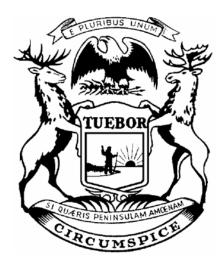
Michigan State Employees' Retirement System A Pension and Other Employee Benefit Trust Fund of the State of Michigan

### **Comprehensive Annual Financial Report** for the Fiscal Year Ended September 30, 2012



MSERS

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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### **Certificate of Achievement**

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

Michigan State 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.



President

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)

alon Helinple

Alan H. Winkle Program Administrator

### Letter of Transmittal

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

### **STATE OF MICHIGAN**

### RICK SNYDER, Governor

### DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

January 30, 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 State Employees' Retirement System (System) for fiscal year 2012.

### INTRODUCTION TO REPORT

The System was established by legislation under Public Act 240 of 1943 (the Michigan State Employees' Retirement Act) and is administered by the Office of Retirement Services (ORS). The number of active and retired members and beneficiaries of the System and a list of participating employers 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 State Employees. The services performed by the 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.

### Letter of Transmittal (continued)

### 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 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 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**

The System was established by Public Act 240 of 1943 and is administered by a nine-member board under the direction of the Executive Secretary. Public Act 216 of 1974 eliminated the requirement for member contributions and provided for financing by legislative appropriation and investment earnings.

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

#### 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 13.4% for the Pension Plan and 12.5% for the Other Post-Employment Benefits (OPEB) Plan.

### Letter of Transmittal (continued)

For the last five years, the System has experienced an annualized rate of return of 1.5%. 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 the accounting and administrative internal controls established by the System provide reasonable assurance the System is carrying out its responsibilities in safeguarding its assets, in maintaining the reliability of financial records for preparing the 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 actuarial 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 of the System were \$10.2 billion and \$15.6 billion, respectively, resulting in a funded ratio of 65.5% on September 30, 2011. A 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 \$14.3 billion. If these benefits were pre-funded, the actuarial accrued liability as of September 30, 2011, would be \$8.8 billion.

### 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 staff members of the organization across multiple processes. The diverse opinions offered a unique opportunity to capture goals and successes from all aspects of the business, so we can offer our members the highest level of customer service. Below are some of the highlights from the last fiscal year.

#### **State Employees Retirement Reform**

As part of the State employees' reform, customers received personalized emails and mailings (165,000 emails and more than 140,000 mailings total) along with personalized statements. Over 900 State employees also attended our informational webinars and seminars. ORS also worked with human resources offices across the State, and conducted special presentations for the Departments of Transportation, Education, and Licensing and Regulatory Affairs

### Redesigned miAccount pages and added new functionality

Members can quickly resolve any issues accessing the secure online tool with an intuitive new design for the miAccount login page. In addition, after PA 264 of 2011 was signed, State employees in both the defined benefit and defined contribution plans were able to access personalized retirement reform information through miAccount.

### Letter of Transmittal (continued)

### **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.

### 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.

### 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, prerecorded tutorials, accessible 24 hours a day, were launched on the website. To date, over 46,000 customers have taken advantage of the tutorials.

### HONORS

**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.

### 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 State Employees' Retirement System. Their cooperation contributes significantly to the success of the System.

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

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Phillip J. Stoddard, Director Office of Retirement Services

### **Administrative Organization**

### **Retirement Board Members**<sup>\*</sup>

Douglas Drake, Chair Retiree Member Term Expires July 31, 2013

Matthew Fedorchuk Employee Member Term Expires July 31, 2015

Douglas Johnson Retiree Member Term Expires July 31, 2012 Molly Jason Representing Attorney General Ex officio

Craig Murray, Vice Chair Representing Deputy Auditor General Ex officio

Randall S. Gregg Representing Commissioner of Financial & Insurance Regulation Ex officio John Gnodtke Representing State Personnel Director Ex officio

Robert L. Brackenbury Representing State Treasurer Ex officio

Ruth Duquette Employee Member Term Expires July 31, 2014

Statute provides that board members may continue to serve after their term expires until they are either 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**

#### Actuary

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

#### Legal Advisor

Bill Schutte Attorney General State of 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

#### Investment Performance Measurement

State Street Corporation State Street Investment Analytics Boston, MA

### Administrative Organization (continued)

### **Organization Chart**

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

Department of Treasury <sup>\*</sup> Andy Dillon, State Treasurer Financial Services Michael Gilliland, Director

Bureau of Investments Jon M. Braeutigam, Director Fiscal Management Division Ronald W. Foss, Director

Office of Retirement Services Phillip J. Stoddard, Director

Laurie Hill, Assistant Director

<sup>&</sup>lt;sup>\*</sup> 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.

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

### **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. MCTAVISH, C.P.A. AUDITOR GENERAL

Independent Auditor's Report on the Financial Statements

Mr. Douglas Drake, Chair Michigan State 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 Mr. Drake, Mr. Nixon, and Mr. Stoddard:

We have audited the accompanying basic financial statements of the Michigan State 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 State 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 State 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 State 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 19 and the schedules of funding progress and schedules of employer and other contributions on pages 44 through 46 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 State Employees' Retirement System. The supporting schedules on pages 47 through 51 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,

Totoman H. M. Tavia

Thomas H. McTavish, C.P.A. Auditor General January 29, 2013

### **Management's Discussion and Analysis**

Our discussion and analysis of the Michigan State 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 \$9.6 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 was approximately 65.5% for pension benefits and the funded ratio for other postemployment benefits (OPEB) was 0.0%.
- Additions for the year were \$2.5 billion, which are comprised primarily of contributions of \$1.2 billion and investment gains of \$1.3 billion.
- Deductions increased over the prior year from \$1.6 billion to \$1.7 billion or 5.4%. Most of this increase represented an increase in pension and health benefits paid.

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

The Statement of Pension Plan and Other Postemployment Benefit Plan 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 44) and Schedules of Employer and Other Contributions (page 45) to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

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

### FINANCIAL ANALYSIS

System total assets as of September 30, 2012, were \$10.6 billion and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased \$436.5 million or 4.3% between fiscal years 2011 and 2012 and total assets decreased \$224.3 million or (2.2)% between fiscal years 2010 and 2011 due primarily to net investment losses.

Total liabilities as of September 30, 2012, were \$986.7 million and were comprised of warrants outstanding, accounts payable, amounts due to other funds, and obligations under securities lending. Total liabilities decreased \$405.0 million or (29.1)% between fiscal years 2011 and 2012 and total liabilities increased \$40.9 million or 3.0% between fiscal years 2010 and 2011 due primarily to decreased obligations under securities lending.

System assets exceeded its liabilities at the close of fiscal year 2012 by \$9.6 billion. Net assets held in trust for pension and OPEB benefits increased \$841.5 million or 9.6% between fiscal years 2011 and 2012 due primarily to increased in investment income and total net assets decreased \$265.2 million or (2.9)% between fiscal years 2010 and 2011 due primarily to investment losses.

#### Net Assets (in thousands)

	2012	Increase (Decrease)	2011	Increase (Decrease) 2010
Assets				
Equity of Common Cash	\$ 88,967	(20.2)	% \$ 111,418	236.4 % \$ 33,125
Receivables	144,703	(19.2)	178,809	20.0 149,042
Investments	10,369,705	5.0	9,876,636	(3.3) 10,209,004
Total Assets	10,603,375	4.3	10,166,862	(2.2) 10,391,172
Liabilities				
Warrants outstanding	964	(15.7)	1,144	(24.1) 1,507
Accounts payable and				
other accrued liabilities	43,718	(63.8)	120,903	61.7 74,756
Amounts due to other funds	397	100.0		
Obligations under securities lending	941,649	(25.8)	1,269,714	(0.4) 1,274,563
Total Liabilities	986,728	(29.1)	1,391,760	3.0 1,350,826
Total Net Assets	\$ 9,616,647	9.6	% \$ 8,775,103	(2.9) % \$ 9,040,346

### 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 contributions and through earnings on investments. Contributions and net investment gains for fiscal year 2012 totaled \$2.5 billion.

Total additions for fiscal year 2012 increased \$1.2 billion from those of fiscal year 2011 due primarily to increased net investment gains. Total additions for fiscal year 2011 decreased \$(.4) billion from those of fiscal year 2010 due primarily to decreased net investment gains. Total employer contributions increased between fiscal years 2011 and 2012 by \$256.1 million or 31.5% due to an increase in contribution rates. This compares to an increase in total employer contributions between fiscal years 2010 and 2011 of \$82.7 million or 11.3% due to an increase in contribution rates. Member contributions increased between fiscal years 2010 and 2011 increased by \$7.2 million or 13.5%, while member contributions between fiscal years 2010 and 2011 increased by \$7.7 million or 13.9%. The increase in member contributions for fiscal year 2012 is a result of members being required to contribute 4% of their annual compensation beginning April 2012. Net investment income increased between fiscal years 2010 and 2011 by \$.5 billion or (58.3%). The Investment Section of this report reviews the results of investment activity for 2012.

### DEDUCTIONS FROM PLAN NET ASSET

The primary expenses of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental and vision benefits, refunds of contributions to former members, and the cost of administering the System. Total deductions for fiscal year 2012 were \$1.7 billion, an increase of 5.7% over fiscal year 2011 expenses. Total deductions for fiscal year 2011 were \$1.6 billion, an increase of 23.7% over fiscal year 2010 expenses.

Payments for health care benefits to members and beneficiaries increased by \$19.6 million or 4.3% from \$456.9 million to \$476.5 million during the fiscal year. This compares to an increase of \$126.4 million or 38.2% from \$330.5 million to \$456.9 million between fiscal years 2010 and 2011. The payment of pension benefits increased by \$66.2 million or 6.1% between fiscal years 2011 and 2012 and increased by \$172.5 million or 18.8% between fiscal years 2010 and 2011. In fiscal years 2011 and 2012, pension benefit expenses increased due to an increase in benefit payments to retirees and an increase of 5,186 retirees and an increase of 640 retirees, respectively. Refunds decreased by \$285.7 thousand or (58.1)% between fiscal years 2011 and 2012. This compares to an increase of \$181.8 thousand or 58.7% between fiscal years 2010 and 2011. Administrative and other expenses increased by \$3.3 million from \$22.6 million in fiscal year 2011 to \$25.9 million in fiscal year 2012, due primarily to a probable loss related to the guarantee of bonds for the Michigan motion pictures studio. Administrative and other expenses increased by \$1.6 million from \$21.0 million in fiscal year 2010 to \$22.6 million in fiscal year 2011, due primarily to an increase in OPEB administrative expenses paid to insurance carriers.

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

	2012	Increase (Decrease)	2011	Increase (Decrease)	2010
Additions	2012	(Decrease)	2011	(Dertase)	2010
Member contributions	\$ 60,723	13.5 %	\$ 53,478	13.9 % \$	46,961
Employer contributions	1,068,808	31.5	812,743	11.3	730,078
Other governmental contributions	23,774	(63.3)	64,773	139.4	27,058
Net investment income	1,346,517	260.9	373,135	(58.3)	895,325
Transfers from other systems		(100.0)	2	(95.7)	50
Miscellaneous income	344	(21.6)	439	6.3	413
Total Additions	2,500,166	91.6	1,304,570	(23.3)	1,699,887
Deductions Pension benefits Health care benefits Refunds of contributions Transfers to other systems Administrative and other expenses Total Deductions	1,156,035 476,508 206 25,872	$ \begin{array}{r} 6.1 \\ 4.3 \\ (58.1) \\ (100.0) \\ 14.4 \\ 5.7 \\ \end{array} $	1,089,823 456,879 491 5 22,615	$ \begin{array}{r}     18.8 \\     38.2 \\     58.1 \\     (72.2) \\     \hline     7.5 \\     \hline     23.7 \\   \end{array} $	917,329 330,513 310 17 21,029
Total Deductions	1,658,621	5.7	1,569,813	23.7	1,269,197
Net Increase (decrease) Net Assets - Beginning of Year	841,544 8,775,103	417.3 (2.9)	(265,243) 9,040,346	(161.6) 5.0	430,690 8,609,656
Net Assets - End of Year	\$ 9,616,647		\$ 8,775,103	(2.9) % \$	, ,

### Changes in Plan Net Assets (in thousands)

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

The System's combined net assets experienced an increase in 2012 after a decrease in 2011. Despite an economy that continues to struggle, the system recorded net investment income of \$1,346.5 million; that is a 260.9% change for net investment activity from 2011. 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.

# **Statements of Pension Plan and** Other Postemployment Benefit Plan Net Assets As of September 30, 2012 and 2011

715 01 September 50, 2012 an		September 30, 2012			September 30, 2011							
	Pens	Pension		OPEB				Pension	OPEB			
	Pla	n		Plan		Total	_	Plan		Plan		Total
Assets:												
Equity in common cash	\$ 47	,324,980	\$	41,642,286	\$	88,967,266	\$	110,046,584	\$	1,371,560	\$	111,418,144
Receivables:												
Amounts due from members		222,575				222,575		196,501				196,501
Amounts due from employer	31	,481,527		25,501,726		56,983,253		44,095,619		14,142,157		58,237,776
Amounts due from federal agencies				7,304,464		7,304,464				23,631,891		23,631,891
Amounts due from other funds	1	,959,563				1,959,563						
Amount due from other				14,368,972		14,368,972				13,266,583		13,266,583
Amounts due from												
employer long term	62	2,438,948				62,438,948		82,014,799				82,014,799
Interest and dividends	1	,408,091		17,563		1,425,654		1,443,292		17,990		1,461,282
Total receivables		7,510,704		47,192,725		144,703,429		127,750,211		51,058,621		178,808,832
Investments:												
Short term investment pools	306	5,459,846		187,917,523		494,377,369		230,630,029		85,638,131		316,268,160
Fixed income pools	1,265	5,876,835		15,777,192		1,281,654,027		1,348,900,112		16,811,943		1,365,712,055
Domestic equity pools	2,556	5,831,888		31,890,272		2,588,722,160		2,492,633,167		31,066,797		2,523,699,964
Real estate and infrastructure pools	1,017	,621,627		12,160,924		1,029,782,551		955,301,588		11,906,348		967,207,936
Alternative investment pools	2,006	5,272,117		25,005,062		2,031,277,179		1,975,423,460		24,620,581		2,000,044,041
International equities pools	1,365	5,903,759		15,034,742		1,380,938,501		1,121,629,228		13,979,364		1,135,608,592
Absolute return pools	821	,799,066		10,242,735		832,041,801		542,348,073		6,759,526		549,107,599
Securities lending collateral	721	,907,639		9,003,522		730,911,161		1,006,443,403		12,543,752		1,018,987,155
Total investments	10,062	2,672,777		307,031,972		10,369,704,749		9,673,309,060		203,326,442		9,876,635,502
Total assets	10,207	7,508,461		395,866,983		10,603,375,444		9,911,105,855		255,756,623		10,166,862,478
Liabilities:												
Warrants outstanding		964,236		25		964,261		1,129,491		14,079		1,143,570
Accounts payable and		. ,====						,, 1		.,		,,
other accrued liabilities	4	1,158,259		39,559,353		43,717,612		1,318,333		119,584,363		120,902,696
Amounts Due to Other Funds				397,146		397,146						
Obligations under securities lending	930	),050,036		11,599,442		941,649,478		1,254,083,366		15,630,199		1,269,713,565
Total liabilities	935	5,172,531		51,555,966		986,728,497		1,256,531,190		135,228,641		1,391,759,831
Net Assets Held in Trust												
for Pension and OPEB Benefits	\$ 9,272	2,335,930	\$	344,311,017	\$	9,616,646,947	\$	8,654,574,665	\$	120,527,982	\$	8,775,102,647

