

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

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



**M J R S**

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

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# INTRODUCTORY SECTION

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

# INTRODUCTORY SECTION

## Certificate of Achievement

### Certificate of Achievement for Excellence in Financial Reporting

Presented to

### Michigan Judges' Retirement System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
September 30, 2011

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



*Christopher P. Morinell*

President

*Jeffrey R. Emen*

Executive Director

**Public Pension Standards Award**



Public Pension Coordinating Council

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

Presented to

***Michigan Office of Retirement Services***

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

*Presented by the Public Pension Coordinating Council, a confederation of*

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

A handwritten signature in cursive script that reads "Alan H. Winkle". The signature is written in black ink and is positioned above the printed name and title.

Alan H. Winkle  
Program Administrator

# INTRODUCTORY SECTION

## Letter of Transmittal

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

STATE OF MICHIGAN

RICK SYNDER, Governor

## DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

January 2, 2013

The Honorable Rick Snyder  
Governor, State of Michigan,

Members of the Legislature  
State of Michigan,

Retirement Board Members  
and  
Members, Retirees and Beneficiaries

Ladies and Gentlemen:

We are pleased to present the comprehensive annual financial report of the Michigan Judges' Retirement System (System) for fiscal year 2012.

### INTRODUCTION TO REPORT

The System was established by legislation under Public Act 234 of 1992 which consolidated the Judges' and former Probate Judges' retirement systems. The System is administered by the Office of Retirement Services (ORS). The number of active and retired members and beneficiaries of the System is presented in Note 1 of the financial statements in the Financial Section of this report. The purpose of the System is to provide benefits for all judges. 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 regarding the safekeeping of assets and reliability of all financial records. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. This internal control structure includes maintaining written policies and procedures. Discussion and analysis of net assets and related additions and deductions are presented in the Management Discussion and Analysis which can be found immediately following the Independent Auditor's Report.

### *Independent Auditors and Actuary*

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

Statute requires that an annual actuarial valuation be conducted. The purpose of the valuation is to evaluate the mortality, service, compensation and other financial experience of the System and to recommend employer-funding rates for the subsequent year. The annual actuarial valuation was completed by Gabriel Roeder Smith & Company for the fiscal year ended September 30, 2012. 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**

Public Act 234 of 1992 authorized the merger of the Probate Judges' Retirement Fund into the Judges' Retirement Fund by requiring the consolidation of all assets, rights, and obligations under the former Judges' and Probate Judges' Retirement Funds. The Judges' Retirement Board, with the director of the Office of Retirement Services as the Executive Secretary, administers the consolidated fund. Financing comes from member contributions, court filing fees as provided under law, investment earnings, and legislative appropriations.

Public Act 523 of 1996, effective March 31, 1997, closed the plan to new entrants. Judges or state officials newly appointed or elected on or after March 31, 1997, become members of the State's 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 13.9% for the Pension Plan and 14.0% for the Other Post-Employment Benefits (OPEB) Plan. For the last five years, the System has experienced an annualized rate of return of 1.4%. A summary of asset allocation and rates of return can be found in the Investment Section of this report.

# INTRODUCTORY SECTION

## Letter of Transmittal (continued)

### *Accounting System*

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

### *Funding*

Funds are derived from the excess of additions to plan 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. As of September 30, 2012, the actuarial value of the assets and actuarial accrued liability of the System were \$245.6 million and \$249.6 million, respectively, resulting in a funded ratio of 98.4%. As of September 30, 2011, the amounts were \$266.8 million and \$251.7 million, respectively, resulting in a funded ratio of 106.2%. An historical perspective of funding levels for the System is presented on the Schedule of Funding Progress in the Required Supplementary Information in the Financial Section of this report.

### *Postemployment Benefits*

An actuarial valuation is completed annually to determine the actuarial accrued liability if the postemployment benefits were to be pre-funded. As of September 30, 2012 the actuarial accrued liability for postemployment benefits based on pay as you go is \$8.5 million. If these benefits were pre-funded the actuarial accrued liability as of September 30, 2012 would be approximately \$5.6 million.

## **MAJOR GOALS ACCOMPLISHED**

The Michigan Department of Technology, Management & 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.

Additional accomplishments are highlighted below:

### **Redesigned miAccount pages and added new functionality**

Retirees can quickly resolve any issues accessing the secure online tool with an intuitive new design for the miAccount login page. In just a few clicks, retirees can retrieve their username, reset their password, and update their email address on file.

### **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. To date, over 11,500 paper check recipients switched to direct deposit.

### **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.



# INTRODUCTORY SECTION

## Letter of Transmittal (continued)

### **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.

### **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.

### ***Acknowledgments***

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, 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 Judges' Retirement System. Their cooperation contributes significantly to the success of the System.

Sincerely,



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



Phillip J. Stoddard, Director  
Office of Retirement Services

# **INTRODUCTORY SECTION**

## **Administrative Organization**

### **Retirement Board Members \***

Robert L. Brackenbury  
Representing State Treasurer  
Statutory Member

Mark Boonstra  
Trustee (General Public)  
Term Expires March 31, 2015

Molly Jason  
Representing Attorney General  
Statutory Member

(vacant)  
Trustee (General Public)

Judge Diane D'Agostini  
Representing Active Judges  
Term Expires March 31, 2013

\*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

#### **Independent Auditors**

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

#### **Investment Manager and Custodian**

Andy Dillon  
State Treasurer  
State of Michigan

#### **Legal Advisor**

Bill Schuette  
Attorney General  
State of Michigan

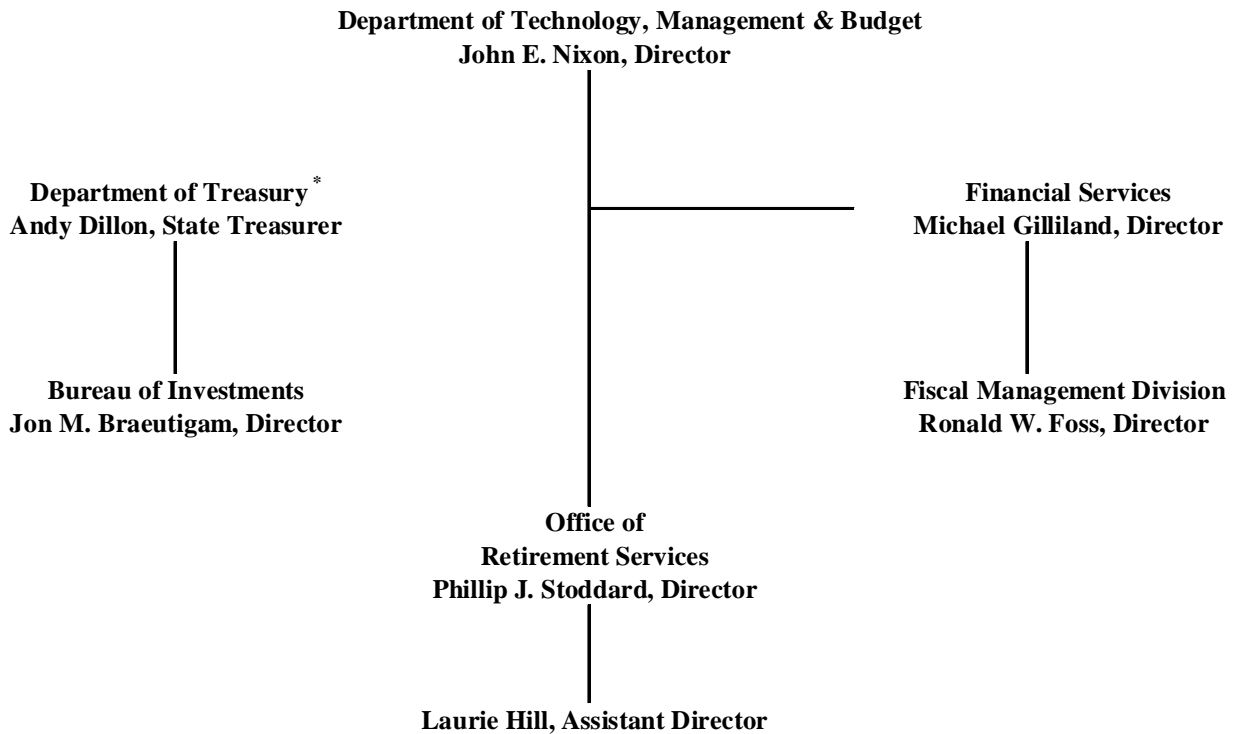
#### **Investment Performance Measurement**

