 years of service).

Dependents are eligible for 90% System paid health benefit coverage (partial System payment for dependents of deferred vested members who had 21 or more years of service).

### *Member Contributions*

Basic Participants – None.

MIP Participants hired before January 1, 1990 - 3.9% of pay.

MIP Participants hired on or after January 1, 1990 and before July 1, 2008 - 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.

MIP and PPP Participants hired on or after July 1, 2008 - 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.

# STATISTICAL SECTION

Schedules of Additions by Source  
Schedules of Deductions by Type  
Schedules of Changes in Net Assets  
Schedules of Benefits and Refunds by Type  
Schedules of Retired Members by Type of Benefit  
Schedule of Other Postemployment Benefits  
Schedules of Average Benefit Payments  
Schedule of Principal Participating Employers  
Ten Year History of Membership  
Schedule of Participating Employers

# 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 Net Assets - Pension Plan
- Schedule of Changes in Net Assets - 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 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

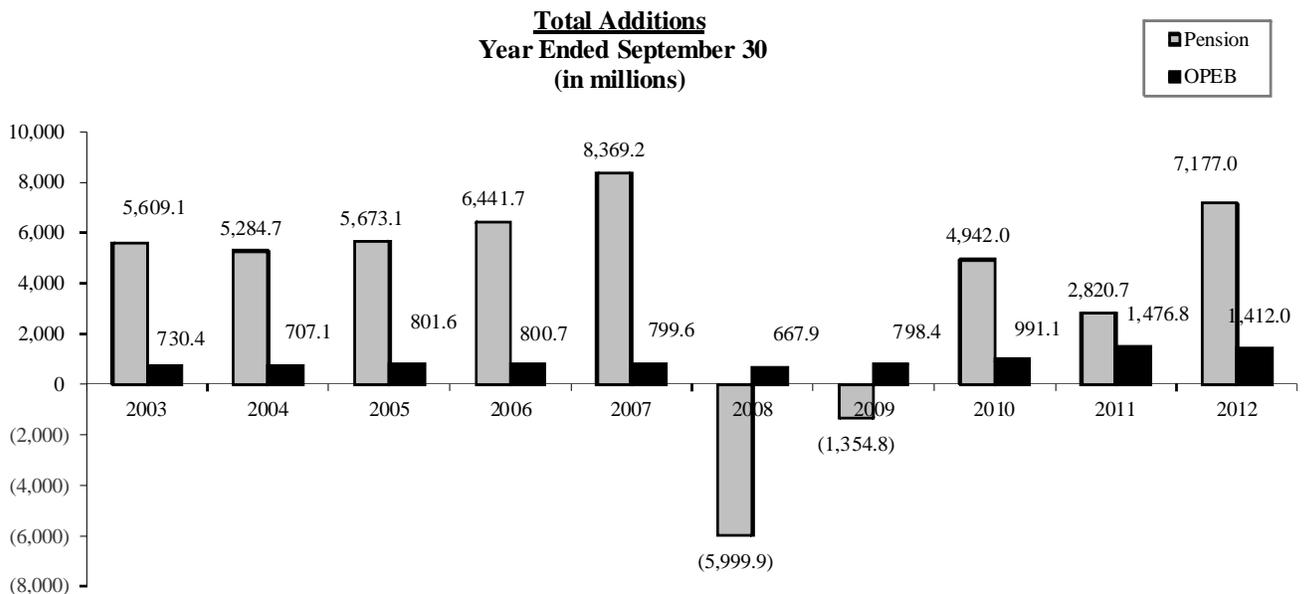
# STATISTICAL SECTION

## Schedule of Pension Plan Additions by Source Last Ten Years

Fiscal Year Ended Sept. 30	Member Contributions	Employer Contributions		Net Investment & Other Income	Total
		Dollars	% of Annual Covered Payroll		
2003	\$ 379,084,549	\$ 697,906,265	6.95 %	\$ 4,532,071,835	\$ 5,609,062,649
2004	456,352,606	697,647,338	6.70	4,130,661,746	5,284,661,690
2005	368,240,837	774,277,778	7.59	4,530,621,088	5,673,139,703
2006	518,599,720	995,932,425	10.15	4,927,180,143	6,441,712,288
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	N/A	5,387,076,055	7,176,985,841

## Schedule of OPEB Plan Additions by Source Last Ten Years

Fiscal Year Ended Sept. 30	Member Contributions	Employer Contributions		Net Investment & Other Income	Total
		Dollars	% of Annual Covered Payroll		
2003	\$ 47,394,003	\$ 657,408,261	6.55 %	\$ 25,584,076	\$ 730,386,340
2004	52,765,881	618,831,102	5.95	35,482,578	707,079,561
2005	62,507,616	700,366,743	6.86	38,718,254	801,592,613
2006	71,813,553	686,929,558	7.00	41,974,561	800,717,672
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	N/A	228,838,969	1,412,001,209