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		OPEB			Pension OPE		OPEB	PEB		
		Plan		Plan		Total		Plan		Plan		Total
Additions:												
Contributions:												
Member contributions	\$	33,290,784	\$	27,431,916	\$	60,722,700	\$	25,830,556	\$	27,647,644	\$	53,478,200
Employer contributions	Ŧ	419,926,997	Ŧ	648,881,078	\$	1,068,808,075	Ŧ	424,546,805	Ŧ	388,196,118	+	812,742,923
Other governmental contributions		,		23,774,071	Ŧ	23,774,071				64,773,181		64,773,181
Total contributions		453,217,781		700,087,065		1,153,304,846		450,377,361		480,616,943		930,994,304
Investment income (loss):		,		,		-,,,				,		
Net appreciation (depreciation)												
in fair value of investments		1,165,850,192		14,424,149		1,180,274,341		184,704,283		2,397,902		187,102,185
Interest, dividends, and other		179,618,668		2,328,802		181,947,470		193,147,735		10,681,052		203,828,787
Investment expenses:		179,010,000		2,020,002		101,917,170		155,111,155		10,001,002		200,020,707
Real estate operating expenses		(367,383)		(5,227)		(372,610)		(529,842)		(6,879)		(536,721
Other investment expenses		(32,459,357)		(390,589)		(32,849,946)		(30,612,948)		(397,429)		(31,010,377
Securities lending activities:		(32,437,337)		(3)0,307)		(32,047,740)		(50,012,740)		(3)7,42))		(31,010,377
Securities lending income		19,887,300		273,954		20,161,254		17,456,337		226,625		17,682,962
Securities lending expenses										(50,393)		
÷ .		(2,604,129)		(39,377)		(2,643,506)		(3,881,679)				(3,932,072
Net investment income (loss)		1,329,925,291		16,591,712		1,346,517,003		360,283,886		12,850,878		373,134,764
Transfers from other systems/funds								2,169				2,169
Miscellaneous income		96,450		247,817		344,267		146,159		292,824		438,983
Total additions		1,783,239,522		716,926,594		2,500,166,116		810,809,575		493,760,645		1,304,570,220
Deductions:												
Benefits paid to plan members												
and beneficiaries:												
Retirement benefits		1,156,035,451				1,156,035,451		1,089,822,880				1,089,822,880
Health benefits		1,100,000,101		433,878,978		433,878,978		1,009,022,000		417,417,811		417,417,811
Dental/vision benefits				41,289,296		41,289,296				39,461,182		39,461,182
Personal Health Care				1,340,225		1,340,225				55, 101,102		55, 101, 102
Refunds of contributions		188,926		16,904		205,830		470,403		21,085		491,488
Transfers to other systems/funds		100,720		10,004		203,000		4,583		21,000		4,583
Administrative and other expenses		9,253,880		16,618,156		25,872,036		6,079,017		16,536,168		22,615,185
-		, , ,										
Total deductions		1,165,478,257		493,143,559		1,658,621,816		1,096,376,883		473,436,246	—	1,569,813,129
Net Increase (Decrease)		617,761,265		223,783,035		841,544,300		(285,567,308)		20,324,399		(265,242,909
Net Assets Held in Trust												
for Pension and OPEB Benefits:												
Beginning of Year		8,654,574,665		120,527,982		8,775,102,647		8,940,141,973		100,203,583		9,040,345,556
End of Voon	¢	0 772 225 0.20	¢	244 211 017	¢	0.616.646.047	¢	0 651 571 665	¢	120 527 092	¢	0 775 100 CAT
End of Year	3	9,272,335,930	\$	344,311,017	\$	9,616,646,947	\$	8,654,574,665	\$	120,527,982	\$	8,775,102,647

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

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

### **NOTE 1 - PLAN DESCRIPTION**

### ORGANIZATION

The Michigan State Employees' Retirement System (System) is a single-employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State) and created under Public Act 240 of 1943, as amended. Section 2 of this act 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 the State's government employees. In addition, the System's OPEB plan provides all retirees with the option of receiving health, dental, and vision coverage under the Michigan State Employees' Retirement Act. The System is a qualified pension trust fund under section 401(a) of the Internal Revenue Code. By statute, employees of the following employers are also covered by this plan: American Legion, American Veterans, Veterans of Foreign Wars, Disabled American Veterans, Mackinac Island State Park, Marine Corps League, Michigan Bar Association, Business Enterprise Program, Third Circuit Court, Recorders Court and 36th District Court. Although the System reports information for several small employers, the State is legally responsible for almost all contractually required contributions to the System. This level of responsibility is ongoing and is unlikely to change significantly in the foreseeable future. Therefore, the reporting requirements for a single employer plan have been adopted.

The System's financial statements are included as a pension and other employee benefit trust fund in the combined financial statements of the State.

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**

Retirees and beneficiaries		
currently receiving benefits:	2012	2011
Regular benefits	45,886	45,338
Survivor benefits	6,884	6,783
Disability benefits	3,518	3,527
Total	56,288	55,648
Current employees:		
Vested	17,401	19,080
Non-vested	459	570
Total	17,860	19,650
Current employees active in defined		
contribution pension plan	516	
Inactive employees entitled		
to benefits and not yet		
receiving them	5,755	6,094
Total all members	80,419	81,392

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

### Notes to Basic Financial Statements (continued)

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

Health, Dental, and Vision Plan	2012	2011
Eligible participants	55,335	54,773
Participants receiving benefits:		
Health	49,520	49,171
Dental	50,010	49,585
Vision	49,959	49,575
Defined Contribution participants		
receiving benefits:		
Health	1,257	472
Dental	1,292	484
Vision	1,288	480

At September 30, 2003, the System recognized 116 participants in the Defined Contribution (DC) Plan who elected to retire under the Early Out Retirement program. This program provided a .25% incentive for those DC members who qualified, which will be provided by the System. These 116 participants have not been included in the pension membership schedule on the previous page.

#### **BENEFIT PROVISIONS - PENSION**

#### Introduction

Benefit provisions of the defined benefit pension plan are established by State statute, which may be amended. Public Act 240 of 1943, State Employees' Retirement Act, as amended, establishes eligibility and benefit provisions for the defined benefit pension plan. Retirement benefits are determined by final average compensation and years of service. Members are eligible to receive a monthly benefit when they meet certain age and service requirements. The System also provides duty disability, non-duty disability and survivor benefits.

A member who has separated from employment may request a refund of his or her member contribution account. A refund may cancel a former member's rights to future benefits. However, former members who return to employment and who previously received a refund of their contributions may reinstate their service through repayment of the refund upon satisfaction of certain requirements.

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

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

#### Pension Reform of 2012

On December 15, 2011, the Governor signed Public Act 264 of 2011 into law. The legislation granted members a choice regarding their future retirement plan. They had the following options:

• **Option 1: DB Classified.** Members voluntarily elected to remain in the DB plan for future service and contribute 4% of their annual compensation to the pension fund until they terminate state employment. The 4% contribution began on April 1, 2012.

### Notes to Basic Financial Statements (continued)

- **Option 2: DB 30.** Members voluntarily elected to remain in the DB plan for future service and contribute 4% of pay until they reach 30 years of service. When they reach 30 years of service, they will switch to the State's DC plan. The 4% contribution began April 1, 2012, and continues until they switch to the DC plan or terminate employment, whichever comes first.
- **Option 3: DB/DC Blend.** Members voluntarily elected not to pay the 4% and therefore became participants in the DC plan for future service beginning April 1, 2012. As a DC plan participant they receive a 4% employer contribution to their 401(k) account and are eligible for an additional dollar-for-dollar employer match of up to 3% of pay to the plan.

Deferred members of the DB plan (with 10 or more years of service) who are reemployed by the State on or after January 1, 2012, become participants in the DC plan. Their pension calculation is determined by their final average compensation (FAC) and years of service as of March 31, 2012. They retain their eligibility for the retiree health insurance premium subsidy offered by the State.

Former nonvested members of the DB plan (with less than 10 years of service) who are reemployed by the State on or after January 1, 2012 and before January 1, 2014, become participants in the DC plan. When they have earned sufficient service credit for vesting (10 years) they would be eligible for a pension based on their FAC and years of service in the DB plan as of March 31, 2012. They retain their eligibility for the retiree health insurance premium subsidy offered by the State.

Former nonvested members (with less than 10 years of service) of the DB plan who are reemployed by the State on or after January 1, 2014 become members of the DC plan. Any service credit previously earned would count towards vesting for the DC plan. They will not be eligible for any pension or retiree health insurance coverage premium but will become a participant in the Personal Healthcare Fund where they will contribute up to 2% of their compensation to a 401(k) or 457 account, earning a matching 2% employer contribution. They will also receive a credit into a health reimbursement account (HRA) at termination if they terminate employment with at least 10 years of service. The credit will be \$2,000 for participants who are at least 60 years old or \$1,000 for participants who are less than 60 years old at termination.

### **Regular Retirement**

The retirement benefit is based on a member's years of credited service (employment) and FAC. The normal benefit equals 1.5% of a member's FAC multiplied by the years and partial year of credited service and is payable monthly over the member's lifetime.

Under PA 264 of 2011, FAC is initially determined as the annual average of the highest 3 years of compensation (including overtime paid before January 1, 2012, but excluding overtime paid after December 31, 2011). If the end date for the initial FAC calculation is between January 1, 2012, and January 1, 2015, then a prorated amount of post-2008 average overtime will be added to the initial FAC calculation. If the end date for the initial FAC calculation is January 1, 2015, or later, then an annual average of overtime – for the 6-year period ending on the FAC calculation date – will be added to that initial FAC calculation to get the final FAC number.

For members who switch to the DC plan for future service, the pension calculation FAC times 1.5% times years of service) will be determined as of the point the member switches to the DC plan. If the FAC period includes the date of the switch to the DC plan, then the FAC will include up to 240 hours of accrued annual leave multiplied by the rate of pay as of the date of the switch. The hours will be paid at separation.

A member may retire and receive a monthly benefit after attaining:

- 1. age 60 with 10 or more years of credited service; or
- 2. age 55 with 30 or more years of credited service; or
- 3. age 55 with at least 15 but less than 30 years of credited service. The benefit allowance is permanently reduced 0.5% for each month from the member's age on the effective date of retirement to the date the member will attain age 60.

### Notes to Basic Financial Statements (continued)

Employees in covered positions are eligible for supplemental benefits and may retire after attaining:

- 1. age 51 with 25 or more years in a covered position; or
- 2. age 56 with 10 or more years in a covered position.

In either case, the three years immediately preceding retirement must have been in a covered position. Employees in covered positions are responsible for the custody and supervision of inmates.

Employees of closing Department of Community Health facilities are eligible for retirement under one of the following conditions:

- 1. age 51 with 25 years of service, the last 5 of which were rendered in the closing facility; or
- 2. age 56 with 10 years of service, the last 5 of which were rendered in the closing facility; or
- 3. 25 years of service at the closing facility regardless of age.

Employees of the State Accident Fund, Michigan Biologic Products, or Liquor Control Commission who were terminated as the result of privatization may retire if the member's age and length of service was equal to or greater than 70 on the date of transfer or termination.

Conservation Officers (CO) with a hire date on or before April 1, 1991, are eligible to retire after 25 years of service, 20 of which must have been rendered as a CO. COs hired after April 1, 1991, and before March 31, 1997, must have 23 years of service as a CO to be eligible for a full retirement benefit with only 25 years of service. In either case, 2 years immediately preceding retirement must be as a CO.

#### **Deferred Retirement**

Any member with 10 or more years of credited service who terminates employment but has not reached the age of retirement is a deferred member and is entitled to receive a monthly pension upon reaching age 60, provided the member's accumulated contributions have not been refunded. Deferred retirement is available after 5 years of service for State employees occupying unclassified positions in the executive and legislative branches and certain Department of Community Health employees subject to reduction in force lay-offs by reason of deinstitutionalization.

#### Non-Duty Disability Benefit

A member with 10 or more years of credited service who becomes totally and permanently disabled not due to performing duties as a State employee is eligible for a non-duty disability pension. The non-duty disability benefit is computed in the same manner as an age and service allowance based upon service and salary at the time of disability.

#### Duty Disability Benefit

A member who becomes totally and permanently disabled from performing duties as a State employee as a direct result of State employment and who has not met the age and service requirement for a regular pension, is eligible for a duty disability pension. Public Act 109 of 2004 amended the State Employees' Retirement Act to change the calculation of the pension benefit and increase the minimum annual payment. If the member is under age 60, the duty disability allowance is now a minimum of \$6,000 payable annually. At age 60 the benefit is recomputed under service retirement.

#### Survivor Benefit

Upon the death of a member who was vested, the surviving spouse shall receive a benefit calculated as if the member had retired the day before the date of death and selected a survivor pension. Certain designated beneficiaries can be named to receive a survivor benefit. Public Act 109 of 2004 amended the State Employees' Retirement Act to change the calculation of Duty Death benefits and redefines eligibility for deceased member's survivors. The new minimum duty-related death benefit has been increased to \$6,000.

### Notes to Basic Financial Statements (continued)

#### Pension Payment Options

When applying for retirement, an employee may name a person other than his or her spouse as a beneficiary if the spouse waives this right. If a beneficiary is named, the employee must choose whether the beneficiary will receive 100%, 75% or 50% of the retiree's pension benefit after the retiree's death. The decision is irrevocable. A description of the options follows.

<u>Regular Pension</u> - 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 beneficiaries.

<u>100%</u> Survivor Pension - Under this option, after the retiree's death, the beneficiary will receive 100% of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. If the beneficiary predeceases the retiree, the pension "pops-up" to the regular pension amount; another beneficiary cannot be named.

<u>75% Survivor Pension</u> - Under this option, after the retiree's death, the beneficiary will receive 75% of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. The reduction factor is lower than the factor used in the 100% option previously described. If the beneficiary predeceases the retiree, the pension "pops-up" to the regular pension amount; another beneficiary cannot be named.

50% Survivor Pension - Under this option, after the retiree's death, the beneficiary will receive 50% of the pension for the remainder of the beneficiary's lifetime. If this option is elected, the normal retirement benefit is reduced by a factor based upon the ages of the retiree and of the beneficiary. The reduction factor is lower than the factor used in the 100% or 75% option previously described. If the beneficiary predeceases the retiree, the pension "pops-up" to the regular pension amount; another beneficiary cannot be named.

<u>Equated Pension</u> - An equated pension may be chosen by any member under age 65 except a disability retiree and an early supplemental retiree. Equated pensions provide an additional amount until age 65 and may be combined with Regular, 100%, 75% or 50% option. At age 65 the monthly amount is permanently reduced. The initial and reduced amounts are based on an estimate of social security benefits at age 65, provided by the Social Security Administration Office. In order to calculate this benefit, members choosing this option must provide ORS with an estimate from the Social Security Administration Office. The actual amount received from social security may vary from the estimate.

#### Post Retirement Adjustments

One-time upward benefit adjustments were made in 1972, 1974, 1976, 1977 and 1987. Beginning October 1, 1988, a 3% non-compounding increase, up to a maximum of \$25 monthly, is paid each October to recipients who have been retired 12 full months. Beginning in 1983, eligible benefit recipients share in a distribution of investment income earned in excess of 8% annually. This distribution is known as the supplemental payment. The supplemental payment is offset by one year's cumulative increases received after the implementation of the annual 3% increase in benefits. These adjustment payments were not issued during fiscal years 1991 through 1994. Members who retired on or after October1, 1987, are not eligible for the supplemental payment.