State Street Corporation  
State Street Investment Analytics  
Boston, MA

# INTRODUCTORY SECTION

## Administrative Organization (continued)

### Organization Chart



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

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# FINANCIAL SECTION

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

# FINANCIAL SECTION

## Independent Auditor's Report



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

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

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

The Honorable Mark T. Boonstra, Vice Chair  
Michigan Judges' 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 Judge Boonstra, Mr. Nixon, and Mr. Stoddard:

We have audited the accompanying basic financial statements of the Michigan Judges' 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 Judges' 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 Judges' 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)

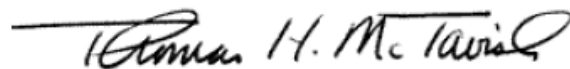
In accordance with *Government Auditing Standards*, we have also issued our report dated December 29, 2012 on our consideration of the Michigan Judges' Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, 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 41 through 43 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 Judges' Retirement System. The supporting schedules on pages 44 through 47 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The supporting schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

The introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Sincerely,



Thomas H. McTavish, C.P.A.

Auditor General

December 29, 2012

# FINANCIAL SECTION

## Management's Discussion and Analysis

Our discussion and analysis of the Michigan Judges' 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 \$240.9 million (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, 2012, the funded ratio was approximately 98.4% for pension benefits and the funded ratio for other postemployment benefits (OPEB) was 0.0%.
- Additions for the year were \$37.9 million, which is comprised primarily of member contributions of \$1.9 million and investment earnings of \$34.8 million.
- Deductions increased over the prior year from \$21.2 million to \$21.6 million or 2.0%. This increase can be mostly attributed to an increase in retirement and health care 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 41) and Schedules of Employer and Other Contributions (page 42) to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.



# FINANCIAL SECTION

## Management's Discussion and Analysis (continued)

### FINANCIAL ANALYSIS

System total assets as of September 30, 2012, were \$266.2 million and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased \$7.7 million or 3.0% between fiscal years 2011 and 2012 due primarily to an increase in net investment income. Total assets decreased \$10.0 million or (3.7)% between fiscal years 2010 and 2011 due primarily to net investment losses.

Total liabilities as of September 30, 2012, were \$25.3 million and were comprised of warrants outstanding, accounts payable, and obligations under securities lending. Total liabilities decreased \$8.6 million or (25.3)% between fiscal years 2011 and 2012 due primarily to decreased obligations under securities lending. Total liabilities decreased \$1.2 million or (3.5)% 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 \$240.9 million. Total net assets held in trust for pension and OPEB benefits increased \$16.3 million or 7.3% between fiscal years 2011 and 2012 due primarily to an increase in net investment income. Total net assets decreased \$8.8 million or (3.8)% between fiscal years 2010 and 2011 due primarily to net investment losses.

#### Net Assets (in thousands)

|  | 2012              | Increase<br>(Decrease) |    | 2011           | Increase<br>(Decrease) |    | 2010           |
|--|-------------------|------------------------|----|----------------|------------------------|----|----------------|
| <b>Assets</b>                                  |                   |                        |    |                |                        |    |                |
| Cash   | \$ 2,715          | 139.4 %                | \$ | 1,134          | 47.2 %                 | \$ | 771            |
| Receivables                                    | 151               | 0.3                    |    | 151            | (55.3)                 |    | 337            |
| Investments                                    | 263,339           | 2.4                    |    | 257,206        | (3.8)                  |    | 267,396        |
| <b>Total Assets</b>                            | <u>266,205</u>    | <u>3.0</u>             |    | <u>258,491</u> | <u>(3.7)</u>           |    | <u>268,504</u> |
| <b>Liabilities</b>                             |                   |                        |    |                |                        |    |                |
| Warrants outstanding                           | 15                | 42.6                   |    | 10             | (61.8)                 |    | 27             |
| Accounts payable and other accrued liabilities | 143               | 676.1                  |    | 18             | (83.5)                 |    | 111            |
| Amounts due to other funds                     |                   |                        |    |                |                        |    | 28             |
| Obligations under securities lending           | 25,169            | (25.7)                 |    | 33,897         | (3.2)                  |    | 35,007         |
| <b>Total Liabilities</b>                       | <u>25,326</u>     | <u>(25.3)</u>          |    | <u>33,926</u>  | <u>(3.5)</u>           |    | <u>35,173</u>  |
| <b>Total Net Assets</b>                        | <u>\$ 240,879</u> | <u>7.3 %</u>           | \$ | <u>224,565</u> | <u>(3.8) %</u>         | \$ | <u>233,331</u> |

# **FINANCIAL SECTION**

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

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

The reserves needed to finance pension and other postemployment benefits are accumulated through the collection of member contributions, earnings on investments, and court fees. Contributions, net investment income, and court fees for fiscal year 2012 totaled \$37.9 million.

Total additions for fiscal year 2012 increased approximately \$25.5 million or 205.8% from those of fiscal year 2011 due primarily to an increase in investment income compared to a decrease in investment income in 2011. Investment income increased primarily due to an increase of the fair value of investments. Total additions for fiscal year 2011 decreased approximately \$12.4 million or (49.9)% from those of fiscal year 2010 due primarily to a decrease in net investment gains. Total contributions decreased between fiscal years 2011 and 2012 by \$145.5 thousand or (7.2)%, and investment income increased \$24.8 million or 247.7%. Total contributions decreased between fiscal years 2010 and 2011 by \$39.1 thousand or (1.9)%, and investment income decreased \$11.9 million or (54.4)%. Court fees totaled \$1.2 million in fiscal year 2012 as compared to \$353.2 thousand in fiscal year 2011. The increase in court fees was needed to cover the Actual Required Contribution (ARC) for the pension plan. The Investment Section of this report reviews the results of investment activity for 2012.

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

The primary deductions of the System include the payment of pension benefits to members and beneficiaries, payment for health, dental and vision benefits, and the cost of administering the System. Total deductions for fiscal year 2012 were \$21.6 million, an increase of 2.0% from fiscal year 2011 deductions. Total deductions for fiscal year 2011 were \$21.2 million, a decrease of (0.8)% over fiscal year 2010 deductions.