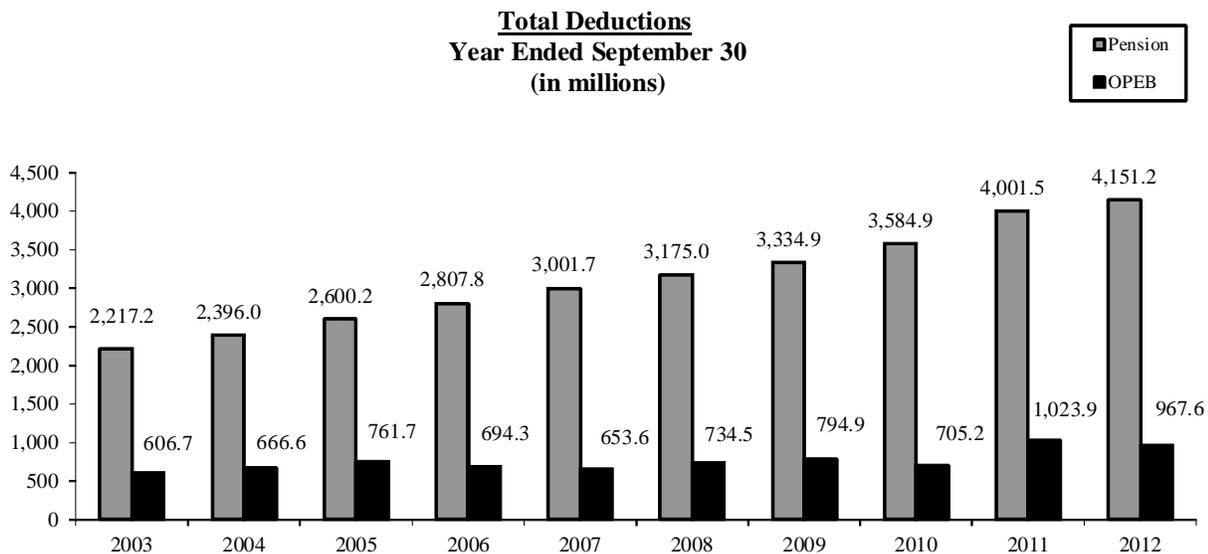
# STATISTICAL SECTION

## Schedule of Pension Plan Deductions by Type Last Ten Years

<u>Fiscal Year</u> <u>Ended</u> <u>Sept. 30</u>	<u>Benefit</u> <u>Payments</u>	<u>Refunds</u> <u>and Transfers</u>	<u>Administrative and</u> <u>Other Expenses</u>	<u>Total</u>
2003	\$ 2,180,574,193	\$ 13,642,300	\$ 23,016,963	\$ 2,217,233,456
2004	2,358,216,073	18,422,941	19,374,673	2,396,013,687
2005	2,558,017,710	22,181,312	19,997,954	2,600,196,976
2006	2,761,292,217	24,026,881	22,501,098	2,807,820,196
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

## Schedule of OPEB Plan Deductions by Type Last Ten Years

<u>Fiscal Year</u> <u>Ended</u> <u>Sept. 30</u>	<u>Benefit</u> <u>Payments</u>	<u>Refunds</u> <u>and Transfers</u>	<u>Administrative and</u> <u>Other Expenses</u>	<u>Total</u>
2003	\$ 558,682,921	\$ 64,411	\$ 47,907,745	\$ 606,655,077
2004	615,416,903	97,849	51,118,851	666,633,603
2005	705,983,783	192,144	55,520,031	761,695,958
2006	634,811,847	42,370	59,459,690	694,313,907
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



# STATISTICAL SECTION

## Schedule of Changes in Net Assets - Pension Plan

### Last Ten Years

(in thousands)