### **Contributions**

<u>Member Contributions</u> - Under Public Act 264 of 2011, members who voluntarily elected to remain in the DB plan contribute 4% of compensation to the retirement system. In addition, members may voluntarily contribute to the System for the purchase of creditable service, such as military service or maternity leave, or a universal buy-in. If a member terminates the System employment before a retirement benefit is payable, the member's contribution and interest on deposit may be refunded. If the member dies before being vested, the member's contribution and interest are refunded to the designated beneficiaries.

### Notes to Basic Financial Statements (continued)

<u>Employer Contributions</u> - The statute requires the employer to contribute to finance the benefits of plan members. These employer contributions are determined annually by the System's actuary and are based upon level-dollar value funding principles so the contribution rates do not have to increase over time.

#### **Banked Leave Time**

Public Act 33 of 2004 amended the State Employees' Retirement Act to include Banked Leave Time (BLT) for members. BLT is an extension of the State's current annual leave program, which banks a predetermined number of hours per pay period. However, the BLT program will not have an effect on a member's final average compensation calculation.

### **BENEFIT PROVISIONS - OTHER POSTEMPLOYMENT**

Benefit provisions of the postemployment benefit plan are established by State statute, which may be amended. Public Act 240 of 1943, as amended, establishes eligibility and benefit provisions for the OPEB plan. Defined Benefit (Tier 1) members are eligible to receive health, prescription drug, dental, and vision coverage on the first day they start receiving pension benefits. Defined Contribution (Tier 2) participants who elected to retain the graded premium subsidy benefit under the reform elections of Public Act 264 of 2011, are also eligible to receive subsidized health, prescription drug, dental and vision coverage after terminating employment, if they meet eligibility requirements. There is no provision for ad hoc or automatic increases. The State Employees' Retirement Act requires joint authorization by DTMB and the Civil Service Commission to make changes to retiree medical benefit plans. Defined Contribution (Tier 2) participants who elected the Personal Healthcare Fund under Public Act 264 of 2011, and those hired on or after January 1, 2012, are not eligible for any subsidized health, prescription drug, dental or vision coverage in retirement, but may purchase it at their own expense (certain conditions apply).

Former nonvested members of the DB plan who are reemployed by the state on or after January 1, 2014 are not eligible for retiree health insurance coverage premium but will become a participant in the Personal Healthcare Fund described on page 24.

Public Act 185 of 2010 required that each actively employed member or qualified participants of the system, beginning with the first pay date after November 1, 2010, and ending September 30, 2013, contribute an amount equal to 3.0% of the member's or qualified participant's compensation toward retiree healthcare. Public Act 264 of 2011 rescinded that provision and refunded any collected contributions to all members.

In addition to member contributions, the employer funds OPEB benefits for both Tier 1 and Tier 2 members on a prefunded basis. Retirees with the premium subsidy benefit contribute 20% of the monthly premium amount for the health (including prescription coverage), dental and vision coverage. Retirees with a graded premium subsidy benefit accrue credit towards insurance premiums in retirement, earnings a 30% subsidy with ten years of service, with an additional 3% subsidy for each year of service thereafter, not to exceed the maximum allowed by statute, or 80%. The employer's payroll contribution rate to provide this benefit was 13.70% and 13.40% for fiscal years 2012 and 2011, respectively.

Retirees are provided with life insurance coverage equal to 25% of the active life insurance coverage, \$1,000 for spouse and \$1,000 for each dependent under age 23. Premiums are fully paid by the State.

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### Notes to Basic Financial Statements (continued)

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

alth, Dental and Vision Plan	 2012	2011
Eligible Participants	55,335	54,773
Participants receiving benefits:		
Health	49,520	49,171
Dental	50,010	49,585
Vision	49,959	49,575
Defined Contribution participants		
receiving benefits:		
Health	1,257	472
Dental	1,292	484
Vision	1,288	480
Expenses for the year	\$ 493,143,559	\$ 473,436,246
Employer payroll contribution rate	13.7%	13.4%

### **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 State 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.

### Reserves

Public Act 240 of 1943, as amended, created the Reserve for Employee Contributions, Reserve for Employer Contributions, Reserve for Retired Benefit Payments, Reserve for Undistributed Investment Income, and Reserve for Health (OPEB) Related Benefits. The financial transactions of the System are recorded in these reserves as required by Public Act 240 of 1943, as amended.

<u>Reserve for Employee Contributions</u> – Beginning April 2012, members contribute 4% of their compensation to this reserve as well as purchases of eligible service credit and repay previously refunded 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 unclaimed amounts transferred to the income account. At September 30, 2012, and 2011, the balance in this reserve was \$168.7 million and \$142.9 million, respectively.

<u>Reserve for Employer Contributions</u> - All employer contributions are credited to this reserve. Interest from the income account is credited annually. Amounts are transferred annually from this reserve to the Reserve for Retired Benefit Payments to fund that reserve. At September 30, 2012, and 2011, the balance in this reserve was \$(\$1.1) billion and \$0.7 billion, respectively.

<u>Reserve for Retired Benefit Payments</u> - This represents the reserves for payment of future retirement benefits to current retirees. At retirement, a member's accumulated contributions plus interest are transferred into this reserve from the Reserve for Employee Contributions. Monthly benefits, which are paid to the retiree, reduce the 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 this reserve to bring the reserve into balance with the actuarial present value of retirement allowances. At September 30, 2012, and 2011, the balance in this reserve was \$10.6 billion and \$8.9 billion, respectively.

### Notes to Basic Financial Statements (continued)

<u>Reserve for Undistributed Investment Income</u> - The net investment earnings (losses) are recorded in this reserve. Interest as authorized by the board is transferred annually to the other reserves. Administrative expenses are paid from this reserve. At September 30, 2012, and 2011, the net balance of this reserve was (\$477.0) million and (\$1,155.1) million, respectively.

<u>Reserve for Health (OPEB) Related Benefits</u> – This reserve is credited with employee and employer contributions for retirees' health (including prescription coverage), dental, and vision benefits. Starting in fiscal year 2012, the employer contribution is based on a prefunded basis. In fiscal year 2012, this reserve includes revenue from the federal government for retiree drug subsidy payment (RDS) pursuant to the provisions of Medicare Part D. In fiscal year 2011, this reserve included revenue from the federal government for the early retiree reinsurance program (ERRP) and RDS pursuant to the provision of Medicare Part D. ERRP ended in fiscal year 2011. The required contribution is based on pay-as-you-go funding and represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liability (or funding excess) over a period not to exceed thirty years. However, the actual annual contributions have been less than the annual required contribution (the ARC). Interest is allocated based on the beginning balance of the reserve. Premiums for health, dental, and vision benefits are paid from this reserve. At September 30, 2012, and 2011, the balance in this reserve was \$344.3 million and \$120.5 million, respectively.

#### **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 "antialienation" 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 are 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.

### Notes to Basic Financial Statements (continued)

### Cost 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 Postemployment 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.

### **Related Party Transactions**

<u>Leases and Services</u> - 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 following summarizes costs incurred by the System for such services.

	2012	2011
Building Rentals	\$ 136,641	\$ 166,190
Technological Support	1,412,149	1,950,550
Attorney General	351,883	349,281
Investment Services	2,627,534	2,373,370
Personnel Services	2,029,986	2,182,758

<u>Cash</u> - On September 30, 2012, and 2011, the System had \$89.0 million and \$111.4 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 \$29.4 thousand and \$6.4 thousand for the years ended September 30, 2012, and 2011, respectively.

### Excess Benefits

Internal Revenue Service (IRS) Code Section 415 requires that, for individuals who receive retirement benefits in excess of established limits, these benefits are recorded and reported outside of the pension plan to keep the qualified status of the plan. This includes coordination of benefit issues whereby a retiree participates in more than one qualified plan. In fiscal years 2011 and 2012, no retirees met the criteria.

### NOTE 3 - CONTRIBUTIONS AND FUNDED STATUS

#### **Contributions**

The State is required by Public Act 240 of 1943, as amended, to contribute amounts necessary to finance the coverage of members and retiree OPEB. Members currently participate in the System on a contributory basis of 4% of the annual compensation. Under certain circumstances, members may contribute to the System for the purchase of creditable service, such as military service or maternity leave. Effective August 1, 1998, the retirement act was amended to permit a universal buy-in. With a universal buy-in, a member may elect to purchase no more than 5 years of service credit (less other service credit purchased). Contribution provisions are specified by State statute and may be amended only by action of the State Legislature.

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### Notes to Basic Financial Statements (continued)

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, 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 \$419.9 million and \$424.5 million for fiscal years 2012 and 2011, respectively, representing 33.3% 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. \$95.3 million and \$116.1 million for fiscal years 2012 and 2011, respectively, for the normal cost of pensions representing 7.5% and 7.2% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.
- 2. \$495.3 million and \$331.9 million for fiscal years 2012 and 2011, respectively, for amortization of unfunded actuarial accrued liability representing 38.8% and 20.5% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.

Actual employer contributions for other postemployment benefits (OPEB) were \$648.9 million and \$388.2 million for fiscal years 2012 and 2011, respectively, representing 12.8% 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:

- 1. \$345.1 million and \$409.6 million for fiscal years 2012 and 2011, respectively, for the normal cost of OPEB representing 11.4% and 13.9% (before reconciliation) of annual covered payroll for fiscal years 2011 and 2010, respectively.
- 2. \$615.5 million and \$610.5 million for fiscal years 2012 and 2011, respectively, for amortization of unfunded actuarial accrued liability representing 20.2% and 20.8% (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 each of the subsequent years' contribution, and is not recognized as a payable or receivable in the accounting records.

In March 2001, 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 and payments began in fiscal year 2002.

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 the members' paycheck and are treated as employer pick-up contributions pursuant to Internal Revenue Code Section 414(h). At September 30, 2012, and September 30, 2011, there were 3,160 and 3,448 agreements, respectively. Agreement amounts that will not be collected within 12 months are discounted using the assumed actuarial rate of return of 8%. The average length remaining of a contract was approximately 10.2 and 10.8 years for 2012 and 2011. The short-term receivable was \$5.3 million and the discounted long-term receivable was \$23.1 million at September 30, 2012. At September 30, 2011, the short-term receivable was \$5.7 million and the discounted long-term receivable was \$26.5 million.

### Notes to Basic Financial Statements (continued)

#### **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 \$15.6 billion, and the actuarial value of assets was \$10.2 billion, resulting in an unfunded actuarial accrued liability (UAAL) of \$5.4 billion and a funded ratio of 65.5%. The covered payroll (annual payroll of active employees covered by the plan) was \$1.3 billion, and the ratio of the UAAL to the covered payroll was 422.0%.

For fiscal year 2011, the actuarial accrued liability (AAL) for OPEB was \$14.3 billion, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$14.3 billion and a funded ratio of 0%. The covered payroll (annual payroll of active employees covered by the plan) was \$3.0 billion, and the ratio of the UAAL to the covered payroll was 468.8%.

#### 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 schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present 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.

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

### Notes to Basic Financial Statements (continued)

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

### **Summary of Actuarial Assumptions**

Valuation Date	9/30/2011
Actuarial Cost Method	Entry Age, Normal
Amortization Method - Pension	Level Dollar, Closed
Amortization Method - OPEB	Level Percent of Payroll, Closed
Remaining Amortization Period	25 years <sup>(1)</sup>
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	8.0%
Investment Rate of Return - OPEB	4.0%
Projected Salary Increases	3.5 - 12.5%
Cost-of-Living Pension Adjustments	3% Annual Non-Compounded with Maximum Annual Increase of \$300 for those eligible
Health Care Cost Trend Rate	9.0% Year 1 graded to 3.5% Year 10
Other Assumptions OPEB only:	
Opt Out Assumption	10% of eligible participants 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
Coverage Election at retirement	continuing after the retiree's death 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.

### **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 Employees Retirement System Investment Act, Public Act 314 of 1965, as amended. The Public Employees 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.

### Notes to Basic Financial Statements (continued)

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 its 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 Statement 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".

Investment and Investment Type	Percentage of Market Value	Notational Value	Investments At Fair Value	Net Appreciation (Depreciation) in Fair Value	Investment Income FY2012	Fair Value Subject to Credit Risk
Structured Notes Absolute Return Investments	0.7%	71.1	72.5	4.0	-	72.5
U.S. Treasury Bond Future Contracts Fixed Income Investments	0.0%	3.2	-	-	-	-
Option Contracts Equity Investments	0.0%	3.1	-	0.5	-	-
Swap Agreements International Equity Investments	1.8%	203.7	178.3	46.9	0.4	14.1
Swap Agreements Equity Investments	0.2%	182.6	19.1	9.8	(0.3)	6.1
Swap Agreements Currency Forward Opportunistic Investments	0.0%	0.9	-	-	-	-

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

### Notes to Basic Financial Statements (continued)

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

Investment and Investment Type	Percentage of Market Value	Notational Value	Investments At Fair Value	Net Appreciation (Depreciation) in Fair Value	Investment Income FY2011	Fair Value Subject to Credit Risk
Structured Notes Absolute Return Investments	0.7%	67.6	65.5	(3.2)	-	65.5
U.S. Treasury Bond Future Contracts Fixed Income Investments	0.0%	2.3	-	-	-	-
Option Contracts Absolute Return Investments	0.0%	0.2	-	-	-	-
Swap Agreements International Equity Investments	4.3%	348.0	380.6	(30.7)	3.6	43.7
Swap Agreements Equity Investments	0.0%	141.2	3.8	(5.0)	(0.1)	4.1
Swap Agreements Currency Forward	0.0%	1.8	0.1	0.1	-	0.1

Opportunistic Investments

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 shortterm 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 multiyear 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.

### Notes to Basic Financial Statements (continued)

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.

During the fiscal year, 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 market 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 market 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 of 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 \$1,269,713,565 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 \$730,911,160 and \$1,018,987,155. The carrying amount, which is the fair market value, of securities on loan for the System as of September 30, 2012 and 2011, was \$918,848,177 and \$1,240,050,092 respectively.

Gross income, including capital gains/losses, from security lending for the fiscal years ended September 30, 2012 and 2011 with Credit Suisse was \$20,161,254 and \$17,682,962 respectively. Expenses associated with this income were the borrower's rebate of \$777,859 and \$707,976, and fees paid to the agent bank of \$1,865,648 and \$3,224,096 respectively.

### Notes to Basic Financial Statements (continued)

#### 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 prorata 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.

<u>Credit Risk</u> - 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 10.0% of the borrowers 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 by 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.