The health, dental and vision care expenses increased during the year by \$143.3 thousand or 35.7% from \$401.0 thousand to \$544.3 thousand. This compares to a decrease of \$677.9 thousand or (62.8)% from \$1.1 million to \$401.0 thousand between fiscal years 2010 and 2011. This year's increases were due primarily to increases in retiree claim payments. The payment of pension benefits increased by \$211.3 thousand or 1.0% between fiscal years 2011 and 2012, and increased by \$501.7 thousand or 2.5% from fiscal year 2010 to 2011. In fiscal year 2012, the increase in pension benefit expense resulted from the increase of the number of retirees from 539 in 2011 to 541 in 2012. In fiscal year 2011, the increase in pension benefit expense resulted from new retirees earning higher pension payments, while the number of retirees decreased from 541 in 2010 to 539 in 2011. Administrative and other expenses increased by \$65.7 thousand or 37.2% from \$176.7 thousand to \$242.4 thousand between fiscal years 2011 and 2012. This compares to a decrease of \$2.0 thousand or (1.1)% from \$178.7 thousand in fiscal year 2010 to \$176.7 thousand in fiscal year 2011. The comparative year's increase in administrative and other expenses is due primarily to a probable loss related to the guarantee of bonds for a Michigan motion picture studio (See Note 6).

# FINANCIAL SECTION

## Management's Discussion and Analysis (continued)

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

|  | 2012              | Increase<br>(Decrease) | 2011              | Increase<br>(Decrease) | 2010              |
|--|-------------------|------------------------|-------------------|------------------------|-------------------|
| <b>Additions</b>                         |                   |                        |                   |                        |                   |
| Member contributions                     | \$ 1,876          | (7.1) %                | \$ 2,020          | (2.0) %                | \$ 2,061          |
| Other governmental contributions         |                   | (100.0)                | 2                 | 0.0                    |                   |
| Net investment income (loss)             | 34,805            | 247.7                  | 10,009            | (54.4)                 | 21,930            |
| Court fees, transfers, and miscellaneous | 1,212             | 234.8                  | 362               | (52.5)                 | 762               |
| <b>Total Additions</b>                   | <u>37,893</u>     | <u>205.8</u>           | <u>12,393</u>     | <u>(49.9)</u>          | <u>24,753</u>     |
| <b>Deductions</b>                        |                   |                        |                   |                        |                   |
| Pension benefits                         | 20,792            | 1.0                    | 20,581            | 2.5                    | 20,079            |
| Health care benefits                     | 544               | 35.7                   | 401               | (62.8)                 | 1,079             |
| Refunds of member contributions          | 0 *               | 0.0                    |                   | 0.0                    |                   |
| Administrative and other expenses        | 242               | 37.2                   | 177               | (1.1)                  | 179               |
| <b>Total Deductions</b>                  | <u>21,579</u>     | <u>2.0</u>             | <u>21,159</u>     | <u>(0.8)</u>           | <u>21,337</u>     |
| <b>Net Increase (decrease)</b>           | 16,314            | 286.1                  | (8,766)           | (356.6)                | 3,416             |
| <b>Net Assets - Beginning of Year</b>    | <u>224,565</u>    | <u>(3.8)</u>           | <u>233,331</u>    | <u>1.5</u>             | <u>229,915</u>    |
| <b>Net Assets - End of Year</b>          | <u>\$ 240,879</u> | <u>7.3 %</u>           | <u>\$ 224,565</u> | <u>(3.8) %</u>         | <u>\$ 233,331</u> |

\* The amounts represents less than \$100.00.

### RETIREMENT SYSTEM AS A WHOLE

The System's combined net assets experienced an increase in 2012 after a decrease in 2011 and an increase in 2010. The Systems rate of return increased an overall 7.8% from a 6.1% return in fiscal year 2011 to a 13.9% return for the Pension Plan and 14.0% return for the OPEB Plan during fiscal year 2012. Management believes that the System remains financially sound and positioned to meet its ongoing benefit obligations due, in part, to a prudent investment program, cost controls, and strategic planning.

### CONTACTING SYSTEM FINANCIAL MANAGEMENT

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

# FINANCIAL SECTION

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

As of September 30, 2012 and 2011

|   | September, 2012       |                   |                       | September, 2011       |                   |                       |
|---|-----------------------|-------------------|-----------------------|-----------------------|-------------------|-----------------------|
|   | Pension Plan          | OPEB Plan         | Total                 | Pension Plan          | OPEB Plan         | Total                 |
| <b>Assets:</b>  |                       |                   |                       |                       |                   |                       |
| Equity in Common Cash   | \$ 2,592,793          | \$ 122,049        | \$ 2,714,842          | \$ 1,131,092          | \$ 3,082          | \$ 1,134,174          |
| Receivables:  |                       |                   |                       |                       |                   |                       |
| Amounts due from members  | 16,054                |                   | 16,054                | 9,614                 |                   | 9,614                 |
| Amounts due from others   |                       | 4,113             | 4,113                 |                       |                   |                       |
| Amounts due from employers  | 91,070                | 2,522             | 93,592                | 101,066               | 2,131             | 103,197               |
| Interest and dividends  | 37,419                | 102               | 37,521                | 37,924                | 103               | 38,027                |
| Total receivables   | 144,543               | 6,737             | 151,280               | 148,604               | 2,234             | 150,838               |
| Investments:  |                       |                   |                       |                       |                   |                       |
| Short term investment pools   | 4,340,916             | 27,179            | 4,368,095             | 7,201,621             | 19,623            | 7,221,244             |
| Fixed income pools  | 38,117,233            | 103,867           | 38,221,100            | 40,889,857            | 111,421           | 41,001,278            |
| Domestic equity pools   | 68,565,385            | 186,824           | 68,752,209            | 66,740,535            | 181,862           | 66,922,397            |
| Real estate and infrastructure pools  | 33,826,049            | 88,413            | 33,914,462            | 31,767,091            | 86,562            | 31,853,653            |
| Alternative investments pool  | 38,479,228            | 104,852           | 38,584,080            | 37,804,205            | 103,013           | 37,907,218            |
| International equities pools  | 36,202,955            | 87,610            | 36,290,565            | 29,504,676            | 80,398            | 29,585,074            |
| Absolute return pools   | 23,608,515            | 64,330            | 23,672,845            | 15,469,330            | 42,153            | 15,511,483            |
| Securities lending collateral   | 19,482,888            | 53,086            | 19,535,974            | 27,129,616            | 73,926            | 27,203,542            |
| Total investments   | 262,623,169           | 716,161           | 263,339,330           | 256,506,931           | 698,958           | 257,205,889           |
| <b>Total assets</b>   | <b>265,360,505</b>    | <b>844,947</b>    | <b>266,205,452</b>    | <b>257,786,627</b>    | <b>704,274</b>    | <b>258,490,901</b>    |
| <b>Liabilities:</b>   |                       |                   |                       |                       |                   |                       |
| Warrants outstanding  | 14,867                |                   | 14,867                | 10,398                | 28                | 10,426                |
| Accounts payable and other accrued liabilities                              | 100,814               | 41,920            | 142,734               | 4,208                 | 14,184            | 18,392                |
| Obligations under securities lending  | 25,100,248            | 68,392            | 25,168,640            | 33,804,981            | 92,115            | 33,897,096            |
| <b>Total liabilities</b>  | <b>25,215,928</b>     | <b>110,312</b>    | <b>25,326,240</b>     | <b>33,819,587</b>     | <b>106,327</b>    | <b>33,925,914</b>     |
| <b>Net Assets (Liabilities) Held in Trust for Pension and OPEB Benefits</b> | <b>\$ 240,144,577</b> | <b>\$ 734,635</b> | <b>\$ 240,879,212</b> | <b>\$ 223,967,040</b> | <b>\$ 597,947</b> | <b>\$ 224,564,987</b> |