	Fiscal Year									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Member contributions	\$ 379,085	\$ 456,353	\$ 368,241	\$ 518,600	\$ 356,761	\$ 399,257	\$ 357,249	\$ 377,749	\$ 332,209	\$ 335,471
Employer contributions	697,906	697,647	774,277	995,932	835,366	999,375	1,000,375	1,001,252	1,156,061	1,454,439
Net investment income	4,532,030	4,130,610	4,530,600	4,926,708	7,174,561	(7,399,527)	(2,712,841)	3,562,452	1,331,744	5,386,497
Transfer from other systems		20	15	3	6	83	15	16	5	
Miscellaneous income	42	32	7	469	2,553	897	412	574	704	579
<b>Total Additions</b>	<b>5,609,063</b>	<b>5,284,662</b>	<b>5,673,140</b>	<b>6,441,712</b>	<b>8,369,247</b>	<b>(5,999,915)</b>	<b>(1,354,790)</b>	<b>4,942,042</b>	<b>2,820,722</b>	<b>7,176,986</b>
Pension benefits	2,180,574	2,358,216	2,558,018	2,761,292	2,944,920	3,117,435	3,278,118	3,525,020	3,942,027	4,082,243
Refunds of member contributions	13,642	18,397	22,062	23,904	32,142	32,613	33,865	33,873	36,591	31,865
Transfer to other systems		26	119	123	106	190	93	50	2	
Administrative and Other Expenses	23,017	19,375	19,998	22,501	24,489	24,741	22,793	26,001	22,926	37,120
<b>Total Deductions</b>	<b>2,217,233</b>	<b>2,396,014</b>	<b>2,600,197</b>	<b>2,807,820</b>	<b>3,001,657</b>	<b>3,174,979</b>	<b>3,334,869</b>	<b>3,584,945</b>	<b>4,001,547</b>	<b>4,151,227</b>
<b>Changes in net assets</b>	<b>\$ 3,391,830</b>	<b>\$ 2,888,648</b>	<b>\$ 3,072,943</b>	<b>\$ 3,633,892</b>	<b>\$ 5,367,590</b>	<b>\$ (9,174,894)</b>	<b>\$ (4,689,659)</b>	<b>\$ 1,357,098</b>	<b>\$ (1,180,824)</b>	<b>\$ 3,025,759</b>

## Schedule of Changes in Net Assets - OPEB Plan

### Last Ten Years

(in thousands)

	Fiscal Year									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Member contributions	\$ 47,394	\$ 52,766	\$ 62,508	\$ 71,814	\$ 77,207	\$ 78,089	\$ 77,034	\$ 125,160	\$ 384,978	\$ 387,567
Employer contributions	657,409	618,831	700,366	686,929	671,680	649,571	705,465	675,117	794,840	795,595
Other governmental contributions				65	63	102	55	39,980	163,949	17,406
Net investment income	25,584	35,483	38,718	41,910	50,417	(60,190)	15,706	150,686	132,993	210,642
Miscellaneous income					261	378	156	195	85	790
<b>Total Additions</b>	<b>730,387</b>	<b>707,080</b>	<b>801,592</b>	<b>800,718</b>	<b>799,628</b>	<b>667,950</b>	<b>798,416</b>	<b>991,138</b>	<b>1,476,844</b>	<b>1,412,001</b>
Health care benefits	558,683	615,417	705,983	634,812	590,226	666,381	726,235	650,677	910,023	785,896
Refunds of contributions	64	98	192	42	31	42	63	53	39	2,462
Uncollectible receivables										37,551
Administrative and Other Expenses	47,908	51,119	55,520	59,460	63,315	68,078	68,552	54,431	113,791	141,708
<b>Total Deductions</b>	<b>606,655</b>	<b>666,634</b>	<b>761,695</b>	<b>694,314</b>	<b>653,572</b>	<b>734,501</b>	<b>794,850</b>	<b>705,161</b>	<b>1,023,853</b>	<b>967,617</b>
<b>Changes in net assets</b>	<b>\$ 123,732</b>	<b>\$ 40,446</b>	<b>\$ 39,897</b>	<b>\$ 106,404</b>	<b>\$ 146,056</b>	<b>\$ (66,551)</b>	<b>\$ 3,566</b>	<b>\$ 285,977</b>	<b>\$ 452,991</b>	<b>\$ 444,384</b>

# STATISTICAL SECTION

## Schedule of Pension Benefits and Refunds by Type Last Ten Years

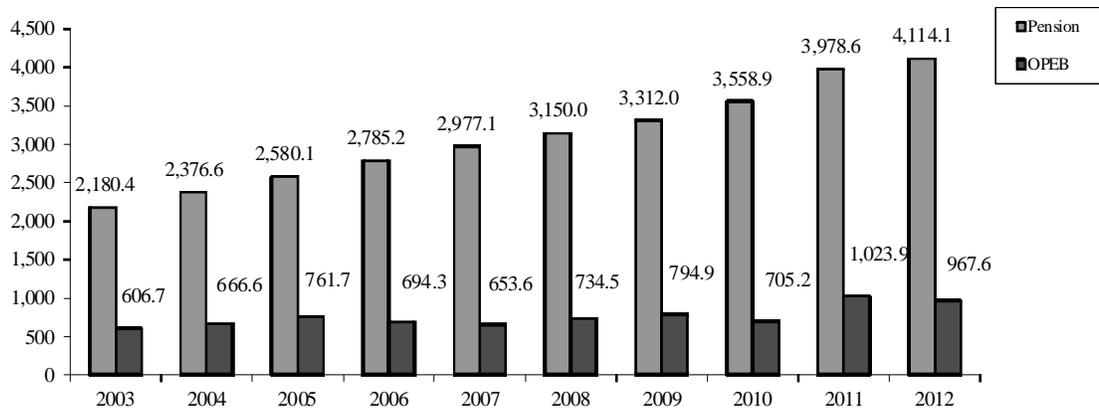
Fiscal Year Ended Sept. 30	Regular Benefits*	Disability Benefits	Survivor Benefits	Refunds			Total
				Employer	Employee	Retired Benefits	
2003	\$ 2,115,423,232	\$ 51,351,620		\$ 2,543,597	\$ 11,098,605	\$ 98	\$ 2,180,417,152
2004	2,304,740,438	53,475,635		518,392	17,878,574	48	2,376,613,087
2005	2,500,815,986	57,201,724		685,592	21,376,126		2,580,079,428
2006	2,573,912,214	52,500,929	\$ 134,879,074	474,347	23,422,647	6,828	2,785,196,039
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