### Notes to Basic Financial Statements (continued)

Investment Type	Fair Value	S&P	<b>E</b> 1 <b>E</b> 1					
	T un vurue	Sar	Fair Value	Moody's	Fair Value	S & P	Fair Value	Moody
Short Term	\$ 617,841	A-1	\$ 617,841	P-1	\$ 407,298	A - 1	\$ 399,224	P-1
	-	A-2	-	P-2	-	A-2	8,074	P-2
Government Securities								
US Agencies - Sponsored	-	AAA	127,945	Aaa	-	AAA	99,222	Aaa
	127,945	AA	-	Aa	99,222	AA	-	Aa
Corporate Bonds & Notes								
	6,817	AAA	12,455	Aaa	16,889	AAA	22,941	Aaa
	139,581	AA	91,129	Aa	165,204	AA	133,112	Aa
	419,600	А	435,364	А	474,410	А	491,238	А
	268,051	BBB	287,836	Baa	249,123	BBB	240,809	Baa
	33,095	BB	24,466	Ba	27,484	BB	23,951	B a
	8,380	в	8,920	В	3,737	в	5,073	В
	2,174	CCC	1,777	Caa	2,090	CCC	1,823	Caa
	-	CC	131	Ca	48	CC	212	C a
	-	С	-	С	-	С	2	С
	7	D	-	D	80	D	-	D
	85,974	NR	101,601	NR	92,584	NR	112,488	NR
nternational *								
	78,624	AA	60,151	Aa	156,407	AA	208,311	Aa
	35,440	A	84,408	A	125,313	A	84,465	A
		BBB	7,667	Baa		BBB	35,164	Baa
	-	BB		Ba	18,124	BB		Ba
	38,162	NR	-	NR	65,296	NR	37,200	NR
Securities Lending Collateral								
	122,483	A - 1	122,483	P-1	98,050	A - 1	98,050	P-1
	2,579	AAA	67,852	Aaa	190,315	AAA	184,592	Aaa
	140,681	AA	12,859	Aa	117,141	AA	453,496	Aa
	12,859	A	75,409	A	67,691	A	62,060	A
	12,057	BBB	415	Baa	364,647	BBB	33,918	Baa
	4,891	BB	392,524	Ba	-	BB	5,728	Ba
	415	B		В	2,678	В	2,678	B
	55,274	ccc	42,167	Caa	52,892	CCC	41,099	Caa
		CC	13,106	Ca		CC	11,793	Ca
	387,633	NR	-	NR	122,005	NR	122,005	NR
Mutual Funds	-	А	-	А	985	А	-	А
	-	NR	_	NR	-	NR	985	NR

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

NR - not rated

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

<u>Custodial Credit Risk</u> - 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 2011, no securities were exposed to custodial credit risk.

#### Notes to Basic Financial Statements (continued)

<u>Concentration of Credit Risk</u> - 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 5.0% of the outstanding obligations of any one issuer or investing more than 5.0% 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.

<u>Interest Rate Risk - Fixed Income Investments</u> - 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 \$617.8 million and \$407.3 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.

### Notes to Basic Financial Statements (continued)

		2012	2		2011	
			Effective			Effective
			Duration			Duration in
	F	'air Value	in Years	ŀ	Fair Value	Years
Government						
U.S. Treasury	\$	73,537	3.9	\$	29,757	8.3
U.S. Agencies - Backed		158,110	3.2		221,334	3.9
U. S. Agencies - Sponsored		127,945	3.9		99,222	3.0
Corporate		963,679	3.9		1,031,649	4.3
International*						
Corporate		152,226	0.3		365,140	0.2
Mutual Funds		-			985	4.4
Total	\$	1,475,497		\$	1,748,087	_

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

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 \$1,633.4 million and \$1,137.5 million which amounted to 16.8% and 12.7% of total investments (exclusive of securities lending collateral) of the System, respectively.

### Notes to Basic Financial Statements (continued)

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

										Internat		tional	
<u>Region</u>	<u>Country</u>	Currency	Alt. Invest. Market Value In U.S. \$		Equity Market Value In U.S. \$		Real Estate Market Value In U.S. \$		Ma	Equities arket Value In U.S. \$	Mar	rivatives ket Value U.S. \$*	
<u>AMERI</u>	CA												
	Brazil Canada	Real Dollar			\$	450					\$	99	
	Mexico	Peso				559							
EUROP	E												
	European Union	Euro	\$	214,799		2,440			\$	6,603		3,268	
	Switzerland	Franc				13,719				1,731		742	
	Sweden	Krona								1,946		80	
	Denmark	Krone				570				462			
	Norway	Krone		2 407		4.071				10.007		2 100	
	U.K.	Sterling		2,497		4,971				10,807		3,188	
<b>PACIFI</b>	<u>C</u>												
	Australia	Dollar										1,926	
	China	Renminbi				224							
	Hong Kong	Dollar								821		810	
	Japan	Yen								63		159	
	New Zealand	Dollar										29	
	Singapore	Dollar								1,938		818	
	South Korea	Won								1,697		1,394	
MIDDL	<u>E EAST</u>												
	Israel	Shekel				9,935							
AFRIC	<u>4</u>												
	South Africa	Rand				47							
VARIO	<u>US</u>						\$	204,577		1,140,049			
	Total		\$	217,296	\$	32,915	\$	204,577	\$	1,166,117	\$	12,513	

\*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 0.4 years.

### Notes to Basic Financial Statements (continued)

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

								International			l
			t. Invest.		Equity		al Estate		Equities		rivatives
	~	~	rket Value		ket Value		rket Value		rket Value		ket Value
<b>Region</b>	<u>Country</u>	<u>Currency</u>	 n U.S. \$	Ir	n U.S. \$	<u>l</u> i	n U.S. \$		n U.S. \$	In	U.S. \$*
AMERI	CA										
	Canada	Dollar									
	Mexico	Peso		\$	336					\$	1,118
EUROP	<u>'E</u>										
	European Union	Euro	\$ 212,794		1,444			\$	1,905		(1,795)
	Switzerland	Franc			16,157						3,520
	Sweden	Krona							1,583		2,733
	Denmark	Krone							291		224
	Norway	Krone									921
	U.K.	Sterling	2,756		17,386				624		4,124
PACIFI	<u>C</u>										
	Australia	Dollar									3,387
	China	Renminbi			137						
	Hong Kong	Dollar			1,563						27
	Japan	Yen	159						72		7,337
	New Zealand	Dollar									678
	Singapore	Dollar			1,804				1,789		(319)
	South Korea	Won							1,336		1,471
MIDDL	<u>E EAST</u>										
	Israel	Shekel			3,349						
AFRICA	<u>A</u>										
	South Africa	Rand			61						
VARIO	<u>US</u>		 			\$	175,199		673,348		
	Total		\$ 215,709	\$	42,237	\$	175,199	\$	680,948	\$	23,426

\*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 0.3 years.

### 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 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 statements required.

### **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

In Michigan Coalition SEW, et al v State of Michigan, et al, Plaintiffs filed suit on February 13, 2012 alleging that 2011 PA 264 and, in particular, MCL 38.35a and 38.50a were unconstitutional because they were enacted without the approval of the Civil Commission, which has the authority of "fix rates of compensation" and regulate all conditions of employment under Const 1962, art 11, sec 5.

On September 25, 2012 the trial court granted summary disposition for Plaintiffs finding that PA 264 was a violation of art 11, sec 5. This was not a final order and Plaintiffs have subsequently submitted a second motion for partial summary disposition asserting that the overtime provisions found in section 1(e) of PA 264 also violate art 11, sec 5. Once final order is entered by the trial court, the State will seek a stay of the order until review by the Court of appeals. The 4% deductions (related to sec 38.35a. above) continue at this time. The hearing on the partial motion for summary disposition was heard on November 28, 2012. The trial court ruled PA 264 was unconstitutional. The parties will need to agree to an expedited appeal while the 4% contribution will continue. Should a final ruling determine the Act is unconstitutional, those who have contributed to the fund and changed their pension benefits, as a result of PA 264, will be made whole.

### **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 19.2% or \$3,833,824 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.

### **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 unfunded or overfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the System.

#### Pension Benefits (\$ in millions)

Valuation Date Sept 30	V	ctuarial Value of Assets (a)	A L	ctuarial .ccrued iability ) Entry Age (b)	(Ov Accru	nfunded erfunded) ued Liability UAAL) (b-a)	Funded Ratio (a/b)	overed ayroll (c)	UAAL as a % of Covered Pay ((b-a)/c)	-
2002	\$	10,616	\$	10,753	\$	137	98.7 %	\$ 2,133	6.4	%
2003		10,441		11,761		1,320	88.8	1,860	71.0	
2004 <sup>1</sup>		10,149		12,004		1,855	84.5	1,889	98.2	
2005		9,897		12,400		2,503	79.8	1,880	133.1	
2006		10,111		12,799		2,688	79.0	1,848	145.5	
2006 <sup>2</sup>		10,890		12,799		1,909	85.1	1,848	103.3	
2007		11,344		13,162		1,818	86.2	1,826	99.6	
2008		11,403		13,766		2,363	82.8	1,764	134.0	
2009		11,107		14,234		3,127	78.0	1,734	180.3	
2010		10,782		14,860		4,078	72.6	1,622	251.5	
2011		10,212		15,597		5,385	65.5	1,276	422.0	

<sup>1</sup> Revised actuarial assumptions.

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

### **Other Postemployment Benefits**<sup>\*</sup> (\$ in millions)

Valuation Date Sept 30	Va	tuarial alue of ssets (a)	A L	ctuarial Accrued Jability ) Entry Age (b)	(Ov Accru	nfunded erfunded) ned Liability UAAL) (b-a)	Funded Ratio (a/b)	-	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2006	\$	-	\$	13,499	\$	13,499	0.0	% \$	2,848	474.0 %
2007		-		12,966		12,966	0.0		2,949	439.6
2008		-		13,542		13,542	0.0		2,822	479.9
2009		-		12,618		12,618	0.0		2,972	424.6
2010		-		14,666		14,666	0.0		2,938	499.2
2011		-		14,251		14,251	0.0		3,040	468.8

Includes members from both the defined benefit and defined contribution plans

### **Required Supplementary Information (continued)**

### **Schedules of Employer and Other Contributions**

#### **Pension Benefits**

 Fiscal Year Ended Sept. 30	C	Annual Required Contribution (ARC)		Actual Contribution		Percentage Contributed		
2003	\$	184,212,419		\$ 79,291,845		43.0	%	1
2004		262,546,900		103,873,294	2	39.6		
2005		308,208,544		256,433,052		83.2		
2006		366,650,515		270,705,017		73.8		
2007		316,138,419	4	150,858,506	3	47.7		
2008		308,019,761		355,732,115		115.5		
2009		351,646,663		343,787,486		97.8		
2010		418,427,738		369,952,868		88.4		
2011		447,924,105		424,546,805		94.8		
2012		590,570,637		419,926,997		71.1		

#### **Other Postemployment Benefits**

	Annual			
Fiscal Year	Required		Other	
Ended	Contribution	Actual	Governmental	Percentage
Sept. 30	(ARC)	Contribution	Contributions	Contributed
2007	\$ 898,716,522	\$ 359,375,055 <sup>3</sup>		40.0
2008	879,245,817	342,186,903	\$ 23,003,762	41.5
2009	922,791,423	362,419,285	21,986,686	41.7
2010	870,011,953	360,125,502	27,058,460	44.5
2011	1,020,144,325	388,196,118	64,773,181	44.4
2012	960,639,525	648,881,078	23,774,071	70.0

<sup>1</sup> The ARC and percentage contributed are due to an additional transfer of \$17.4 million into the Health Advance Funding SubAccount in fiscal year 2003.

<sup>2</sup> In fiscal year 2004, \$24.4 million was transferred from the Health Advance Funding SubAccount to the Pension Plan at the request of the State Budget Director and with the approval of the legislature. The purpose of this transfer was to reduce the contribution rates charged to State agencies for fiscal year 2003-2004 to help bring the general fund budget back into balance.

<sup>3</sup> In fiscal year 2007, \$41.3 million was transferred from the Health Advance Funding SubAccount to the Reserve for Employer Contributions in accordance with the provisions set forth in the State Employees' Retirement Act to comply with Executive Order 2007-3 and the subaccount was brought to \$0.

<sup>4</sup> Pursuant to Public Act 22 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.

### 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, 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 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 Contributions are presented to show the responsibility of the Employer in meeting the actuarial requirements to maintain the System on a sound financial basis.

### **Supporting Schedules**

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

	 2012	 2011
Personnel Services:		
Staff Salaries	\$ 1,276,686	\$ 1,565,480
Retirement and Social Security	498,387	364,861
Other Fringe Benefits	 254,913	 252,417
Total	 2,029,986	 2,182,758
Professional Services:		
Accounting	181,853	247,202
Actuarial	170,440	157,530
Attorney General	351,883	349,281
Audit	51,794	48,514
Consulting	200,964	328,227
Medical	 179,791	 156,428
Total	 1,136,726	 1,287,182
Building and Equipment:		
Building Rentals	136,641	166,190
Equipment Purchase, Maintenance, and Rentals	8,855	5,804
Total	 145,496	 171,994
Miscellaneous:		
Bond Guarantee	3,833,824	
Travel and Board Meetings	9,265	2,933
Office Supplies	9,769	7,435
Postage, Telephone, and Other	568,391	359,233
Printing	108,275	116,932
Technological Support	 1,412,149	 1,950,550
Total	 5,941,673	2,437,083
Total Administrative and Other Expenses	\$ 9,253,880	\$ 6,079,017

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

	 2012	 2011
Health Fees	\$ 14,546,077	\$ 14,527,350
Dental Fees	1,583,298	1,530,399
Vision Fees	488,781	478,418
Total Administrative and Other Expenses	\$ 16,618,156	\$ 16,536,168

The OPEB plan administrative expenses of \$16,618,156 in 2012 and \$16,536,168 in 2011 result from the transfer of all retiree related OPEB activity, including administrative fees paid to insurance carriers, from the State Sponsored Group Insurance Fund in accordance with GASB Statement No. 45.

### **Supporting Schedules (continued)**

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

	 2012	_	2011
Real Estate Operating Expenses	\$ 372,610	2	\$ 536,721
Securities Lending Expenses	2,643,506		3,932,072
Other Investment Expenses <sup>1</sup>			
ORS-Investment Expenses <sup>2</sup>	2,627,534		2,373,370
Custody Fees	156,391		163,003
Management Fees	29,537,005		28,018,726
Research Fees	529,015		455,278
Total Investment Expenses	\$ 35,866,062		\$ 35,479,170

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

<sup>2</sup> Does not exclude Treasury Civil Service fees of \$28,142 for fiscal year 2012 and \$28,608 for ficasl year 2011 recorded as a pass through in the Schedule of Investment Fees - State Treasurer.