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

# FINANCIAL SECTION

## 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<br>Plan       | OPEB<br>Plan      | Total                 | Pension<br>Plan       | OPEB<br>Plan      | Total                 |
| <b>Additions:</b>  |                       |                   |                       |                       |                   |                       |
| Contributions:   |                       |                   |                       |                       |                   |                       |
| Member contributions   | \$ 1,353,949          | \$ 522,042        | \$ 1,875,991          | \$ 1,468,068          | \$ 551,783        | \$ 2,019,851          |
| Other governmental contributions                                       |                       |                   |                       |                       | \$ 1,617          | \$ 1,617              |
| <b>Total contributions</b>   | <b>1,353,949</b>      | <b>522,042</b>    | <b>1,875,991</b>      | <b>1,468,068</b>      | <b>553,400</b>    | <b>2,021,468</b>      |
| Investment income (loss):  |                       |                   |                       |                       |                   |                       |
| Net appreciation (depreciation)<br>in fair value of investments        | 30,178,520            | 81,470            | 30,259,990            | 5,010,227             | 13,096            | 5,023,323             |
| Interest, dividends, and other   | 4,863,082             | 13,279            | 4,876,361             | 5,373,883             | 24,880            | 5,398,763             |
| <b>Net investment income (loss)</b>                                    | <b>35,041,602</b>     | <b>94,749</b>     | <b>35,136,351</b>     | <b>10,384,110</b>     | <b>37,976</b>     | <b>10,422,086</b>     |
| Investment expenses:   |                       |                   |                       |                       |                   |                       |
| Real estate operating expenses   | (12,233)              | (38)              | (12,271)              | (19,423)              | (51)              | (19,474)              |
| Other investment expenses  | (774,564)             | (2,007)           | (776,571)             | (756,037)             | (1,976)           | (758,013)             |
| Securities lending activities:   |                       |                   |                       |                       |                   |                       |
| Securities lending income  | 526,229               | 1,533             | 527,762               | 472,505               | 1,235             | 473,740               |
| Securities lending expenses  | (69,915)              | (191)             | (70,106)              | (108,833)             | (284)             | (109,117)             |
| <b>Net investment income (loss)</b>                                    | <b>34,711,119</b>     | <b>94,045</b>     | <b>34,805,165</b>     | <b>9,972,322</b>      | <b>36,900</b>     | <b>10,009,222</b>     |
| Court Fees   | 1,111,026             | 100,000           | 1,211,026             | 43,185                | 310,000           | 353,185               |
| Miscellaneous income   | 1,106                 |                   | 1,106                 | 8,824                 |                   | 8,824                 |
| <b>Total additions</b>   | <b>37,177,201</b>     | <b>716,087</b>    | <b>37,893,288</b>     | <b>11,492,399</b>     | <b>900,300</b>    | <b>12,392,699</b>     |
| <b>Deductions:</b>   |                       |                   |                       |                       |                   |                       |
| Benefits paid to plan members<br>and beneficiaries:                    |                       |                   |                       |                       |                   |                       |
| Retirement benefits  | 20,792,225            |                   | 20,792,225            | 20,580,971            |                   | 20,580,971            |
| Health benefits  |                       | 425,647           | 425,647               |                       | 265,202           | 265,202               |
| Dental/vision benefits   |                       | 118,702           | 118,702               |                       | 135,825           | 135,825               |
| Refund of contributions  |                       | 90                | 90                    |                       |                   |                       |
| Administrative and other expenses                                      | 207,439               | 34,959            | 242,398               | 141,155               | 35,539            | 176,694               |
| <b>Total deductions</b>  | <b>20,999,664</b>     | <b>579,399</b>    | <b>21,579,063</b>     | <b>20,722,126</b>     | <b>436,566</b>    | <b>21,158,692</b>     |
| <b>Net Increase (decrease)</b>   | <b>16,177,537</b>     | <b>136,688</b>    | <b>16,314,225</b>     | <b>(9,229,727)</b>    | <b>463,734</b>    | <b>(8,765,993)</b>    |
| <b>Net Assets Held in<br/>Trust for Pension<br/>and OPEB Benefits:</b> |                       |                   |                       |                       |                   |                       |
| <b>Beginning of Year</b>   | <b>223,967,040</b>    | <b>597,947</b>    | <b>224,564,987</b>    | <b>233,196,766</b>    | <b>134,213</b>    | <b>233,330,979</b>    |
| <b>End of Year</b>   | <b>\$ 240,144,577</b> | <b>\$ 734,635</b> | <b>\$ 240,879,212</b> | <b>\$ 223,967,040</b> | <b>\$ 597,947</b> | <b>\$ 224,564,987</b> |

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

# FINANCIAL SECTION

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

### NOTE 1 - PLAN DESCRIPTION

#### ORGANIZATION

The Michigan Judges' Retirement System (System) is a cost sharing, multiple employer, state-wide, defined benefit public employee retirement plan governed by the State of Michigan (State), created under Public Act 234 of 1992, which consolidated the former Judges' and Probate Judges' Retirement Systems into one retirement system. Section 204 of this Act establishes the board's authority to promulgate or amend the provisions of the System. The System's pension plan was established to provide retirement, survivor and disability benefits to judges in the judicial branch of state government. In addition, the System's OPEB plan provides all retirees with the option of receiving health, dental, and vision coverage under the Michigan Judges' Retirement Act. There are 111 participating employers. The System also includes the Governor of the State of Michigan, Lieutenant Governor, Secretary of State, Attorney General, Legislative Auditor General, and the Constitutional Court Administrator if elected prior to March 31, 1997. (Those officials elected on or after March 31, 1997, are part of the Defined Contribution Retirement Plan.). The System is a qualified pension trust fund under section 401(a) of the Internal Revenue Code.

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 (DTMB). The Department Director appoints the Office Director who serves as Executive Secretary to the System's Board, with whom the general oversight of the System resides. The State Treasurer serves as the investment officer and custodian for the System.