\*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
2003	\$ 501,566,419	\$ 57,116,502	\$ 47,907,745	\$ 64,411	\$ 606,655,077
2004	554,472,234	60,944,669	51,118,851	97,849	666,633,603
2005	641,616,478	64,367,305	55,520,031	192,144	761,695,958
2006	565,261,409	69,550,438	59,459,690	42,370	694,313,907
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

**Total Benefit Deductions**  
Year Ended September 30  
(in millions)



# STATISTICAL SECTION

## Schedule of Retired Members by Type of Pension Benefit September 30, 2011

Amount of Monthly Pension Benefit	Number of Retirees	Type of Retirement *						Selected Option**				
		1	2	3	4	5	6	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt.1E 2E,3E,4E
\$ 1 - 200	13,255	11,597	1,058	89	348	4	159	7,318	2,901	1,908	176	952
201 - 400	21,302	18,029	1,438	128	1,330	1	376	11,794	4,213	3,630	398	1,267
401 - 600	16,175	13,316	1,176	100	1,198	1	384	8,504	3,306	2,994	391	980
601 - 800	12,558	10,281	882	51	945	2	397	6,289	2,500	2,511	388	870
801 - 1000	10,521	8,582	836	40	706		357	5,040	2,133	2,114	372	862
1001 - 1200	9,144	7,571	762	18	502		291	4,087	1,911	1,839	357	950
1201 - 1400	8,245	6,779	762	15	425		264	3,483	1,704	1,554	355	1,149
1401 - 1600	7,943	6,751	653	7	297		235	3,047	1,639	1,443	346	1,468
1601 - 1800	7,564	6,606	512	3	259	1	183	2,826	1,540	1,298	367	1,533
1801 - 2000	7,808	6,955	477	3	217	1	155	2,831	1,693	1,278	386	1,620
over 2000	77,920	74,494	2,277	10	439	2	698	33,689	15,005	16,147	5,734	7,345
<b>Totals</b>	<b>192,435</b>	<b>170,961</b>	<b>10,833</b>	<b>464</b>	<b>6,666</b>	<b>12</b>	<b>3,499</b>	<b>88,908</b>	<b>38,545</b>	<b>36,716</b>	<b>9,270</b>	<b>18,996</b>

\* Type of Retirement

- 1 - Normal retirement for age & service
- 2 - Survivor payment - normal retirement
- 3 - Duty disability retirement (including survivors)
- 4 - Non-duty disability retirement (including survivors)
- 5 - Survivor payment - duty death in service
- 6 - Survivor payment - non-duty 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.

# STATISTICAL SECTION

## Schedule of Retired Members by Type of Other Postemployment Benefits

September 30, 2011

Amount of Monthly Pension Benefit	Number of Retirees	Type of Other Postemployment Benefits	
		Health	Dental/Vision
\$ 1 - 200	13,255	6,623	7,749
201 - 400	21,302	12,106	13,952
401 - 600	16,175	10,424	11,713
601 - 800	12,558	8,807	9,749
801 - 1,000	10,521	7,702	8,397
1,001 - 1,200	9,144	6,948	7,457
1,201 - 1,400	8,245	6,460	6,925
1,401 - 1,600	7,943	6,326	6,736
1,601 - 1,800	7,564	6,157	6,522
1,801 - 2,000	7,808	6,334	6,745
Over 2,000	77,920	65,027	67,932
<b>Totals</b>	<b>192,435</b>	<b>142,914</b>	<b>153,877</b>

Source: Gabriel Roeder Smith & Co.