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

	 2012	 2011
Accounting	\$ 181,853	\$ 247,202
Actuary	170,440	157,530
Attorney General	351,883	349,281
Independent Auditors	51,794	48,514
Consulting	200,964	328,227
Medical Advisors	 179,791	 156,428
Total Payment for Professional Services	\$ 1,136,726	\$ 1,287,182

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### **Supporting Schedules (continued)**

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

	Employee Contributions	Employer Contributions	Retired Benefit Payments	Undistributed Investment Income	OPEB	Total
Additions:						
Contributions:						
Member contributions	\$ 33,290,784				\$ 27,431,916	\$ 60,722,700
Employer contributions	+	\$ 419,926,997			648,881,078	1,068,808,075
Other governmental contributions		+,,-,,,			23,774,071	23,774,071
Total Contributions	33,290,784	419,926,997			700,087,065	1,153,304,846
Investment income:	20,200,701	113,720,777			100,001,000	1,100,001,010
Net appreciation (depreciation)						
in fair value of investments				\$ 1,165,850,192	14,424,149	1,180,274,341
Interest, dividends, and other				179,618,668	2,328,802	181,947,470
, , ,				179,018,008	2,520,002	181,947,470
Investment expenses:				(277 202)	(5.007)	(270 (10)
Real estate operating expenses				(367,383)	(5,227)	(372,610)
Other investment expenses				(32,459,357)	(390,589)	(32,849,946)
Securities lending activities:						
Securities lending income				19,887,300	273,954	20,161,254
Securities lending expenses				(2,604,129)	(39,377)	(2,643,506)
Net investment income (loss)				1,329,925,291	16,591,712	1,346,517,003
<b>—</b> • • • • • • •						
Transfer from other systems/funds			¢ 05.000	1.041	047.017	244.2/7
Miscellaneous income			\$ 95,209	1,241	247,817	344,267
Total additions	33,290,784	419,926,997	95,209	1,329,926,532	716,926,594	2,500,166,116
Deductions:						
Benefits paid to plan members						
and beneficiaries:						
			1 156 025 451			1 156 025 451
Retirement benefits			1,156,035,451		422 070 070	1,156,035,451
Health benefits					433,878,978	433,878,978
Dental/vision benefits					41,289,296	41,289,296
Personal Health Care					1,340,225	1,340,225
Refunds of contributions	54,635	111,837	20,419	2,035	16,904	205,830
Transfers to other systems/funds						
Administrative and other expenses				9,253,880	16,618,156	25,872,036
Total deductions	54,635	111,837	1,156,055,870	9,255,915	493,143,559	1,658,621,816
Net Increase (Decrease)						
Before Other Changes	33,236,149	419,815,160	(1,155,960,661)	1,320,670,617	223,783,035	841,544,300
Dure outer changes	55,250,115	115,015,105	(1,105,700,001)	1,020,010,017	223,703,033	011,011,000
Other Changes in Net Assets:						
Interest allocation	3,303,497	58,073,242	581,159,735	(642,536,474)		
Transfers upon retirement	(10,715,577)		10,715,577	(0.1,000,000)		
Transfers of employer shares	(10,713,077)	(2,256,246,420)	2,256,246,420			
Total other changes		(2,230,240,420)	2,200,240,420			
in net assets	(7,412,080)	(2,198,173,178)	2,848,121,732	(642,536,474)		
	(7,412,000)	(2,170,173,170)	2,0+0,121,752	(0+2,330,+7+)		
Net Increase (Decrease)	25,824,069	(1,778,358,018)	1,692,161,071	678,134,143	223,783,035	841,544,300
Net Assets Held in Trust		(-,. : 0,00 0,010)	-, =,- 01,07 1		,,	
for Pension and OPEB Benefits:						
Beginning of Year	142,854,082	725,915,520	8,940,919,005	(1,155,113,942)	120,527,982	8,775,102,647
Inguilling VI 1 GAL	172,004,002	120,710,020	0,770,717,003	(1,133,113,742)	120,021,702	0,773,102,047
End of Year	\$ 168,678,151	\$ (1,052,442,498)	\$ 10,633,080,076	\$ (476,979,799)	\$ 344,311,017	\$ 9,616,646,947

### **Supporting Schedules (continued)**

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

	Employee Contributions	Employer Contributions	Retired Benefit Payments	Undistributed Investment Income	OPEB	Total
Additions:						
Contributions:						
Member contributions	\$ 25,830,556				\$ 27,647,644	\$ 53,478,200
Employer contributions		\$ 424,546,805			388,196,118	812,742,923
Other governmental contributions					64,773,181	64,773,181
Total Contributions	25,830,556	424,546,805			480,616,943	930,994,304
Investment income:					<u>, , , , , , , , , , , , , , , , , </u>	
Net appreciation (depreciation)						
in fair value of investments				\$ 184,704,283	2,397,902	187,102,185
Interest, dividends, and other				193,147,735	10,681,052	203,828,787
Investment expenses:						, ,
Real estate operating expenses				(529,842)	(6,879)	(536,721)
Other investment expenses				(30,612,948)	(397,429)	(31,010,377)
Securities lending activities:						
Securities lending income				17,456,337	226,625	17,682,962
Securities lending expenses				(3,881,679)	(50,393)	(3,932,072)
Net investment income (loss)				360,283,886	12,850,878	373,134,764
Transfer from other systems/funds	2,169					2,169
Miscellaneous income			\$ 102,886	43,273	292,824	438,983
Total additions	25,832,725	424,546,805	102,886	360,327,159	493,760,645	1,304,570,220
Deductions:						
Benefits paid to plan members						
and beneficiaries:			1 000 000 000			1 000 000 000
Retirement benefits			1,089,822,880		417 417 011	1,089,822,880
Health benefits					417,417,811	417,417,811
Dental/vision benefits Personal health care					39,461,182	39,461,182
	11.000	417 227	0.411		01.005	401 400
Refunds of contributions	44,655	417,337	8,411		21,085	491,488
Transfers to other systems/funds	4,583			6 070 017	16 526 169	4,583
Administrative and other expenses				6,079,017	16,536,168	22,615,185
Total deductions	49,238	417,337	1,089,831,291	6,079,017	473,436,246	1,569,813,129
Net Increase (Decrease)						
	05 792 497	404 100 469	(1,000,700,405)	25 4 049 140	20 22 4 200	(265-242.000)
Before Other Changes	25,783,487	424,129,468	(1,089,728,405)	354,248,142	20,324,399	(265,242,909)
Other Changes in Net Assets:						
Interest allocation	4,068,318	84,507,393	674,038,612	(762,614,323)		
Transfers upon retirement	(92.062.398)	04,507,575	92,062,398	(702,014,323)		
Transfers of employer shares	(92,002,398)	(839,063,750)	839,063,750			
Total other changes		(839,003,730)	837,003,730			
in net assets	(87,994,080)	(754,556,357)	1,605,164,760	(762,614,323)		
		( - )/	,, . ,			
Net Increase (Decrease)	(62,210,593)	(330,426,889)	515,436,355	(408,366,181)	20,324,399	(265,242,909)
Net Assets Held in Trust			· · ·			
for Pension and OPEB Benefits:						
Beginning of Year	205,064,675	1,056,342,409	8,425,482,650	(746,747,761)	100,203,583	9,040,345,556
				<u>`</u>		
End of Year	\$ 142,854,082	\$ 725,915,520	\$ 8,940,919,005	\$ (1,155,113,942)	\$ 120,527,982	\$ 8,775,102,647

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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

### **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.

### **Report on Investment Activity (continued)**

Investment Category	As of 9/30/12 Actual %	Five-Year Target %
Domestic Equity Pools	26.6 %	31.0 %
International Equity Pools	14.2	16.0
Alternative Investment Pools	20.9	16.0
Real Estate and Infrastrucure Pools	10.6	9.0
Fixed Income Pools	13.2	15.0
Absolute Return Pools	8.5	9.0
Short Term Investment Pools	6.0	4.0
TOTAL	<u>100.0</u> %	100.0 %

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

#### 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 13.4% for the pension and 12.5% for OPEB as compiled by State Street Investment Analytics. Annualized rates of return for the three, five, and ten year periods ending September 30, 2012 were: 9.4%, 1.5%, and 7.5% 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 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.

### **Report on Investment Activity (continued)**

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 13.4% for the Pension Plan and 12.5% for the OPEB Plan.

#### Domestic Equity Pools

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

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

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

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

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### **Report on Investment Activity (continued)**

The pools invest in equities and equity related securities that are listed on U.S. national securities exchanges, including American Depository Receipts (ADRs). It 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:

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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 26.6% of total investments. This compares to 28.1% for fiscal year 2011. The following summarizes the System's 19.8% ownership share of the Domestic Equity pools at September 30, 2012:

### Domestic Equity Pools (in thousands)

Short Term Pooled Investments	\$ 42,138
Equities	2,536,925
Market Value of Equity Contracts	6,071
Other Investments	(38)
Long Term Obligations	1,189
Settlement Principal Payable	(666)
Settlement Proceeds Receivable	364
Accrued Dividends	2,739
Total	\$ 2,588,722

#### **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.

### **Report on Investment Activity (continued)**

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 its 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
Total	100.0 %
Developed	74.9 %
Emerging	25.1
Total	100.0 %

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 15.4% for the MSCI ACWI Ex US Gross.

At the close of fiscal year 2012, the International Equity pools represented 14.2% of total investments. This compares to 12.7% for fiscal year 2011. The following summarizes the System's 19.6% ownership share of the International Equity pools at September 30, 2012:

#### International Equity Pools (in thousands)

Short Term Pooled Investments	\$ 11,929
Equities	1,202,306
Fixed Income Securities	152,226
Market Value of Equity Contracts	14,119
Accrued Dividends and Interest	 359
Total	\$ 1,380,939

### **Report on Investment Activity (continued)**

#### **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:

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

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 20.9% of total investments. This compares to 22.3% for fiscal year 2011. The following summarizes the System's 17.3% ownership share of the Alternative Investment pools at September 30, 2012:

#### Alternative Investment Pools (in thousands)

Short Term Pooled Investments	\$ 33,436
Equities	1,997,737
Settlement Proceeds Receivable	 104
Total	\$ 2,031,277

#### **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 diversifies 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.
- Property Size and Value The pool diversifies its holdings by size so that it is not concentrated in a limited number of large investments.
- Investment Type As summarized on the next page, the pools are diversified by investment type including a new sub-strategy in infrastructure that was initiated during the fiscal year.

### **Report on Investment Activity (continued)**

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
Total	100.0 %

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 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 10.6% of total investments. This compares to 10.8% for fiscal year 2011. The following summarizes the System's 19.5% ownership share of the Real Estate and Infrastructure pools at September 30, 2012:

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

Short Term Pooled Investments	\$ 18,926
Real Estate Equities	973,639
Infrastructure Equities	 37,218
Total	\$ 1,029,783

#### 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 6.4% 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 13.2% of total investments. This compares to 15.2% for fiscal year 2011. The following summarizes the System's 19.6% ownership share of the Fixed Income pools at September 30, 2012:

### **Report on Investment Activity (continued)**

Fixed Income Pools (in thousands)	
Short Term Pooled Investments	\$ 42,702
Fixed Income Securities	1,229,036
Settlement Proceeds Receivable	2,017
Settlement Principal Payable	(940)
Accrued interest	8,839
Total	\$ 1,281,654

#### 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.

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 6.3% for the Pension Plan and 6.4% for the OPEB Plan.

At the close of fiscal year 2012, the Absolute Return pools represented 8.5% of total investments. This compares to 6.1% for fiscal year 2011. The following summarizes the System's 18.7% ownership share of the Absolute Return Strategies pool at September 30, 2012:

#### Absolute Return Pools (in thousands)

Total	\$ 832,042
Market Value of Equity Contracts	 (41)
Accrued Interest and Dividends	206
Long Term Obligations	7,586
Equities	742,548
Short Term Pooled investments	\$ 81,743

### **Report on Investment Activity (continued)**

#### 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:

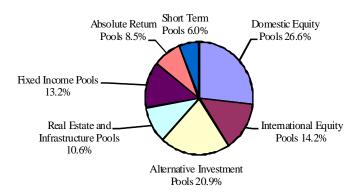
- Obligations of the United States or its agencies.
- Banker's acceptances, commercial accounts, certificates of deposit or depository receipts.
- Repurchase agreements for the purchase of securities issued by the US government or its agencies.
- Commercial paper rated at the time of purchase within 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 6.0% of total investments. This compares to 4.8% for fiscal year 2011. The following summarizes the System's 25.3% ownership share of the Short Term Investment pools at September 30, 2012:

#### Short Term Investment Pools (in thousands)

Short Term Pooled Investments	\$ 459,319
Fixed Income Securities	124,018
Accrued interest	 8
Total	\$ 583,345

### Asset Allocation – Security Type Only



		Annualized Rate of Return <sup>1</sup>			
Investment Category	Current Year	3 Years	5 Years	<b>10 Years</b>	
Total Portfolio	13.4 %	9.4 %	1.5 %	7.5 %	
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	6.4	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 Fund Cons 1 month lag	0.0	2.0			
Total Real Return and Opportunistic	6.3	8.3			
Short Term Investment Pools	0.3	0.5	0.0	1.5	
30 Day Treasury Bill	0.0	0.1	0.5	1.6	

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

1Calculations 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 prior to 1/1/10 is S & P Developed BMI EPAC Net 50/50

History 1/1/10 to 9/30/10 is S & P Developed BMI EPAC Net 75/25

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.

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

Investment Category	Current Year
Total Portfolio	12.5 %
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	6.4
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.

### Largest Assets Held

### Largest Stock Holdings (By Market Value)<sup>1</sup> September 30, 2012

Rank	Shares	Stocks	Market Value
1	171,724	Apple Inc.	\$ 114,584,306
2	68,125	Google Inc.	51,399,949
3	325,949	SPDR S&P 500 ETF Trust	46,913,785
4	624,163	Johnson & Johnson	43,011,075
5	467,338	Exxon Mobil Corporation	42,738,044
6	802,434	Merck & Company Inc.	36,189,750
7	1,168,112	Microsoft Corp	34,786,371
8	500,640	Abbott Laboratories	34,323,890
9	283,787	Chevron Corp	33,078,202
10	463,168	Procter & Gamble Co	32,125,352

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

Rank	k Par Amount		Par Amount		k Par Amount		Description	Market Value
1	\$ 49,02	5,381	General Electric Cap Corp .60450% FRN Due 2-15-2017	\$ 47,104,518				
2	22,532	2,055	Barclays Bank PLC Due 11-01-18	22,106,199				
3	19,420	0,000	Barclays Bank PLC Due 7-24-19	20,348,276				
4	19,13	1,797	JPMorgan Chase & Co .59460% FRN Due 11-01-2012	19,137,288				
5	19,13	1,797	Barclays Bank PLC 1.31760% FRN Due 1-13-2014	19,037,363				
6	19,420	0,000	Barclays Bank PLC Due 2-02-18	18,179,062				
7	14,43	8,160	General Electric Cap Corp .64875% FRN Due 9-15-2014	14,360,382				
8	11,53	6,901	Dow Chemical Co 5.7% Due 5-15-18	13,887,614				
9	12,05	3,032	Total Capital Canada LTD .83510% FRN Due 1/17/14	12,113,515				
10	9,494	4,298	Target Corp 5.375% Due 5/1/17	11,327,188				

 A complete list of holdings is available from the Michigan Department of Treasury. The System's assets 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.

2 Largest Bond Holdings are exclusive of securities lending collateral.

### **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. 55.42% of the total investment portfolio is managed by fully discretionary outside advisors. The Michigan Department of Treasury's cost of operations applicable to the retirement system for the fiscal year end amounted to \$2,661 thousand or six and two-tenth basis points (0.062%) of the market value of the Assets under Management by 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 and Affairs and the Department of Technology, Management & Budget, or their duly authorized representatives, and three public members appointed by the Governor with the advice and consent of the Senate. The public members serve without pay, but may be paid actual and necessary travel and other expenses. The Committee meets quarterly to review investments, goals and objectives and may submit recommendations to the State Treasurer. The Committee may also, by a majority vote, direct the State Treasurer to dispose of any holding which, in the Committee's judgment, is not suitable for the fund involved, and may by unanimous vote direct the State Treasurer to make specific investments.

#### Schedule of Investment Fees

#### **Investment Managers' Fees:**

	Μ	ssets under anagement thousands)	Fees (in thousands)		Basis Points*
State Treasurer	\$	4,322,919	\$	2,661	6.2
Outside Advisors for					
Fixed Income		318,123		536	16.9
Absolute Return		799,386		3,431	42.9
International Equity		534,214		1,614	30.2
Domestic Equity		692,059		4,325	62.5
Alternative		2,031,277		17,067	84.0
Real Estate & Infrastructure		1,029,783		2,570	25.0
Total	\$	9,727,761	\$	32,204	
Other Investment Services Fees:					
Assets in Custody	\$	9,638,602	\$	685	
Securities on Loan		918,848		1,866	

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.