#### MEMBERSHIP

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

|  |            |            |
|--|------------|------------|
| Retirees and beneficiaries<br>currently receiving benefits:              |            |            |
| Regular benefits   | 2012       | 2011       |
| Survivor benefits  | 352        | 355        |
| Disability benefits  | 183        | 178        |
|  | 6          | 6          |
| <b>Total</b>   | <u>541</u> | <u>539</u> |
| Current employees:   |            |            |
| Vested   | 199        | 204        |
| Non-vested   | 0          | 1          |
| <b>Total</b>   | <u>199</u> | <u>205</u> |
| Inactive employees entitled<br>to benefits and not yet<br>receiving them | 6          | 11         |
| <b>Total all members</b>   | <u>746</u> | <u>755</u> |

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Plan 1 or 2 members (Supreme Court Justice, Court of Appeals, or elected officials) may enroll in the State Health Plan when they retire and their premium rate is subsidized. All other member may enroll in the State Health Plan if they wish to, but they must pay the entire premium cost. At September 30, 2012, and 2011, there were a total of 511 and 512 retirees, respectively, who are eligible to participate in the health/dental/vision plans. The number of participants is as follows:

| <b>Health, Dental, and Vision Plan</b>                | <u>2012</u> | <u>2011</u> |
|---|-------------|-------------|
| Eligible participants                                 | 511         | 512         |
| Participants receiving benefits:                      |             |             |
| Health  | 77          | 81          |
| Dental  | 135         | 140         |
| Vision  | 113         | 116         |
| Defined Contribution participants receiving benefits: |             |             |
| Health  | 1           | 1           |
| Dental  | 6           | 6           |
| Vision  | 6           | 6           |

## BENEFIT PROVISIONS – PENSION

### *Introduction*

Benefit provisions of the defined benefit pension plan are established by State statute, which may be amended. Public Act 234 of 1992, Michigan Judges' Retirement Act, as amended, establishes eligibility and benefit provisions for the defined benefit pension plan. Retirement benefits are determined by final 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 disability and survivor benefits.

A member who leaves judicial service may request a refund of his or her member contribution account. A refund cancels a former member's rights to future benefits. Returning members who previously received a refund of their contributions may reinstate their service credit through repayment of the refund upon satisfaction of certain requirements. For salary, contribution and calculation of retirement benefit, the membership of the System is categorized into seven plans. The categories are based on the position to which the member was elected or appointed.

Public Act 523 of 1996, which was effective March 31, 1997, closed the plan to new entrants. Judges or State officials newly appointed or elected on or after March 31, 1997, become members of the defined contribution plan.

### *Regular Retirement*

The retirement benefit or allowance is calculated in accordance with the formula of the plan, which applies to the member. The formula is based on a member's years of credited service (employment) and final compensation. The normal retirement benefit is payable monthly over the lifetime of a member.

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

1. age 60 with 8 or more years of credited service; or
2. age 55 with 18 or more years of credited service (the last 6 years continuous); or
3. 25 or more years of service, the last 6 years continuous; no age requirement; or
4. age 60 with service of two full terms in the office of Governor, Lieutenant Governor, Secretary of State, or Attorney General, or one full term in the office of Legislative Auditor General.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### *Early Retirement*

A member may retire early with a permanently reduced pension:

1. after completing at least 12 but less than 18 years of service, of which the last 6 years are continuous;  
and
2. after attaining age 55.

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

### *Deferred Retirement*

A member with 8 or more years of credited service who terminates judicial service before meeting the age requirements to receive a retirement allowance and who does not withdraw his or her contributions, is entitled to receive a monthly allowance upon reaching age 60 or age 55 with 18 years of service, the last 6 of which were continuous.

### *Disability Benefit*

A member with 8 or more years of credited service, who is totally disabled from physically or mentally performing his or her duties, is eligible for a disability pension. The disability benefit is computed in the same manner as an age and service allowance based upon service and final salary at the time of disability.

### *Pension Payment Options*

A pension is payable monthly for the lifetime of a System retiree and equals 3% of final salary times years of service for up to 12 years of service; or 50% of salary with 12 years, increased 2.5% for each additional year up to a maximum of 60% of salary. A former retiree of the Probate Judges' Retirement System receives 3% of salary times years of service, to a maximum of the greater of 40% of salary or \$15,000 but not to exceed 66 2/3% of final salary when added to a county pension; or 3.5% of salary times years of service with a maximum of two thirds of final salary, if elected.

Straight Life - This option provides the highest monthly retirement allowance. Surviving spouse receives a 50% survivor's benefit.

Option A - 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.

Option B - 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 smaller than the factor used in Option A above.

### *Survivor Benefit*

A survivor benefit may be paid if 1) a member who has 8 or more years of credited service dies while in office, 2) a vested former member dies before retirement, or 3) a retiree dies following retirement.

### *Contributions*

Member Contributions - Members currently participate on a contributory basis. For contribution purposes, the membership of the System is categorized in seven plans, which are based on the position to which the member was



# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

elected or appointed. Under certain circumstances, members may contribute to the System for the purchase of creditable service, such as military service or other public service. If a member terminates covered 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.

Publicly Financed Contributions - There are two public sources which fund retirement benefits: Court fees and State appropriations. The State contributes annually the greater of 3.5% of the aggregate annual compensation of State paid base salaries, or the difference between the total actuarial requirement of current service and unfunded accrued liabilities minus the revenues from court filing fees and member contributions. If the court fees deposited in the reserve for employer contributions equal the amount needed in addition to other publicly financed contributions to sustain the required level of publicly financed contributions, Section 304(4) of Judges' Retirement Act requires court fees be deposited in the court fee fund. A chart showing the publicly financed contribution rates is included in the Schedules of Additions by Source in the Statistical Section.

Public Act 95 of 2002 authorizes the State Treasurer, if funds remain in the court fee fund after transfers, to transmit a portion of the money in the court fee fund and any earnings on those amounts to the reserve for health benefits. The purpose of this transfer is to pay expected health care costs for the subsequent fiscal year that are not covered as a result of employee contributions. For fiscal year 2012, this amount was \$100,000. The amount for fiscal year 2011 was \$310,000.

### **BENEFIT PROVISIONS – OTHER POSTEMPLOYMENT**

#### *Introduction*

Benefit provisions of the postemployment benefit plan are established by State statute, which may be amended. Public Act 234 of 1992, as amended, establishes eligibility and benefit provisions for the OPEB plan. Members are eligible to receive health, prescription drug, dental and vision coverage on the first day they start receiving pension benefits. There is no provision for ad hoc or automatic increases. The Judges' Retirement Act requires joint authorization by DTMB and the Civil Service Commission to make changes to retiree medical benefit plans.

Under the Michigan Judges' Retirement Act, Plan 1 or 2, members may enroll in the State Health Plan when they retire. Five percent of the health insurance premium is deducted from the monthly pension check until age 65, at which time Medicare provides primary health insurance coverage. All other members may enroll in the State Health Plan during an open enrollment period. The total premium is deducted from the monthly pension check. The active employee payroll contribution rate to fund health benefits for the Plan 1 or 2 members was 2.0% for 2012 and 2.0 % for 2011. There are no required employer contributions to fund health benefits.

All retirees may enroll in the state dental and/or vision plan during an open enrollment period. The total premium is deducted from the monthly pension check.

Retirees of Plan 1 and 2 are provided with life insurance coverage equal to 25% of the active life insurance coverage and \$1,000 for each dependent. Premiums are fully paid by the State for Plan 1 and 2 members. All others must pay the full premium.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

| <b>Health, Dental, and Vision Plan</b>                | <u>2012</u> | <u>2011</u> |
|---|-------------|-------------|
| Eligible participants                                 | 511         | 512         |
| Participants receiving benefits:                      |             |             |
| Health  | 77          | 81          |
| Dental  | 135         | 140         |
| Vision  | 113         | 116         |
| Defined Contribution participants receiving benefits: |             |             |
| Health  | 1           | 1           |
| Dental  | 6           | 6           |
| Vision  | 6           | 6           |
| Expenses for the year                                 | \$ 579,399  | \$ 436,566  |
| Employer payroll contribution rate                    | 0%          | 0%          |

## 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. Court filing fees are recognized as revenue in the period received. 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 234 of 1992, as amended, created several reserves. The reserves are described below and details are provided in the supporting schedules.