**Schedule of Other Postemployment Benefits**  
**For Years Ended September 30, 2012 and 2011**

	<u>2012</u>	<u>2011</u>
<b>Claims</b>		
Health insurance	\$ 490,179,497	\$ 623,120,018
Vision insurance	7,832,644	7,752,289
Dental insurance	<u>85,647,096</u>	<u>84,800,032</u>
<b>Total Claims</b>	<u>583,659,237</u>	<u>715,672,339</u>
<b>Estimated Claims Liability</b>		
Health insurance	200,089,005	192,191,932
Dental insurance	<u>2,148,115</u>	<u>2,158,863</u>
<b>Total Estimated Claims Liability</b>	<u>202,237,120</u>	<u>194,350,795</u>
<b>Administrative Fees</b>		
Health insurance	136,456,822	108,753,107
Dental insurance	<u>5,251,553</u>	<u>5,037,670</u>
<b>Total Administrative Fees</b>	<u>141,708,374</u>	<u>113,790,777</u>
<b>Subtotal</b>	927,604,731	1,023,813,911
Refunds	<u>2,461,527</u>	<u>39,133</u>
<b>Grand Total</b>	<u><u>\$ 930,066,257</u></u>	<u><u>\$ 1,023,853,044</u></u>

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Pension

### Last Ten Years

Payment Periods	Credited Service (Years) as of September 30							Total
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	
Period 10/1/01 to 9/30/02								
Average Monthly Benefit	\$ 527	\$ 154	\$ 272	\$ 495	\$ 815	\$ 1,237	\$ 2,166	\$ 1,290
Average Final Average Salary	2,171	15,438	15,160	20,407	26,097	31,542	47,124	32,795
Number of Active Retirants	934	3,951	17,068	20,977	20,201	15,427	56,719	135,277
Period 10/1/02 to 9/30/03								
Average Monthly Benefit	\$ 543	\$ 159	\$ 280	\$ 510	\$ 837	\$ 1,273	\$ 2,232	\$ 1,342
Average Final Average Salary	2,225	15,789	15,635	21,059	26,790	32,349	48,604	34,014
Number of Active Retirants	896	4,139	17,285	21,404	20,533	15,698	59,859	139,814
Period 10/1/03 to 9/30/04								
Average Monthly Benefit	\$ 607	\$ 181	\$ 309	\$ 514	\$ 881	\$ 1,238	\$ 2,288	\$ 1,394
Average Final Average Salary	1,640	16,138	16,357	21,257	27,798	32,353	50,198	35,268
Number of Active Retirants	1,178	4,386	15,706	23,764	18,842	18,076	63,426	145,378
Period 10/1/04 to 9/30/05								
Average Monthly Benefit	\$ 583	\$ 170	\$ 298	\$ 540	\$ 887	\$ 1,346	\$ 2,374	\$ 1,453
Average Final Average Salary	1,542	16,607	16,719	22,539	28,288	34,036	50,418	35,938
Number of Active Retirants	1,396	4,601	17,884	22,502	21,321	16,548	67,454	151,706
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

Source: Gabriel Roeder Smith & Co.

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Health

### Last Seven Years

Payment Periods	Credited Service (Years) as of September 30							Total
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	
Period 10/1/04 to 9/30/05								
Average Monthly Benefit	\$ 114	\$ 188	\$ 337	\$ 587	\$ 937	\$ 1,678	\$ 2,505	\$ 1,592
Average Final Average Salary	14,348	16,926	17,732	23,228	28,848	40,434	51,670	38,192
Number of Active Retirants	200	3,602	10,994	15,777	16,341	20,508	48,162	115,584
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

Source: Gabriel Roeder Smith & Co. - for all periods except 10/1/04 to 9/30/05

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Dental/Vision Last Seven Years

Payment Periods	Credited Service (Years) as of September 30							Total
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	
Period 10/1/04 to 9/30/05								
Average Monthly Benefit	\$ 121	\$ 188	\$ 336	\$ 582	\$ 933	\$ 1,685	\$ 2,503	\$ 1,581
Average Final Average Salary	14,741	16,957	17,768	23,221	28,858	40,661	51,804	38,138
Number of Active Retirants	228	3,858	11,858	16,959	17,352	21,664	50,334	122,253
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