### **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
Investment Brokerage Firms:							
Banc Of America Securities LLC	\$ 11,904	378,897	\$ 0.03	\$ 0.01	\$ 0.02	\$ 3,789	\$ 7,577
Barclays Capital Inc.	52,457	1,746,510	0.03	0.01	0.02	17,466	34,930
BNY Convergex Execution Solutions LLC	15,242	809,152	0.02	0.01	0.01	8,091	8,093
BTIG LLC	49,814	3,973,163	0.01	0.01		39,732	
The Buckingham Research Group Inc.	16,320	543,990	0.03	0.01	0.02	5,440	10,879
Cantor Fitzgerald & Co.	12,206	655,042	0.02	0.01	0.01	6,551	6,551
Capital Institutional Services Inc.	42,577	1,400,137	0.03	0.01	0.02	14,002	28,003
Citigroup Global Markets Inc.	43,049	1,620,595	0.03	0.01	0.02	16,206	32,412
Cowen & Company LLC	20,654	688,441	0.03	0.01	0.02	6,885	13,769
Credit Suisse Securities LLC	59,881	2,226,538	0.03	0.01	0.02	22,265	44,532
Dahlman Rose & Company LLC	7,398	594,982	0.01	0.01		5,950	
Deutsche Bank - Alex Brown	85	2,136	0.04	0.01	0.03	21	64
Deutsche Bank Securities Inc.	2,057	136,521	0.02	0.01	0.01	1,365	1,365
Drexel Hamilton	2,360	78,693	0.03	0.01	0.02	786	1,574
Goldman, Sachs & Co.	10,516	350,500	0.03	0.01	0.02	3,505	7,010
The Griswold Company Inc.	25,605	1,706,944	0.02	0.01	0.01	17,070	17,070
Guggenhiem Partners LLC	12,747	424,904	0.03	0.01	0.02	4,249	8,498
ISI Capital LLC	44,502	1,483,426	0.03	0.01	0.02	14,834	29,669
Investment Technology Group Inc.	1,857	61,918	0.03	0.01	0.02	619	1,238
J. P. Morgan Securities Inc.	44,041	1,855,610	0.02	0.01	0.01	18,556	18,556
Merrill Lynch, Pierce, Fenner & Smith Inc.	16,358	548,173	0.03	0.01	0.02	5,482	10,963
MF Global Inc	3,849	128,299	0.03	0.01	0.02	1,283	2,567
Mischler Financial Group Inc.	13,317	443,898	0.03	0.01	0.02	4,439	8,878
Morgan Stanley & Co. Inc.	33,670	1,140,578	0.03	0.01	0.02	11,406	22,812
OTA LLC	13,685	456,143	0.03	0.01	0.02	4,561	9,122
RBC Capital Markets	12	1,219	0.01	0.01		12	
Sanford C. Bernstein & Co. LLC	41,249	1,374,947	0.03	0.01	0.02	13,749	27,499
Stifel, Nicolaus & Co. Inc.	1,771	59,034	0.03	0.01	0.02	591	1,180
UBS Securities LLC	114	3,719	0.03	0.01	0.02	37	74
Weeden & Co. LP	17,188	1,718,845	0.01	0.01		17,188	
Western International Securities Inc.	8,937	446,837	0.02	0.01	0.01	4,468	4,468
Total	\$ 625,422	27,059,791	\$ 0.03	\$ 0.01	\$ 0.02	\$ 270,598	\$ 359,353

<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 Summary**

Fiscal Year Ended September 30, 2012

	Market Value <sup>1</sup>	Percent of Total Market Value	Investment & Interest Income <sup>2</sup>	Percent of Total Investment & Interest Income
Fixed Income Pools	\$ 1,281,654,027	13.2 %	\$ 75,563,565	5.7 %
Domestic Equity Pools	2,588,722,160	26.6	686,300,776	51.9
Real Estate and Infrastructure Pools	1,029,782,551	10.6	80,879,392	6.1
Alternative Investment Pools	2,031,277,179	20.9	230,345,905	17.4
International Equity Pools	1,380,938,501	14.2	194,282,288	14.7
Absolute Return Pools	832,041,801	8.5	53,758,715	4.1
Short Term Investment Pools	583,344,635	6.0	1,077,904	0.1
Total	\$ 9,727,760,854	100.0 %	\$ 1,322,208,545	100.0 %

<sup>1</sup> Market value excludes \$730,911,161 in securities lending collateral for fiscal year 2012.

<sup>2</sup> Total Investment & Interest Income excludes net security lending income of \$17,517,748 and gain of \$39,988,092 for securities lending collateral.

### **Investment Summary**

### Fiscal Year Ended September 30, 2011

	Market Value <sup>1</sup>	Percent of Total Market Value	Investment & Interest Income <sup>2</sup>	Percent of Total Investment & Interest Income
Fixed Income Pools	\$ 1,365,712,055	15.2 %	\$ 59,073,485	16.4 %
Domestic Equity Pools	2,523,699,964	28.1	(2,524,831)	(0.7)
Real Estate Pool	967,207,936	10.8	110,539,962	30.7
Alternative Investment Pools	2,000,044,041	22.3	313,670,855	87.2
International Equity Pools	1,135,608,592	12.7	(126,072,165)	(35.0)
Absolute Return Pools	549,107,599	6.1	4,658,803	1.3
Short Term Investment Pools	316,268,160	4.8	550,692	0.2
Total	\$ 8,857,648,347	100.0 %	\$ 359,896,801	100.0 %

<sup>1</sup> Market value excludes \$1,018,987,155 in securities lending collateral for fiscal year 2011.

<sup>2</sup> Total Investment & Interest Income excludes net security lending income of \$13,750,890 and unrealized gain of \$30,955,583 for securities lending collateral.

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# **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



Gabriel Roeder Smith & Company Consultants & Actuaries One Towne Square Suite 800 Southfield, MI 48076-3723 248.799.9000 phone 248.799.9020 fax www.gabrielroeder.com

October 24, 2012

Mr. John E. Nixon, Director
Department of Technology, Management and Budget and
The Retirement Board
Michigan State Employees Retirement System
P.O. Box 30171
Lansing, Michigan 48909

Ladies and Gentlemen:

The basic financial objective of the Michigan State Employees Retirement System (SERS) 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)
- Schedule of Retired Members by Type of Pension Benefit (Selected Option)
- Schedule of Retired Members by Type of Health Benefit
- Schedule of Average Benefit Payments Pension, Medical, Dental, and 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.

## 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 SERS 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,

Louise Gates, ASA, MAAA

Mite Draylov Mita D. Drazilov, ASA, MAAA

LMG:MDD:mrb

### Summary of Actuarial Assumptions and Methods

- The investment return rate used in the valuations was 8% per year 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%. Adopted 2004.
- The healthy life mortality table used in evaluating allowances to be paid was the RP-2000 Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA. Adopted 2010.
- Sample probabilities of regular, unreduced retirement are shown in Schedule 1 on the next page. Adopted 2010.
- 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.
- The active member population is closed to new hires. This will result in a gradual reduction in the total active member payroll over time.
- An individual entry age actuarial cost method of valuation was used in determining actuarial liabilities and normal cost. Adopted 1975. Unfunded actuarial accrued liabilities are financed over a declining 40-year period for years beginning October 1, 1996. Adopted 1996.
- 7. The Department of Technology, Management and 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.
- The data including people 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.
- 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 and Budget after consulting with the actuary.
- 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.
- Gabriel Roeder Smith & Company was awarded the actuarial and consulting services contract beginning October 4, 2006.

## <u>Summary of Actuarial Assumptions and Methods</u> (continued)

### **SCHEDULE 1**

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

Retirement Ages	Correction Officers	Conservation Officers	<u>Other Members</u>
45		28 %	
48		28	
51	27 %	28	
55	16	28	15 %
58	12	28	10
61	18	28	13
64	22	40	16
67	30	50	21
70	100	100	50
75	100	100	100

#### **SCHEDULE 2**

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

			Percent	of Active				
		Percent of Active	Members	Becoming	Percent			
		Members Withdrawing	<b>Disabled</b> Wit	hin Next Year	Increase			
Sample	Years of	Within Next Year	Non-Duty	Duty	In Pay During			
Ages	Service	(Men and Women)	Disabilities	Disabilities	Next Year			
All	0	12.00 %						
	1	8.50						
	2	6.50						
	3	5.00						
	4	4.00						
25	5 & Over	3.50	0.03 %	0.00 %	9.5 %			
35		2.50	0.10	0.01	4.7			
45		2.00	0.34	0.04	4.0			
55		1.75	0.92	0.08	3.9			
60		1.75	2.10	0.11	3.5			

## **Actuarial Valuation Data**

Valuation Date Sept. 30	Number	A	eported Annual Payroll*	 Average Annual Pay	% Increase	Average Age	Average Service
2002	43,064	\$	2,133,477	\$ 49,542	1.8	48.0	18.6
2003	36,536		1,859,555	50,897	2.7	47.7	17.9
2004	34,749		1,889,410	54,373	6.8	48.4	19.0
2005	33,770		1,880,179	55,676	2.4	49.3	20.0
2006	32,575		1,847,653	56,720	1.9	50.1	21.0
2007	30,864		1,825,889	59,159	4.3	50.8	21.8
2008	28,568		1,763,672	61,736	4.4	51.4	22.7
2009	27,455		1,734,325	63,170	2.3	52.1	23.5
2010	25,478		1,621,709	63,651	0.8	52.6	24.1
2011	19,650		1,276,058	64,939	2.0	51.9	23.3

## Schedule of <u>Active Member Valuation Data</u>

\*In thousands of dollars.

### Schedule of Changes in the Retirement Rolls

Year	Add	led to	Rolls	Remove	ed from Rolls	Rolls-	End o	f Year	% Increase	Average	
Ended Sept. 30	No.		Annual Iowances <sup>1</sup>	No.	Annual Allowances <sup>1</sup>	No.		Annual lowances <sup>1</sup>	in Annual Allowances		nnual wances
2002	3,806	\$	80,871	1,251	5,310	39,666	\$	546,968	16.0	\$	13,789
2003 <sup>2</sup>	6,448		163,673	623	2,034	45,491		708,607	29.6		15,577
2004	1,561		23,195	1,433	2,715	45,619		729,087	2.9		15,982
2005	1,542		25,024	1,360	6,683	45,801		747,428	2.5		16,319
2006	1,728		41,794	1,549	20,126	45,980		769,096	2.9		16,727
2007	2,206		52,687	1,300	19,765	46,886		802,018	4.3		17,106
2008	2,653		63,219	1,461	22,625	48,078		842,612	5.1		17,526
2009	2,423		61,683	1,472	23,531	49,029		880,763	4.5		17,964
2010	2,937		78,647	1,504	23,518	50,462 934,092		6.1		18,511	
2011	6,656		205,413	1,470	25,542	55,648		1,113,963	19.3		20,018

<sup>1</sup> In thousands of dollars

<sup>2</sup> 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 System'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 following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (liability 3) are normally partially covered by the remainder of present assets. Generally, if the System has been using level-cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded is not necessarily a by-product of level percent of payroll funding methods.

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

#### Pension Benefits (\$ in millions)

	Act	uarial Accrued Lia	bility (AAL)							
	(1)	(2)	(3)							
Valuation	Active	Retirants	Active and Inactive							
Date	Member	and	Members (Employer	Valuation	Porti	on of AAL C	overed by As	ered by Assets		
Sept. 30	Contributions	Beneficiaries	Financed Portion)	Assets	(1)	(2)	(3)	( <b>4</b> ) <sup>3</sup>		
2002	\$ 123	\$ 5,512	\$ 5,118	\$ 10,616	100 %	100 %	37.3 %	98.7 %		
2003	57	7,386	4,318	10,441	100	100	69.4	88.8		
2004	78	7,503	4,586	10,149	100	100	56.0	83.4		
2005	97	7,607	4,696	9,897	100	100	46.7	79.8		
2006	107	7,607	5,085	10,111	100	100	47.1	79.0		
$2006^{1}$	107	7,607	5,085	10,890	100	100	62.5	85.1		
2007	116	7,847	5,199	11,344	100	100	65.0	86.2		
2008	119	8,361	5,286	11,403	100	100	55.3	82.8		
2009	127	8,681	5,426	11,107	100	100	42.4	78.0		
2010	138	9,151	5,239	10,782	100	100	28.5	74.2		
2010 <sup>2</sup>	138	9,265	5,457	10,782	100	100	25.3	72.6		
2011	93	11,197	4,307	10,212	100	90.4	0	65.5		

<sup>1</sup> Revised asset valuation method.

<sup>2</sup> Revised actuarial assumptions.

<sup>3</sup> Percents funded on a total valuation asset and total actuarial accrued liability basis.

## **Prioritized Solvency Test (continued)**

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

		Act	uarial	Accrued Liab	ility (AAI	.)						
		(1)		(2)		(3)						
Valuation		Active		Retirants	Active	and Inactive						
Date		Member		and	Memb	ers (Employer	Va	luation	Porti	on of AAL C	overed by As	sets
Sept. 30	Co	ntributions	В	eneficiaries	Finan	ced Portion)	1	Assets	(1)	(2)	(3)	( <b>4</b> ) <sup>1</sup>
2007	\$	-	\$	6,389	\$	6,576	\$	-	0 %	0 %	0 %	0 %
2008		-		6,759		6,783		-	0	0	0	0
2009		-		6,425		6,193		-	0	0	0	0
2010		-		7,655		7,011		-	0	0	0	0
2011		-		8,418		5,833		-	0	0	0	0

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

## **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.	\$ (32,129,362)
2.	Withdrawal From Employment (including death-in-service). If more liabilities are released by withdrawals and deaths than assumed, there is a gain. If smaller releases, a loss.	1,635,922
3.	<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	10,697,152
4.	<b>Investment Income.</b> If there is greater investment income than assumed, there is a gain. If less income, a loss.	(767,318,264)
5.	Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(51,639,505)
6.	Rehires. Rehires will generally result in an actuarial loss.	(21,966,047)
7.	<b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	(144,045,164)
8.	Composite Gain (or Loss) During Year	\$ (1,004,765,268)

## **Summary of Plan Provisions**

Our actuarial valuation of the System as of September 30, 2011, is based on the present provisions of the Michigan State Employees' Retirement Act (Public Act 240 of 1943, as amended).

#### Regular Retirement (no reduction factor for age)

<u>Eligibility</u> - Age 55 with 30 years service, or age 60 with 10 or more years of service. Corrections Officers may retire at age 51 with 25 or more years of service, or age 56 with 10 or more years of service. Conservation Officers may retire after 25 years of service regardless of age.

<u>Final Average Compensation</u> - Regular retirement benefit is based on final average compensation (FAC), which is the average of highest 3 consecutive years (2 years for Conservation Officers).

<u>Annual Amount</u> - Total service times 1.5% of FAC. For members with 20 or more years of service, a \$3,000 minimum annual benefit is payable. Corrections Officers receive an additional temporary supplement to age 62 equal to the product of supplemental service times 0.5% of FAC. Conservation Officers retiring after 25 years receive a benefit equal to 60% of FAC.

#### Early Retirement (age reduction factor used)

Eligibility - Age 55 with 15 or more years of service.

Annual Amount - Computed as regular retirement benefit but reduced by 0.5% for each month under age 60.

#### Deferred Retirement (vested benefit)

<u>Eligibility</u> - 10 years of service (5 years for unclassified persons in the executive or legislative branch). Benefit commences at age 60.

Annual Amount - Computed as regular retirement benefit based on service and FAC at termination.

#### Duty Disability Retirement

Eligibility - No age or service requirement.

<u>Annual Amount</u> - Disability age 60+: Computed as regular retirement benefit with minimum benefit based on 10 years service. Disability prior to age 60: To age 60, benefit is computed as a regular retirement benefit using service at the time of disability retirement with a minimum benefit of \$6,000 per year. Additional limitation such that benefit plus workers' compensation does not exceed final compensation. At age 60, benefit is recomputed as a regular retirement benefit with service granted for period in receipt of disability benefit before age 60. If the member dies before age 60, benefits are payable to a surviving spouse computed as a regular retirement benefit but based on service at time of disability retirement plus elapsed time between date of retirement and age 60.