Reserve for Employee Contributions - This reserve represents active member contributions, payments for the purchase of service credit, repayment of previously refunded contributions and interest less amounts transferred to the Reserve for Retirement Benefit Payments for regular and disability retirement, amounts refunded to terminated members, and transferring inactive reserves. At September 30, 2012, and 2011, the balance in this reserve was \$51.1 million and \$48.5 million, respectively.

Reserve for Employer Contributions - This reserve represents court fees, late fees, interest payments, employer contributions, and State appropriations. 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 (\$23.5) million and (\$15.8) million, respectively.

Reserve for Retired Benefit Payments - This reserve 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 and the Reserve for Employer Contributions. Monthly benefits, which are paid to the retiree, reduce the reserve. At the end of each fiscal year, an amount is transferred from the Reserve for Employer Contributions 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 \$155.0 million and \$154.8 million, respectively.

Reserve for Undistributed Investment Income - This reserve is credited with all investment earnings, changes in fair value, gifts to the System, and forfeited contributions. All administrative expenses are paid from this reserve and interest is transferred annually to the other reserves. At September 30, 2012, and 2011, the balance in this reserve was \$57.5 million and \$36.5 million, respectively.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Reserve for Health (OPEB) Benefits - This reserve is credited with member contributions for health, dental and vision benefits. In fiscal year 2011, this reserve included revenue from the federal government for the early retiree reinsurance program (ERRP) and the retiree drug subsidy program (RDS) pursuant to the provisions of Medicare Part D. The 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. The actual annual contributions have been less than the annual required contribution (the ARC). Health, dental, and vision benefits are paid from this reserve. At September 30, 2012, and 2011, the balance in this reserve was \$734,635 and \$597,947 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 organizations. Accordingly, the System is the only entity included in this financial report.

### ***Benefit Protection***

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

### ***Fair Value of Investments***

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

### ***Investment Income***

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

### ***Costs of Administering the System***

Each year a restricted general fund appropriation is requested to fund the on-going business operations of the System. These administrative costs are ultimately funded by the System through the regular transfer of funds from the System to the State's general fund based on either a direct cost or allocation basis depending on the nature of the expense. Costs of administering the System are financed by undistributed investment income of the System.

### ***Property and Equipment***

Office space is leased from the State on a year to year basis. Office equipment is capitalized if the value exceeds \$5,000. These assets are recorded at cost and are reported net of depreciation in the Statement of Pension Plan and Other Postemployment Benefit Plan Net Assets. Such assets are depreciated on a straight-line basis over 10 years. The System does not have equipment that falls within these parameters.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### *Related Party Transactions*

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

|                       | <u>2012</u> | <u>2011</u> |
|-----------------------|-------------|-------------|
| Building Rentals      | \$ 1,256    | \$ 1,543    |
| Technological Support | 8,260       | 12,355      |
| Attorney General      | 7,650       | 15,523      |
| Investment Services   | 68,223      | 62,637      |
| Personnel Services    | 16,830      | 15,624      |

Cash - On September 30, 2012, and 2011, the System had \$2.7 million and \$1.1 million, respectively in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings from these activities amounted to \$0.8 thousand and \$1.2 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 in order 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 2012 and 2011, the System provided excess benefits to one retiree.

## NOTE 3 - CONTRIBUTIONS AND FUNDED STATUS

### *Contributions*

Members' contributions range from 3.5% to 7% of their salary depending on the plan (described in statute). Contributions are tax deferred under Section 414(h)(2) of the Internal Revenue Code, except for probate judges whose contributions are tax deferred only if the local unit of government has adopted a resolution to do so. Contribution provisions are specified by State statute and may be amended only by action of the State Legislature.

The State contributes annually the greater of 3.5% of the aggregate annual compensation of State paid base salaries, or the difference between the total actuarial requirement of current service and unfunded actuarial liabilities minus the revenues from court filing fees and member contributions. Although contributions are expressed as a percentage of payroll, because the system is a closed plan, the actuarial valuation calculates a level dollar amount for funding purposes. For fiscal year 2012, an employer contribution in the amount of \$1.1 million was paid from the court fee fund. For fiscal year 2011, no employer contributions were required based on the annual actuarial valuation. If the court fees deposited in the reserve for employer contributions equal the amount needed in addition to other publicly financed contributions to sustain the required level of publicly financed contributions, Section 304(4) requires court fees to be deposited in the court fee fund in the State Treasury. The State Treasurer transmits the money in the court fee fund, not exceeding \$2.2 million in any fiscal year, to the court equity fund for operational expenses of trial courts.

Employer contributions to the System are determined on an actuarial basis using the entry age normal actuarial cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the service of the individual between entry age and assumed exit age. The portion of this cost allocated to the current valuation year is called the normal cost. The remainder is called the actuarial accrued liability. Normal cost is funded on a current basis. For retirement and OPEB benefits, the unfunded (overfunded) actuarial accrued liability will be amortized over a 24 year period for the 2012 fiscal year and is amortized over a 25 year period for the 2011 fiscal year.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

Actual contributions (court fees) for retirement benefits were \$1.1 million and \$43.2 thousand for fiscal years 2012 and 2011, respectively, representing 4.8 % of annual covered payroll for the year ended September 30, 2012, and 0.18% of annual covered payroll for the year ended September 30, 2011. Required employer contributions based on previous year actuarial valuations for pensions included:

1. \$2.4 million for fiscal year 2012 and \$2.4 million for fiscal year 2011 for the normal cost of pensions representing 10.5% and 10.3% (before reconciliation) of annual covered payroll for fiscal years 2012 and 2011, respectively.
2. \$4million and (\$1.4) million for fiscal years 2012 and 2011, respectively, for amortization of overfunded(underfunded) actuarial accrued liability representing 1.6% and (5.9)% (before reconciliation) of annual covered payroll for fiscal years 2012 and 2011, respectively.

Actual employer contributions (court fees) for other postemployment benefits (OPEB) were \$100.0 thousand and \$310.0 thousand, respectively, for fiscal years 2012 and 2011, representing 1.6% of annual covered payroll for the year ended September 30, 2012 and 5.7% of annual covered payroll for the year ended September 30, 2011. Required employer contributions based on previous year actuarial valuations for OPEB included:

1. \$317.1 thousand and \$257.2 thousand for fiscal years 2012 and 2011, respectively, for the normal cost of OPEB representing 5.1% and 4.8% (before reconciliation) of annual covered payroll for fiscal years 2012 and 2011, respectively.
2. \$382.0 thousand and \$339.8 thousand for fiscal years 2012 and 2011, respectively, for amortization of unfunded actuarial accrued liability representing 6.2% and 6.3% (before reconciliation) of annual covered payroll for fiscal years 2012 and 2011, 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.

### ***Funded Status***

Participating employers are required to contribute at an actuarially determined rate for both pension benefits and OPEB. For fiscal year 2012, the actuarial accrued liability (AAL) for pension benefits was \$249.6 million, and the actuarial value of assets was \$245.6 million, resulting in an unfunded actuarial accrued liability (UAAL) of \$4.0 million and a funded ratio of 98.4%. The covered payroll (annual payroll of active employees covered by the plan) was \$22.9 million and the ratio of the UAAL to the covered payroll was 17.4%.