Source: Gabriel Roeder Smith & Co. - for all periods except 10/1/04 to 9/30/05

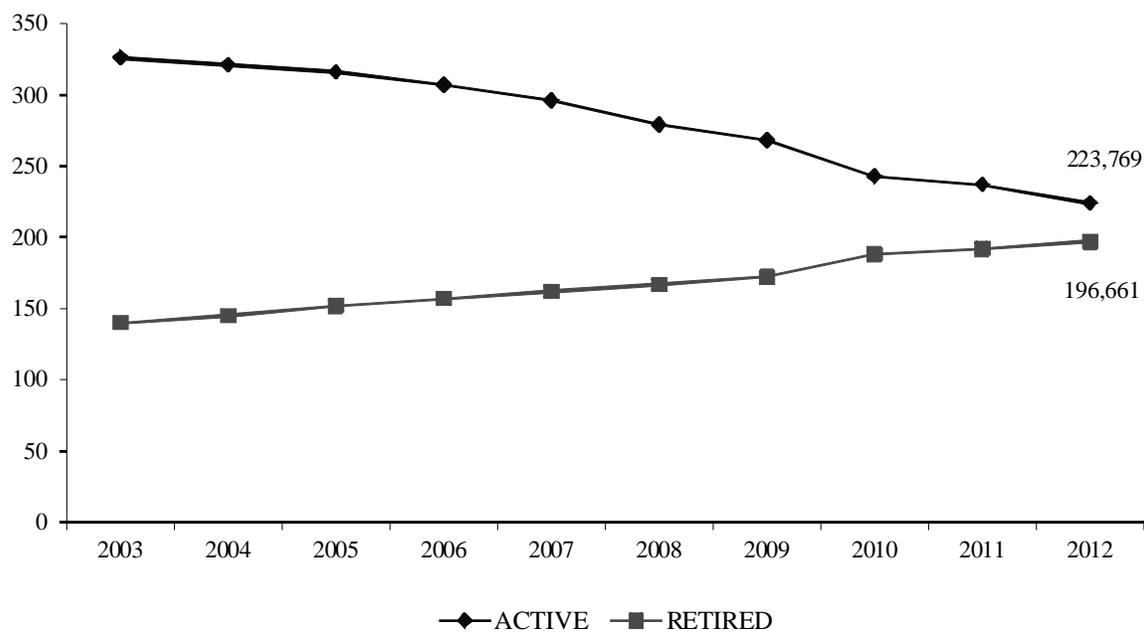
# STATISTICAL SECTION

## Schedule of Principal Participating Employers For Fiscal Years Ending September 30, 2011 and 2002

<u>Participating Employer</u>	<u>2011</u>		<u>2002</u>	
	<u>Employees</u>	<u>Percentage of Total System</u>	<u>Employees</u>	<u>Percentage of Total System</u>
Detroit Public Schools	10,462	4.42 %	23,262	7.12 %
Utica Community Schools	4,526	1.91	5,118	1.57
Grand Rapids Public Schools	3,867	1.63	5,421	1.66
Ann Arbor Public Schools	3,646	1.54	4,224	1.29
Oakland Community College	3,084	1.30	2,638	0.81
Kalamazoo Public Schools	3,047	1.29	3,392	1.04
Dearborn Public Schools	3,037	1.28	3,545	1.09
Flint Community Schools	2,787	1.18	5,086	1.56
Plymouth-Canton Community SD	2,706	1.14	2,939	0.90
Macomb Community College	2,691	1.14	2,296	0.70
All other	<u>196,807</u>	<u>83.16</u>	<u>268,617</u>	<u>82.26</u>
Total	<u>236,660</u>	<u>100.00 %</u>	<u>326,538</u>	<u>100.00 %</u>

# STATISTICAL SECTION

## Ten Year History of Membership (In thousands) Fiscal Year Ended September 30



Source: Gabriel Roeder Smith & Co.

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12

### 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 Community College  
Jackson County Community 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 E. S. D.  
Barry Intermediate School District  
Bay-Arenac Intermediate School District  
Berrien Intermediate School District  
Branch Intermediate School District  
Calhoun Intermediate School District  
Charlevoix-Emmet Intermediate School District

Cheboygan-Otsego-Presque Isle ISD  
Clare-Gladwin Intermediate School District  
Clinton County R. E. S. A.  
Coo 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  
Griatiot-Isabella R. E. S. D.  
Hillsdale Intermediate School District  
Huron Intermediate School District  
Ingham Intermediate School District  
Ionia Intermediate School District  
Iosco Intermediate School District  
Jackson Intermediate School District  
Kalamazoo Valley Intermediate School District  
Kent Intermediate School District  
Lapeer Intermediate School District  
Lenawee Intermediate School District  
Lewis Cass Intermediate School District  
Livingston Intermediate School District  
Macomb Intermediate School District  
Manistee Intermediate School District  
Marquette-Alger Intermediate School District  
Mason Lake Intermediate School District  
Mecosta-Osceola Intermediate School District  
Menominee Intermediate School District  
Midland Intermediate School District  
Monroe Intermediate School District  
Montcalm Area Intermediate School District  
Muskegon Area Intermediate School District  
Newaygo Intermediate School District  
Oakland Intermediate School District  
Oceana Intermediate School District  
Ottawa Area Intermediate School District  
Saginaw Intermediate School District  
Sanilac Intermediate School District  
Shiawassee R. E. S. D.  
St. Clair Intermediate School District  
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 R. E. S. A.  
Wexford-Missaukee Intermediate School District