#### Non-Duty Disability Retirement

Eligibility - 10 years of service.

<u>Annual Amount</u> - Computed as regular retirement benefit based on service and FAC at time of disability. Minimum annual benefit is \$600.

#### **Duty Death Before Retirement**

Eligibility - No age or service requirement.

## Summary of Plan Provisions (continued)

<u>Annual Amount</u> - Accumulated employee contributions are refunded. Surviving spouse receives annual benefit computed as a regular retirement benefit as if the deceased member retired the day before date of death and elected Option A. Benefit is based on member's service at time of death, or 10 years of service, whichever is greater. A minimum benefit of \$6,000 per year is payable. Children under age 21 each receive equal share of one-half of the benefit payable (surviving spouse receives the other half), to a maximum of one-half for all children. A given child's share of benefits terminates upon the child's marriage, death or attainment of age 21. In the event that there is no surviving spouse, the benefit is allocated equally among all children subject to the limitations described above. In the event that there is no surviving spouse or eligible children, benefits may be paid to an eligible, dependent parent. Benefits end upon the marriage or death of the surviving parent. Additional limitation such that benefit plus workers' compensation does not exceed final compensation.

#### Non-Duty Death Before Retirement

<u>Eligibility</u> - 10 years of service. In the case of a deceased vested former member, the survivor benefit commences when the deceased former member would have attained age 60.

Annual Amount - Computed as regular retirement benefit but reduced in accordance with a 100% joint and survivor election.

#### Post-Retirement Cost-of-Living Adjustments

One-time upward adjustments have been made in 1972, 1974, 1976, 1977 and 1987. Beginning in 1983, some benefit recipients share in a distribution of a portion of investment income earned in excess of 8% annually (supplemental payment). Beginning in 1988, all benefit recipients are eligible for automatic 3% annual (non-compounded) benefit increases, with a maximum \$300 annual increase. Eligibility for the above benefits:

Retired before October 1, 1987	Greater of supplemental payment or the combination of the 1987 one-time adjustment and the automatic increases.
Retired on or after October 1, 1987	Automatic increases only.

#### Post-Retirement Health Benefits Coverage

Persons in receipt of retirement allowance (including members who did not retire directly from the System, but come from a vested deferred status), and their dependents, are eligible for 90% System paid health insurance coverage and 90% System paid dental and vision insurance.

#### Member Contributions

None.

#### Defined Contribution (Public Act 487 of 1996)

New employees hired on or after March 31, 1997, become participants in Tier 2 (i.e., the defined contribution plan) rather than Tier 1 (i.e., the above described defined benefit plan).

Active members on March 30, 1997, had an opportunity to irrevocably elect to terminate membership in Tier 1 and become participants in Tier 2. Elections were in writing and submitted between January 2, 1998, and April 30, 1998.

Such members became Tier 2 participants on June 1, 1998, and had the actuarial present value of their Tier 1 accrued benefit transferred into Tier 2 by September 30, 1998.

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 Ten Year History of Membership

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 Benefits 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 Benefit
- Schedule of Other Post Employment Benefits
- Schedule of Average Benefit Payments Pension
- Schedule of Average Benefit Payments Health
- Schedule of Average Benefit Payments Dental
- Schedule of Average Benefit Payments Vision
- Ten Year History of Membership

### Schedule of Pension Plan Additions by Source

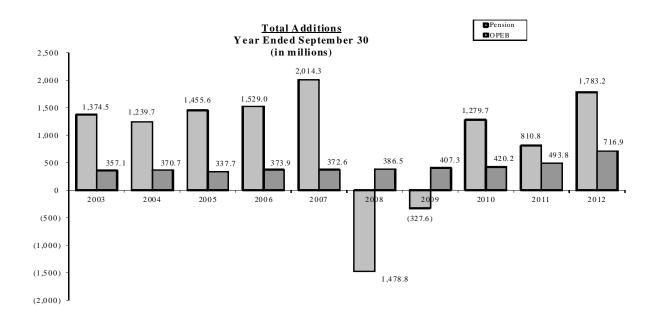
### Last Ten Years

Fiscal Year	•		Employer C	ontributions		
Ended		Member		% of Annual	Net Investment &	
Sept. 30	_	Contributions	Dollars	Covered Payroll	Other Income	Total
2003	\$	80,185,475 \$	79,291,845	4.3 % \$	1,215,018,189 \$	1,374,495,509
2004		37,682,883	103,873,294	5.5	1,098,149,414	1,239,705,591
2005		30,395,040	256,433,052	13.6	1,168,811,938	1,455,640,030
2006		9,434,310	270,705,017	14.7	1,248,845,519	1,528,984,846
2007		19,696,132	150,858,506	8.3	1,843,763,625	2,014,318,263
2008		5,643,805	355,732,115	20.2	(1,840,212,839)	(1,478,836,919)
2009		6,994,975	343,787,486	19.8	(678,361,614)	(327,579,153)
2010		26,055,668	369,952,868	22.8	883,696,454	1,279,704,990
2011		25,830,556	424,546,805	3.3	360,432,214	810,809,575
2012		33,290,784	419,926,997	NA	1,330,021,741	1,783,239,522

### Schedule of OPEB Plan Additions by Source

### Last Ten Years

Fiscal Year		Employer C	ontributions		
Ended	Member		% of Annual	Net Investment &	
Sept. 30	Contributions	Dollars	Covered Payroll	Other Income	Total
2003 \$	11,144,737 \$	320,838,540	17.2 % \$	25,157,754 \$	357,141,031
2004	9,723,230	357,554,699	18.9	3,380,735	370,658,664
2005	10,701,614	324,305,023	17.3	2,712,374	337,719,011
2006	11,528,041	356,674,243	19.3	5,660,782	373,863,066
2007	11,760,544	359,375,055	19.4	1,500,072	372,635,671
2008	13,099,796	342,186,903	19.4	31,242,590	386,529,289
2009	20,982,595	362,419,285	20.9	23,861,475	407,263,355
2010	20,905,488	360,125,502	12.3	39,150,651	420,181,641
2011	27,647,644	388,196,118	30.4	77,916,883	493,760,645
2012	27,431,916	648,881,078	N/A	40,613,600	716,926,594



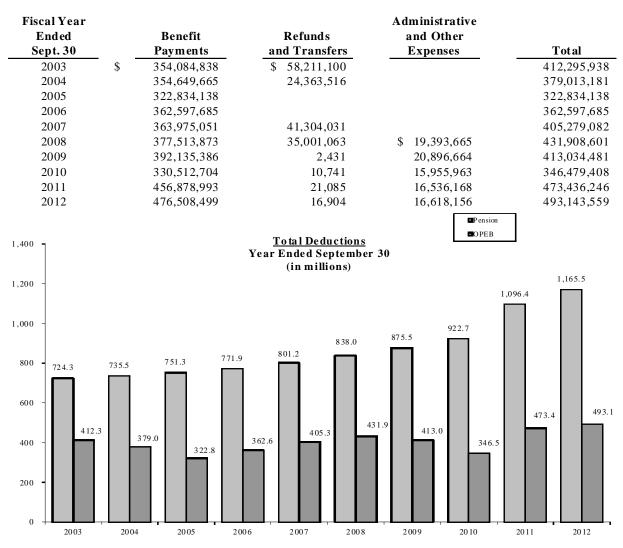
## **STATISTICAL SECTION** Schedule of Pension Plan Deductions by Type

#### Last Ten Years

<b>Fiscal Year</b>				1	Administrative	
Ended	Benefit		Refunds		and Other	
Sept. 30	Payments	5	and Transfers		Expenses	Total
2003	\$ 701,664,432	\$	17,484,652	\$	5,192,039	\$ 724,341,123
2004	731,009,109		183,126		4,316,433	735,508,668
2005	746,673,263		306,643		4,297,985	751,277,891
2006	767,000,706		256,533		4,628,043	771,885,282
2007	795,842,013		229,600		5,115,226	801,186,839
2008	832,553,176		373,916		5,048,737	837,975,829
2009	870,278,863		366,039		4,865,232	875,510,134
2010	917,328,820		315,367		5,073,446	922,717,633
2011	1,089,822,880		474,986		6,079,017	1,096,376,883
2012	1,156,035,451		188,926		9,253,880	1,165,478,257

### Schedule of OPEB Plan Deductions by Type

### Last Ten Years



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

Last Ten Years

(in thousands)

						I	liscal	Year					
	 2003		2004	 2005	 2006	 2007		2008	 2009	 2010	 2011	·	2012
Member contributions	\$ 80,185	\$	37,683	\$ 30,395	\$ 9,435	\$ 19,696	\$	5,644	\$ 6,995	\$ 26,056	\$ 25,831	\$	33,291
Employer contributions	79,292		103,873	256,433	270,705	150,858		355,732	343,787	369,953	424,547		419,927
DC savings subaccount													
Net investment income	1,215,018		1,073,758	1,168,690	1,248,616	1,801,588		(1,840,587)	(678,588)	883,511	360,284		1,329,925
Transfer from other systems			26	120	123	106		190	93	50	2		
Transfer from pension/													
OPEB plan			24,364			41,304							
Miscellaneous income			2	2	106	766		184	133	135	146		96
Total Additions	1,374,495		1,239,706	1,455,640	1,528,985	 2,014,318		(1,478,837)	(327,579)	1,279,705	810,810		1,783,240
		_		 	 	 							
Pension benefits	701,664		731,009	746,673	767,000	795,842		832,553	870,279	917,329	1,089,823		1,156,035
Refunds of member													
contributions	118		163	292	254	222		291	316	299	470		189
Transfer to pension/													
OPEB plan	17,365												
Transfers to other systems	2		20	15	3	8		83	50	17	5		
Administrative and													
other expenses	 5,192		4,317	 4,298	4,628	 5,115		5,049	 4,865	5,073	6,079		9,254
Total Deductions	 724,341		735,509	 751,278	 771,885	 801,187	_	837,976	875,510	 922,718	 1,096,377		1,165,478
Changes in net assets	\$ 650,154	\$	504,197	\$ 704,362	\$ 757,100	\$ 1,213,131	\$	(2,316,813)	\$ (1,203,089)	\$ 356,987	\$ (285,567)	\$	617,762

### 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	\$	11,145	\$	9,723	\$	10,702	\$	11,528	\$	11,761	\$	13,100	\$	20,983	\$	20,905	\$	27,648	\$	27,432
Employer contributions		320,838		357,555		324,305		356,674		359,375		342,187		362,419		360,126		388,196		648,881
Other governmental contributions												22 004		21.027		27.059		(1772)		22 774
												23,004		21,987		27,058		64,773		23,774
DC savings subaccount Net investment income		7,793		3,381		2,712		5,661		1,500		657		1,359		11,815		12,851		16,592
Transfers from other systems		1,175		5,501		2,712		5,001		1,500		6,884		1,557		11,015		12,001		10,092
Transfer from pension/												0,004								
OPEB plan		17,365																		
Miscellaneous income		.,										698		516		278		293		248
Total Additions		357,141		370,659		337,719	_	373,863		372,636	_	386,530	_	407,263	_	420,182	_	493,761		716,927
Health care benefits		354,085		354,650		322,834		362,598		363,975		377,513		392,135		330,513		456,879		476,508
Refunds of member																				
contributions												2		2		11		21		17
Transfer to pension/																				
OPEB plan				24,364						41,304										
Transfers to other systems		58,211										35,000								
Administrative and																				
other expenses												19,394		20,897		15,956		16,536		16,618
Total Deductions		412,296		379,014		322,834		362,598		405,279		431,909		413,034		346,479		473,436		493,144
Changes in net assets	\$	(55,155)	\$	(8,355)	\$	14,885	\$	11,265	\$	(32,643)	\$	(45,379)	\$	(5,771)	\$	73,702	\$	20,325	\$	223,783

## Schedule of Pension Benefits and Refunds by Type

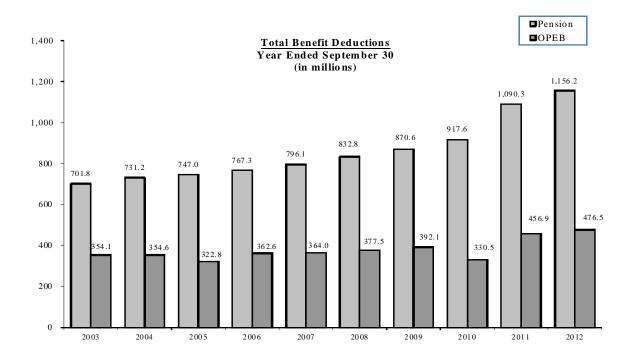
### Last Ten Years

<b>Fiscal Year</b>	ır							Refunds								
Ended		Regular		Disability		Survivor	Er	nployee	Er	nployer	R	Retired	Inv	restment		
Sept. 30		Benefits		Benefits		Benefits	Cor	tribution	Con	tribution	В	Benefit	I	ncome		Total
2003	\$	664,188,203	\$	37,476,229			\$	60,536	\$	57,059					\$	701,782,027
2004		690,942,422		40,066,687				72,838		90,580						731,172,527
2005		704,890,377		41,782,886				63,782		227,810						746,964,855
2006		676,029,503		37,961,735	\$	53,009,468		145,554		105,809	\$	2,523				767,254,592
2007		688,989,246		38,666,660		68,186,107		42,892		178,316		831				796,064,052
2008		720,224,862		39,877,844		72,450,470		69,741		219,335		1,702				832,843,954
2009		752,155,935		40,876,663		77,246,265		177,079		133,294		5,618				870,594,854
2010		793,100,996		42,118,014		82,109,810		12,698		280,046		6,119				917,627,683
2011		960,389,210		42,816,787		86,616,883		44,655		417,337		8,411				1,090,293,283
2012	1	1,020,591,855		44,263,358		91,180,238		54,635		111,837		20,419	\$	2,035		1,156,224,377

## Schedule of OPEB Benefits and Refunds by Type

### Last Ten Years

Fiscal Year Ended	Health	Dental	Vision	Personal	Health	
Sept. 30	Benefits	Benefits	Benefits	Health Care	Refunds	Total
2003	\$ 327,707,446	\$ 22,732,630	\$ 3,644,762			\$ 354,084,838
2004	327,143,997	23,831,344	3,674,324			354,649,665
2005	295,431,830	23,740,953	3,661,355			322,834,138
2006	328,528,595	29,583,938	4,485,152			362,597,685
2007	329,714,449	29,750,672	4,509,930			363,975,051
2008	345,286,591	29,046,230	3,181,052		\$ 295	377,514,168
2009	358,691,332	30,140,662	3,303,392		2,431	392,137,817
2010	295,928,047	31,532,621	3,052,036		10,741	330,523,445
2011	417,417,811	35,820,611	3,640,571		21,085	456,900,078
2012	433,878,978	37,327,504	3,961,792	\$1,340,225	16,904	476,525,403



## Schedule of Retired Members by Type of Pension Benefit

**September 30, 2012** 

Amount of Monthly	Number of			Т	ype of Re	tirement *	k		
<b>Pension Benefit</b>	Retirees	1	2	3	4	5	6	7	8
\$ 1 - 200	450	248	144	6	39	-	7	1	5
201 - 400	2,278	1,467	431	9	228	-	49	2	92
401 - 600	4,186	2,504	671	29	585	1	150	9	237
601 - 800	5,049	2,851	639	208	752	16	233	30	320
801 - 1,000	4,578	2,732	537	8	711	1	222	93	274
1,001 - 1,200	4,217	2,594	395	17	629	1	213	128	240
1,201 - 1,400	4,136	2,755	349	6	510	-	187	185	144
1,401 - 1,600	4,379	3,196	353	7	319	-	138	263	103
1,601 - 1,800	4,069	3,213	244	4	167	1	100	280	60
1,801 - 2,000	3,820	3,104	197	3	104	-	68	300	44
Over 2,000	18,486	15,817	406	3	86		127	1,983	64
Totals	55,648	40,481	4,366	300	4,130	20	1,494	3,274	1,583