For fiscal year 2012, the actuarial accrued liability (AAL) for OPEB benefits was \$8.5 million, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$8.5 million and a funded ratio of 0.0%. The covered payroll (annual payroll of active employees covered by the plan) was \$6.2 million, and the ratio of the UAAL to the covered payroll was 137.5%.

### ***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 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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

The information presented in the required supplementary information 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                          | 9/30/2012   |
| Actuarial Cost Method                   | Entry Age, Normal   |
| Amortization Method - Pension           | Level dollar, Closed  |
| Amortization Method - OPEB              | Level Percent of Payroll, Closed  |
| Remaining Amortization Period - Pension | 24 Years*   |
| Remaining Amortization Period - OPEB    | 24 Years*   |
| Asset Valuation Method - Pension        | 5-Year Smoothed Market  |
| Asset Valuation Method - OPEB           | Market  |
| Actuarial Assumptions:                  |   |
| Wage Inflation Rate                     | 3.5%  |
| Investment Rate of Return - Pension     | 8.0%  |
| Investment Rate of Return - OPEB        | 4.0%  |
| Projected Salary Increases              | 4.0%  |
| Cost-of-Living Pension Adjustments      | Assumed 4% Compounded<br>for those eligible   |
| Healthcare Cost Trend Rate              | 9.0% Year 1 graded to 3.5% Year 10  |
| Other Assumptions OPEB only:            |   |
| Opt Out Assumption                      | 0% of eligible participants are assumed<br>to opt out of the retiree health plan  |
| Survivor coverage                       | 75% of male retirees and 60% of female<br>retirees are assumed to have coverage<br>continuing after the retiree's death |
| Coverage Election at retirement         | 75% of male and 60% of female future<br>retirees are assumed to elect coverage<br>for 1 or more dependents              |

\*Based on the provisions of GASB Statement No. 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 Employee Retirement Investment Act, Public Act 314 of 1965, as amended. The Public Employee Retirement Investment Act authorizes, with certain restrictions, the investment of pension fund assets in stocks, corporate and government bonds and notes, mortgages, real estate,

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

and certain short-term and alternative investments. Investments must be made for the exclusive purposes of providing benefits to active members, retired members and beneficiaries, and for defraying the expenses of investing the assets.

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

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

### Derivatives

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

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

The derivative fair values are reported on the Statements of Pension Plan and Other Postemployment Benefit Plan Net Assets as of September 30, 2012, and 2011, in their respective investment pools market value. Derivative net appreciation and depreciation are reported on the Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Net Assets for fiscal years ended September 30, 2012, and 2011 statements, 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".

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

| <u>Investment and<br/>Investment Type</u>     | <u>Percentage<br/>of Market<br/>Value</u> | <u>Notional<br/>Value</u> | <u>Investments<br/>At Fair Value</u> | <u>Net<br/>Appreciation<br/>(Depreciation)<br/>in Fair Value</u> | <u>Investment<br/>Income<br/>FY 2012</u> | <u>Fair Value<br/>Subject to<br/>Credit Risk</u> |
|---|---|---------------------------|--------------------------------------|--|--|--|
| Structured Notes                              |   |                           |                                      |  |  |  |
| Absolute Return Investments                   | 0.8%                                      | 1,830.2                   | 1,868.0                              | 102.7  | -  | 1,868.0  |
| US Treasury Bond Future<br>Contracts          |   |                           |                                      |  |  |  |
| Fixed Income Investments                      | 0.0%                                      | 95.0                      | (0.3)                                | (0.3)  | -  | -  |
| Option Contracts                              |   |                           |                                      |  |  |  |
| Equity Investments                            | 0.0%                                      | 78.9                      | (1.0)                                | 14.1   | -  | -  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| International Equity Investments              | 1.8%                                      | 5,172.9                   | 4,528.3                              | 2,670.7  | 10.7                                     | 358.7  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| Equity Investments                            | 0.2%                                      | 4,858.4                   | 509.1                                | 324.2  | (8.1)                                    | 161.5  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| Currency Forward<br>Opportunistic Investments | 0.0%                                      | 28.4                      | (1.2)                                | 1.1  | -  | -  |

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

| <u>Investment and<br/>Investment Type</u>     | <u>Percentage<br/>of Market<br/>Value</u> | <u>Notional<br/>Value</u> | <u>Investments<br/>At Fair Value</u> | <u>Net<br/>Appreciation<br/>(Depreciation)<br/>in Fair Value</u> | <u>Investment<br/>Income<br/>FY 2011</u> | <u>Fair Value<br/>Subject to<br/>Credit Risk</u> |
|---|---|---------------------------|--------------------------------------|--|--|--|
| Structured Notes                              |   |                           |                                      |  |  |  |
| Absolute Return Investments                   | 0.7%                                      | 1,685.2                   | 1,741.1                              | (82.9)   | -  | 1,685.2  |
| US Treasury Bond Future Fixed<br>Contracts    |   |                           |                                      |  |  |  |
| Income Investments                            | 0.0%                                      | 67.1                      | 0.2                                  | 1.6  | -  | -  |
| Option Contracts                              |   |                           |                                      |  |  |  |
| Absolute Return Investments                   | 0.0%                                      | 6.2                       | (0.6)                                | 1.1  | -  | -  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| International Equity Investments              | 4.2%                                      | 8,837.6                   | 9,664.2                              | (708.6)  | 97.4                                     | 1,110.3  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| Equity Investments                            | 0.0%                                      | 3,758.9                   | 102.2                                | (132.0)  | (0.7)                                    | 108.7  |
| Swap Agreements                               |   |                           |                                      |  |  |  |
| Currency Forward<br>Opportunistic Investments | 0.0%                                      | 54.2                      | 2.3                                  | 2.3  | -  | 2.3  |

To diversify the trust funds' portfolio, the State Treasurer has entered into international swap agreements with investment grade counterparties, which are tied to stock market indices in twenty-two foreign countries. Generally, one quarter or less of the notional amount tied to foreign stock market indices is usually hedged against foreign currency fluctuations. The swap agreements provide that the System will pay quarterly over the term of the swap agreements, interest indexed to the three month London Inter Bank Offer Rate (LIBOR), adjusted for an interest rate spread, on the notional amount stated in the agreements. International equity swap agreement maturity dates range from October 2012 to June 2013. The U.S. Domestic LIBOR based floating rate notes and other investments earning short-term interest are held to correspond with the notional amount of the international swap agreements. The value of the international synthetic equity structures is a combination of the value of the swap agreements and the value of the notes and short-term investments. The book value represents the cost of the notes and short-term investments. The current value represents the current value of the notes and short-term investments and the change in the value of the underlying indices from the inception of the swap agreements. The current value is used as a representation of the fair value based on the intention to hold all swap agreements until maturity. At the maturity of the swap agreements, the trust funds will either receive the increase in the value of the equity indices from the level at the inception of the agreements, or pay the decrease in the value of the indices. The combined swap structure generally realizes gains and losses on a rolling multi-year basis.

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



# FINANCIAL SECTION

## 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 2011, was \$25,168,640 and \$33,897,096 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 \$19,535,974 and \$27,203,542. The carrying amount, which is the fair market value, of securities on loan for the System as of September 30, 2012 and 2011, was \$24,559,318 and \$33,104,448 respectively.