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (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  
Albion 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 City School District  
Berrien Springs Public Schools  
Bessemer Area School District  
Big Bay De Noc School District  
Big Burning-Colfax #1f School  
Big Jackson School District  
Big Rapids Public Schools  
Birch Run Area Schools  
Birmingham City Schools  
Blissfield Community School District  
Bloomfield Hills School District  
Bloomington Public Schools  
Bois Blanc Township School District  
Boyne City Public Schools  
Boyne Falls Public Schools  
Brandon School District  
Brandywine Public Schools  
Breckenridge Community Schools  
Breitung Township Schools  
Bridgeport-Spaulding Comm. 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  
Buena Vista School District  
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

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (continued)

### **K - 12 School Districts (continued):**

Caseville Public Schools	Detroit Public Schools
Cass City Public Schools	Dewitt Public Schools
Cassopolis Public Schools	Dexter Community Schools
Cedar Springs Public Schools	Dollar Bay-Tamarack School District
Center Line Public Schools	Dowagiac-Union School District
Central Lake-Antrim County Public Schools	Dryden Community Schools
Central Montcalm Public Schools	Dundee Community Schools
Centreville Public Schools	Durand Area Schools
Charlevoix Public Schools	East China Township School District
Charlotte Public Schools	East Detroit School District
Chassell Township Schools	East Grand Rapids Public Schools
Cheboygan Area School District	East Jackson Public Schools
Chelsea School District	East Jordan Public Schools
Chesaning-Union Schools	East Lansing Public Schools
Chippewa Hills School District	Eaton Rapids Public Schools
Chippewa Valley Schools	Eau Claire Public Schools
Church School	Eccles-Sigel #4 School
Clare Public Schools	Ecorse Public Schools
Clarenceville School District	Edwardsburg Public Schools
Clarkston Community Schools	Elk Rapids Schools
Clawson City School District	Ellsworth Community Schools
Climax-Scotts Community Schools	Elm River Township Schools
Clinton Community Schools	Engadine Consolidated School District #4
Clintondale Community Schools	Escanaba Area Public Schools
Clio Area School District	Essexville-Hampton Public Schools
Coldwater Community Schools	Ewart Public Schools
Coleman Community Schools	Ewen-Trout Creek Consolidated School District
Coloma Community Schools	Fairview Area Schools
Colon Community School	Farmington Public Schools
Columbia School District	Farwell Area Schools
Comstock Park Public Schools	Fennville Public Schools
Comstock Public Schools	Fenton Area Public Schools
Concord Community Schools	Ferndale City School District
Constantine Public Schools	Fitzgerald Public Schools
Coon-Berlin Township School District #3	Flat Rock Community Schools
Coopersville Public Schools	Flint City School District
Corunna Public Schools	Flushing Community Schools
Covert Public Schools	Forest Area Schools
Crawford-AuSable School District	Forest Hills Public Schools
Crawford-Excelsior School District #1	Forest Park School District
Crestwood School District	Fowler Public Schools
Croswell-Lexington Schools	Fowlerville Community Schools
Dansville Agricultural School	Frankenmuth School District
Davison Community Schools	Frankfort-Elberta Area Schools
Dearborn Heights School District #7	Fraser Public Schools
Dearborn Public Schools	Freeland Community Schools
Decatur Public Schools	Free Soil Community School District # 8
Deckerville Community School District	Fremont Public Schools
Delton-Kellogg Schools	Fruitport Community Schools
DeTour Area Schools	Fulton Schools
	Galesburg-Augusta Community School District

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (continued)

### K - 12 School Districts (continued):

Galien Township School  
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  
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  
Inkster Public 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

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (continued)

### **K - 12 School Districts (continued):**

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

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (continued)