\* Type of Retirement

1 - Normal retirement for age & service

2 - Survivor payment - normal or early retirement

3 - Duty disability retirement (incl. survivors)

4 - Non-duty disability retirement (incl. survivors)

5 - Survivor payment - duty death in service

6 - Survivor payment - non-duty death in service

7 - Retirees with supplemental benefits for early retirement incentive factors

8 - Retirees with reduced benefits for early retirement reduction factors

### Schedule of Retired Members by Type of Pension Benefit (continued)

September 30, 2012

	Amount of									
	Monthly	Number of				Selected	<b>Option</b> **			
]	Pension Benefit	Retirees	Reg.	Opt. A	Opt. B	Opt. C	Opt. E	Opt. E1	Opt. E2	Opt.E3
\$	1 - 200	450	112	139	138	6	36	10	9	-
	201 - 400	2,278	892	601	492	38	167	43	44	1
	401 - 600	4,186	1,613	1,190	714	94	328	96	143	8
	601 - 800	5,049	2,098	1,304	806	93	474	103	168	3
	801 - 1,000	4,578	1,818	1,199	766	111	434	82	159	9
	1,001 - 1,200	4,217	1,795	1,218	664	127	247	56	99	11
	1,201 - 1,400	4,136	1,858	1,241	644	125	146	54	63	5
	1,401 - 1,600	4,379	1,918	1,340	753	167	115	48	34	4
	1,601 - 1,800	4,069	1,670	1,274	752	203	82	49	32	7
	1,801 - 2,000	3,820	1,533	1,142	673	238	102	65	49	18
	Over 2,000	18,486	6,810	4,835	3,347	1,342	1,083	369	519	181
	Fotals	55,648	22,117	15,483	9,749	2,544	3,214	975	1,319	247

\*\*Selected Option

Reg. - Straight life allowance

Opt. A - 100% survivor option

Opt. B - 50% survivor option

Opt. C - 75% survivor option

Opt. E - Social Security equated

Opt. E1 - Social Security equated w/100% survivor option

Opt. E2 - Social Security equated w/50% survivor option

Opt. E3 - Social Security equated w/75% survivor option

### <u>Schedule of Retired Members by Type of Other Postemployment Benefit</u> September 30, 2011

Amount of		Type of Other Postemployment Benefits							
Monthly	Retired								
Pension Benefit	Members	Health	Dental	Vision					
\$ 1-200	450	253	255	256					
201 - 400	2,278	1,489	1,492	1,492					
401 - 600	4,186	3,205	3,233	3,250					
601 - 800	5,049	4,247	4,278	4,264					
801 - 1,000	4,578	3,974	3,998	4,005					
1,001 - 1,200	4,217	3,759	3,775	3,783					
1,201 - 1,400	4,136	3,761	3,775	3,773					
1,401 - 1,600	4,379	4,039	4,060	4,064					
1,601 - 1,800	4,069	3,756	3,782	3,779					
1,801 - 2,000	3,820	3,553	3,594	3,584					
Over 2,000	18,486	17,135	17,343	17,325					
Totals	55,648	49,171	49,585	49,575					

Source: Gabriel Roeder Smith & Co.

### **Schedule of Other Postemployment Benefits**

For Years Ended September 30, 2012 and 2011

	2012	2011
Claims		
Health Insurance	\$ 406,234,410	\$ 389,773,243
Vision Insurance	36,988,599	3,301,667
Dental Insurance	 2,989,220	 34,848,038
Total Claims	 446,212,229	 427,922,948
Estimated Claims Liability		
Health Insurance	27,644,568	27,644,568
Vision Insurance	338,905	338,905
Dental Insurance	 972,572	 972,572
Total Estimated Claims Liability	 28,956,045	 28,956,045
Administrative Fees		
Health Insurance	14,546,077	14,527,350
Vision Insurance	1,583,298	478,418
Dental Insurance	 488,781	 1,530,399
Total Administrative Fees	16,618,156	16,536,167
Subtotal		
Refunds	16,904	21,085
Personal Health Care	1,340,225	y
Transfers to Other Systems	 7- 7 -	 
Grand Total	\$ 493,143,559	\$ 473,436,245

## **Schedule of Average Benefit Payments - Pension**

### Last Ten Years

Payment Periods	Credited Service (Years) as of September 30													
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total						
Period 10/1/01 to 9/30/02 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 670 18,504 827	\$ 542 31,089 626	\$ 491 27,935 6,505	\$ 733 29,554 6,962	\$ 1,007 32,211 6,710	\$ 1,460 \$ 36,772 7,985	1,789 38,742 10,051	\$ 1,149 33,313 39,666						
Period 10/1/02 to 9/30/03 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 731 23,640 1,056	\$ 559 29,738 653	\$ 510 28,338 6,632	\$ 758 29,985 7,036	\$ 1,074 33,205 7,221	\$ 1,573 \$ 39,023 9,889	1,990 \$ 42,071 13,004	\$ 1,298 35,175 45,491						
Period 10/1/03 to 9/30/04 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 475 6,315 687	\$ 429 34,463 454	\$ 528 29,897 6,842	\$ 783 31,520 7,262	\$ 1,112 34,992 7,287	\$ 1,618 \$ 40,396 9,951	2,036 43,751 13,136	\$ 1,332 36,939 45,619						
Period 10/1/04 to 9/30/05 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 491 5,754 712	\$ 437 34,264 453	\$ 545 29,838 6,850	\$ 807 31,806 7,272	\$ 1,136 34,749 7,303	\$ 1,650 \$ 40,329 10,035	2,077 5 43,302 13,176	\$ 1,360 36,774 45,801						
Period 10/1/05 to 9/30/06 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 381 20,190 221	\$ 432 35,841 459	\$ 562 31,723 6,896	\$ 831 33,730 7,340	\$ 1,158 36,861 7,380	\$ 1,673 \$ 41,827 10,235	2,094 5 45,468 13,449	\$ 1,394 39,123 45,980						
Period 10/1/06 to 9/30/07 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 410 20,673 229	\$ 449 36,684 481	\$     575 32,290 6,980	\$ 856 34,739 7,470	\$ 1,189 37,877 7,499	\$ 1,702 \$ 42,531 10,380	2,133 46,435 13,847	\$ 1,425 40,007 46,886						
Period 10/1/07 to 9/30/08 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 751 25,963 571	\$ 645 38,066 640	\$ 594 33,076 7,054	\$ 888 35,846 7,550	\$ 1,227 39,066 7,553	\$ 1,731 \$ 43,268 10,428	2,182 \$ 47,724 14,282	\$ 1,460 40,996 48,078						
Period 10/1/08 to 9/30/09 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 870 28,021 915	\$ 847 39,237 956	\$ 624 34,045 7,070	\$ 924 36,778 7,554	\$ 1,268 40,234 7,578	\$ 1,757 \$ 44,008 10,378	2,234 48,993 14,578	\$ 1,497 41,965 49,029						
Period 10/1/09 to 9/30/10 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 942 30,076 1,227	\$ 940 39,552 1,218	\$ 650 34,746 7,106	\$ 958 37,805 7,531	\$ 1,315 41,761 7,734	\$ 1,788 \$ 44,946 10,402	2,292 5 50,437 15,224	\$ 1,543 43,123 50,462						
Period 10/1/10 to 9/30/11 Average Monthly Benefit Average Final Average Salary Number of Active Retirants	\$ 987 31,075 1,298	\$ 1,005 39,981 1,386	\$ 670 35,412 7,139	\$ 993 39,132 7,656	\$ 1,373 43,695 8,199	\$ 1,850 \$ 47,053 11,216	2,440 5 54,109 18,754	\$ 1,668 45,804 55,648						

## Schedule of Average Benefit Payments - Health

Last Five Years

Payment Periods	Credited Service (Years) as of September 30									
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total		
Period 10/1/06 to 9/30/07										
Average Monthly Benefit	\$ 362	\$ 464	\$ 596	\$ 879	\$ 1,220	\$ 1,723	\$ 2,167	\$ 1,462		
Average Final Average Salary	25,607	33,691	32,779	35,044	38,135	42,355	46,304	40,186		
Number of Active Retirants	137	625	5,833	6,568	6,892	9,574	12,491	42,120		
Period 10/1/07 to 9/30/08										
Average Monthly Benefit	\$ 836	\$ 622	\$ 618	\$ 912	\$ 1,258	\$ 1,752	\$ 2,218	\$ 1,502		
Average Final Average Salary	29,453	35,651	33,645	36,130	39,275	43,094	47,598	41,221		
Number of Active Retirants	423	730	5,821	6,572	6,933	9,596	12,881	42,956		
Period 10/1/08 to 9/30/09										
Average Monthly Benefit	\$ 956	\$ 822	\$ 652	\$ 947	\$ 1,299	\$ 1,779	\$ 2,271	\$ 1,541		
Average Final Average Salary	30,647	37,602	34,597	37,020	40,435	5	48,829	42,190		
Number of Active Retirants	713	1,000	5,778	6,538	6,929	9,519	13,129	43,606		
Period 10/1/09 to 9/30/10										
Average Monthly Benefit	\$ 1,018	\$ 922	\$ 682	\$ 982	\$ 1,344	\$ 1,813	\$ 2,329	\$ 1,591		
Average Final Average Salary	31,884	38,449	35,351	37,985	41,901	44,759	50,256	42,190		
Number of Active Retirants	982	1,218	5,721	6,487	7,046	9,516	13,741	44,711		
Period 10/1/10 to 9/30/11										
Average Monthly Benefit	\$ 1,060	\$ 995	\$ 707	\$ 1,017	\$ 1,402	\$ 1,875	\$ 2,484	\$ 1,721		
Average Final Average Salary	32,687	39,054	36,121	39,281	43,823	46,829	53,921	46,043		
Number of Active Retirants	1,057	1,358	5,678	6,542	7,454	10,241	16,843	49,171		

### **Schedule of Average Benefit Payments - Dental**

Last Five Years

Payment Periods		Credited	Service (	Years) as o	of Septeml	oer 30		
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total
Period 10/1/06 to 9/30/07								
Average Monthly Benefit	\$ 364	\$ 468	\$ 598	\$ 884	\$ 1,225	\$ 1,730	\$ 2,176	\$ 1,469
Average Final Average Salary	26,051	34,210	32,996	35,318	38,325	42,551	46,514	40,418
Number of Active Retirants	140	621	5,841	6,520	6,849	9,559	12,532	42,062
Period 10/1/07 to 9/30/08								
Average Monthly Benefit	\$ 830	\$ 627	\$ 619	\$ 916	\$ 1,262	\$ 1,758	\$ 2,226	\$ 1,507
Average Final Average Salary	29,547	36,106	33,801	36,371	39,459	43,267	47,776	41,414
Number of Active Retirants	425	733	5,857	6,546	6,901	9,599	12,930	42,991
Period 10/1/08 to 9/30/09								
Average Monthly Benefit	\$ 958	\$ 823	\$ 652	\$ 950	\$ 1,302	\$ 1,784	\$ 2,277	\$ 1,545
Average Final Average Salary	30,843	37,869	34,704	37,227	40,591	43,967	48,964	42,344
Number of Active Retirants	712	1,009	5,835	6,548	6,928	9,549	13,209	43,790
Period 10/1/09 to 9/30/10								
Average Monthly Benefit	\$ 1,018	\$ 920	\$ 682	\$ 984	\$ 1,347	\$ 1,817	\$ 2,335	\$ 1,593
Average Final Average Salary	31,970	38,623	35,431	38,181	42,047	44,884	50,397	43,487
Number of Active Retirants	988	1,232	5,806	6,523	7,063	9,559	13,833	45,004
Period 10/1/10 to 9/30/11								
Average Monthly Benefit	\$ 1,060	\$ 985	\$ 706	\$ 1,020	\$ 1,404	\$ 1,879	\$ 2,488	\$ 1,724
Average Final Average Salary	32,815	39,018	36,186	39,483	43,935	46,955	54,041	46,163
Number of Active Retirants	1,058	1,380	5,761	6,587	7,487	10,300	17,014	49,585

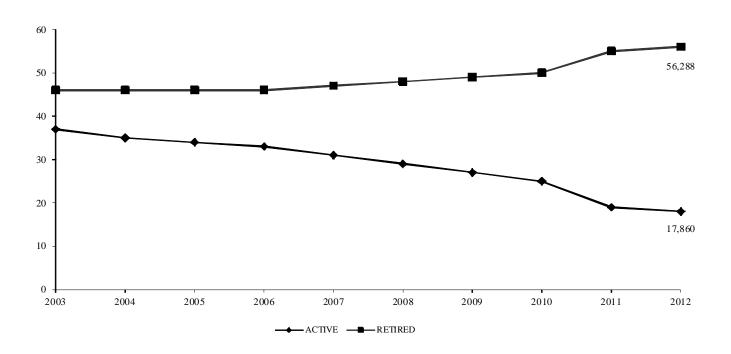
### **Schedule of Average Benefit Payments - Vision**

### Last Five Years

Payment Periods		Credited	Service (	Years) as o	of Septeml	oer 30		-
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30+	Total
Period 10/1/06 to 9/30/07								
Average Monthly Benefit	\$ 367	\$ 465	\$ 596	\$ 882	\$ 1,225	\$ 1,727	\$ 2,175	\$ 1,467
Average Final Average Salary	26,042	34,121	32,874	35,234	38,304	42,459	46,480	40,345
Number of Active Retirants	133	626	5,870	6,553	6,865	9,596	12,533	42,176
Period 10/1/07 to 9/30/08								
Average Monthly Benefit	\$ 837	\$ 624	\$ 617	\$ 915	\$ 1,262	\$ 1,755	\$ 2,225	\$ 1,505
Average Final Average Salary	29,578	36,009	33,699	36,302	39,449	43,189	47,742	41,355
Number of Active Retirants	418	739	5,877	6,577	6,915	9,632	12,933	43,091
Period 10/1/08 to 9/30/09								
Average Monthly Benefit	\$ 962	\$ 820	\$ 651	\$ 949	\$ 1,301	\$ 1,782	\$ 2,276	\$ 1,544
Average Final Average Salary	30,904	37,745	34,664	37,158	40,563	43,908	48,936	42,298
Number of Active Retirants	705	1,012	5,844	6,572	6,944	9,578	13,207	43,862
Period 10/1/09 to 9/30/10								
Average Monthly Benefit	\$ 1,002	\$ 920	\$ 681	\$ 984	\$ 1,346	\$ 1,815	\$ 2,334	\$ 1,592
Average Final Average Salary	32,028	38,597	35,398	38,124	42,003	44,829	50,368	43,449
Number of Active Retirants	983	1,230	5,798	6,539	7,072	9,583	13,828	45,033
Period 10/1/10 to 9/30/11								
Average Monthly Benefit	\$ 1,060	\$ 986	\$ 706	\$ 1,019	\$ 1,404	\$ 1,878	\$ 2,487	\$ 1,723
Average Final Average Salary	32,787	39,015	36,150	39,380	43,901	46,904	54,014	46,119
Number of Active Retirants	1,059	1,379	5,745	6,600	7,485	10,312	16,995	49,575

## Ten Year History of Membership (In thousands)

### **Fiscal Year Ended September 30**



### ACKNOWLEDGMENTS

The *Michigan State 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:

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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, Department of Community Health cashiering personnel, Investments Division of Treasury, 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