### **K - 12 School Districts (continued):**

Ovid-Elsie Area Schools	Royal Oak City School District
Owendale-Gagetown Area Schools	Rudyard Public Schools
Owosso Public Schools	Saginaw City Schools
Oxford Area Community Schools	Saginaw Township Community Schools
Palo Community Schools	Saline Area Schools
Parchment School District	Sand Creek Community Schools
Paw Paw Public Schools	Sandusky Community Schools
Peck Community Schools	Saranac Community Schools
Pellston Public Schools	Saugatuck Public Schools
Pennfield Public Schools	Sault Ste Marie Public Schools
Pentwater Public Schools	Schoolcraft Community Schools
Perry Public Schools	Shelby Public Schools
Petoskey Public Schools	Shepherd Public Schools
Pewamo-Westphalia Comm School District	South Haven Public Schools
Pickford Public Schools	South Lake Public Schools
Pinckney Community Schools	South Lyon Community Schools
Pinconning Area Schools	South Redford School District
Pine River Area Schools	Southfield Public Schools
Pittsford Area Schools	Southgate Community School District
Plainwell Community Schools	Sparta Area Schools
Plymouth-Canton Community School District	Spring Lake Public Schools
Pontiac City School District	Springport Public Schools
Port Hope Community Schools	St Charles Community Schools
Port Huron Area Schools	St Ignace Public Schools
Portage Public Schools	St Johns Public Schools
Portland Public Schools	St Joseph Public Schools
Posen Consolidated Schools	St Louis Public Schools
Pottersville Public Schools	Standish-Sterling Community School District
Powell Township School District	Stanton Township Public Schools
Quincy Community Schools	Stephenson Area Public Schools
Rapid River Public Schools	Stockbridge Community Schools
Ravenna Public Schools #24	Strange-Oneida School #3
Reading Community Schools	Sturgis Public Schools
Redford-Union School District #1	Summerfield Schools
Reed City Public School District	Superior Central School District
Reese Public Schools	Suttons Bay Public Schools
Reeths-Puffer Schools	Swan Valley School District
Republic-Michigamme Schools	Swartz Creek Community Schools
Richmond Community Schools	Tahquamenon Area School District
River Rouge Public Schools	Tawas Area Schools
River School	Taylor Township Schools
River Valley School District	Tecumseh Public Schools
Riverside-Hagar School District #6	Tekonsha Community Schools
Riverview Public Schools	Thornapple-Kellogg School
Rochester Community Schools	Three Rivers Community Schools
Rockford Public Schools	Traverse City Public Schools
Rogers City Area Schools	Trenton Public Schools
Romeo Community Schools	Tri-County Area Schools
Romulus Community Schools	Troy City School District
Roscommon Area Public Schools	Ubyly Community Schools
Roseville Community Schools	Union City Community Schools

# STATISTICAL SECTION

## Schedule of Participating Employers at 9/30/12 (continued)

### **K - 12 School Districts (continued):**

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 Rural Community School District  
Walled Lake Consolidated Schools  
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  
Willow Run 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 Public Schools  
Zeeland Public Schools

### **Public School Academies:**

Academy of Flint  
AGBU Alex & Marie Manoogian School  
Aisha Shule/WEB DuBois Prep School  
Arts Academy in the Woods  
Bay-Arenac Community High School  
Blue Water Learning Academy  
Blue Water Middle College Academy  
Casman Alternative Academy  
Central Academy  
Charlton Heston Academy  
Cole Academy  
Commonwealth Community Development Academy  
Concord Academy  
Countryside Charter School  
Creative Technologies Academy  
Crossroads Charter Academy  
Da Vinci Institute  
Dearborn Academy  
Detroit Academy of Arts & Sciences  
Detroit Service Learning Academy  
Edison Public School Academy  
El-Hajj Malik El-Shabazz Academy  
Gaudior Academy  
Grand Rapids Child Discovery Center  
Henry Ford Academy  
Holly Academy  
Honey Creek Community School  
Hope Academy  
International Academy of Flint  
International Academy of Saginaw  
Joseph K. Lumsden Public School Academy  
Macomb Academy  
Madison Academy  
Martin Luther King, Jr. Public School Academy  
Michigan Math and Science Academy  
Michigan Technical Academy  
Mid-Michigan Leadership Academy  
Nah Tah Wahsh Public School Academy  
New Beginnings Academy  
New Branches School  
North Star Academy  
Oakland International Academy  
Outlook Academy  
Plymouth Educational Center Charter School  
St. Clair County Academy of Style  
St. Clair County Career Prep Academy  
St. Clair County Intervention Academy  
St. Clair County Learning Academy  
Summit Academy

# **STATISTICAL SECTION**

## **Schedule of Participating Employers at 9/30/12 (continued)**

### **Public School Academies (continued):**

Summit Academy North  
Three Lakes Academy  
Virtual Learning Academy of St. Clair  
Walden Green Day School  
Washtenaw Technical Middle College  
Wavecrest Career Academy  
West Village Academy  
Windover High School  
Woodland Park Academy  
Woodward Academy

### **Libraries:**

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

## 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 2011 - 2012 report included:

### Management:

Ronald W. Foss, Director  
Cindy Peters, Accounting Manager  
Julie Salman, Accounting Manager

### Accountants:

Carol Wheaton  
Dan Harry  
Erik Simmer  
Paula Webb

### Technical and Support Staff:

Jamin Schroeder  
Rob Feguer  
Thomas Reese

Special thanks are also extended to the Office of Retirement Services personnel, accounting and support personnel throughout Financial Services, Investments Division of Treasury, Department of Community Health cashiering personnel, Office of the Auditor General, Gabriel Roeder Smith & Co., and the staff at the Office of Financial Management. Preparation of this report would not have been possible without the efforts of these individuals.

The report may be viewed on-line at: [www.michigan.gov/ors](http://www.michigan.gov/ors)