Gross income, including capital gains/losses, from security lending for the fiscal years ended September 30, 2012 and 2011 with Credit Suisse was \$527,762 and \$473,740 respectively. Expenses associated with this income were the borrower's rebate of \$20,629 and \$19,647, and fees paid to the agent bank of \$49,477 and \$89,470 respectively.

# FINANCIAL SECTION

## 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 pro-rata share of the underlying investments as required by GASB Statement No. 40. These are held in internal investment pools and reported as such in the financial statements.

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

- Short-Term Fixed Income Investments-Prime commercial paper investments must be rated A-1 or P-1 at the time of purchase as rated by the two major rating services Standard and Poor's Corporations (S&P) and Moody's Investor Service (Moody's), respectively. Borrowers must have at least \$400.0 million in commercial paper outstanding and the State Treasurer may not invest in more than 10% of the borrower's outstanding debt. The investments are further limited to \$200.0 million in any borrower, unless the borrower has an A-1+ rating in which case the investment is not to exceed \$300.0 million.
- Long-Term Fixed Income Investments – These investments must be investment grade or better at the time of purchase unless specific requirements are met as defined 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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### Rated Debt Investments

(in thousands)

As of September 30, 2012 and 2011

| Investment Type                      | 2012             |     |                  |         | 2011             |     |                  |         |
|--------------------------------------|------------------|-----|------------------|---------|------------------|-----|------------------|---------|
|                                      | Fair Value       | S&P | Fair Value       | Moody's | Fair Value       | S&P | Fair Value       | Moody's |
| <b>Short Term</b>                    | \$ 8,569         | A-1 | \$ 8,569         | P-1     | \$ 12,267        | A-1 | \$ 12,024        | P-1     |
|                                      | -                | A-2 | -                | P-2     | -                | A-2 | 243              | P-2     |
| <b>Government Securities</b>         |                  |     |                  |         |                  |     |                  |         |
| US Agencies - Sponsored              | -                | AAA | 4,740            | Aaa     | -                | AAA | 3,530            | Aaa     |
|                                      | 4,740            | AA  | -                | Aa      | 3,530            | AA  | -                | Aa      |
| <b>Corporate Bonds &amp; Notes</b>   |                  |     |                  |         |                  |     |                  |         |
|                                      | 188              | AAA | 342              | Aaa     | 446              | AAA | 616              | Aaa     |
|                                      | 3,665            | AA  | 2,400            | Aa      | 4,344            | AA  | 3,508            | Aa      |
|                                      | 11,071           | A   | 11,456           | A       | 12,521           | A   | 12,920           | A       |
|                                      | 7,224            | BBB | 7,763            | Baa     | 6,729            | BBB | 6,508            | Baa     |
|                                      | 946              | BB  | 697              | Ba      | 760              | BB  | 678              | Ba      |
|                                      | 252              | B   | 293              | B       | 115              | B   | 160              | B       |
|                                      | 61               | CCC | 51               | Caa     | 60               | CCC | 53               | Caa     |
|                                      | -                | CC  | 4                | Ca      | 1                | CC  | 6                | Ca      |
|                                      | -                | C   | -                | C       | -                | C   | 1                | C       |
|                                      | -                | D   | -                | D       | 2                | D   | -                | D       |
|                                      | 2,235            | NR  | 2,636            | NR      | 2,401            | NR  | 2,929            | NR      |
| <b>International <sup>1</sup></b>    |                  |     |                  |         |                  |     |                  |         |
|                                      | 1,996            | AA  | 1,527            | Aa      | 3,971            | AA  | 5,289            | Aa      |
|                                      | 900              | A   | 2,143            | A       | 3,182            | A   | 2,145            | A       |
|                                      | -                | BBB | 195              | Baa     | -                | BBB | 893              | Baa     |
|                                      | -                | BB  | -                | Ba      | 460              | BB  | -                | Ba      |
|                                      | 969              | NR  | -                | NR      | 1,658            | NR  | 944              | NR      |
| <b>Securities Lending Collateral</b> |                  |     |                  |         |                  |     |                  |         |
|                                      | 3,249            | A-1 | 3,249            | P-1     | 2,618            | A-1 | 2,618            | P-1     |
|                                      | 69               | AAA | 1,800            | Aaa     | 5,081            | AAA | 4,928            | Aaa     |
|                                      | 3,732            | AA  | 341              | Aa      | 3,127            | AA  | 12,107           | Aa      |
|                                      | 341              | A   | 2,001            | A       | 1,807            | A   | 1,657            | A       |
|                                      | -                | BBB | 11               | Baa     | 9,735            | BBB | 906              | Baa     |
|                                      | 130              | BB  | 10,414           | Ba      | -                | BB  | 153              | Ba      |
|                                      | 11               | B   | -                | B       | 72               | B   | 71               | B       |
|                                      | 1,467            | CCC | 1,119            | Caa     | 1,412            | CCC | 1,097            | Caa     |
|                                      | -                | CC  | 348              | Ca      | -                | CC  | 315              | Ca      |
|                                      | 10,284           | NR  | -                | NR      | 3,257            | NR  | 3,257            | NR      |
| <b>Mutual Funds</b>                  |                  |     |                  |         |                  |     |                  |         |
|                                      | -                | A   | -                | A       | 19               | A   | -                | A       |
|                                      | -                | NR  | -                | NR      | -                | NR  | 19               | NR      |
| <b>Total</b>                         | <u>\$ 62,099</u> |     | <u>\$ 62,099</u> |         | <u>\$ 79,575</u> |     | <u>\$ 79,575</u> |         |

NR - not rated

<sup>1</sup> International Investment types consist of domestic floating rate note used as part of a Swap strategy.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government and are held by either:

- The counterparty or
- The counterparty's trust department or agent but not in the government name.

The State Treasurer does not have a policy for custodial credit risk. However, the State's custodial bank had a credit rating of A+ at September 30, 2012. As of September 30, 2012 and 2011, no securities were exposed to custodial credit risk.

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

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

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

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

The State Treasurer's policy states that cash equivalents are invested in short-term fixed income securities with an average weighted maturity of less than one year to provide liquidity and safety of principal from capital market and default risk. At September 30, 2012, and 2011, the fair value of the System's prime commercial paper was \$8.6 million and \$12.3 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.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

|                            | 2012             |                             | 2011             |                             |
|----------------------------|------------------|-----------------------------|------------------|-----------------------------|
|                            | Fair Value       | Effective Duration in Years | Fair Value       | Effective Duration in Years |
| <b>Government</b>          |                  |                             |                  |                             |
| U. S. Treasury             | 1,490            | 3.9                         | \$ 866           | 8.3                         |
| U. S. Agencies - Backed    | 6,512            | 3.2                         | 9,175            | 3.9                         |
| U. S. Agencies - Sponsored | 4,740            | 3.9                         | 3,530            | 3.0                         |
| <b>Corporate</b>           | 25,642           | 3.9                         | 27,379           | 4.3                         |
| <b>International*</b>      |                  |                             |                  |                             |
| Corporate                  | 3,865            | 0.3                         | 9,272            | 0.2                         |
| <b>Mutual Funds</b>        | 0                |                             | 19               | 4.4                         |
| <b>Total</b>               | <u>\$ 42,249</u> |                             | <u>\$ 50,241</u> |                             |

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 \$43.1 million and \$29.7 million which amounted to 17.5% and 12.8% of total investments (exclusive of securities lending collateral) of the System, respectively.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

| Region                    | Country        | Currency | Alt. Invest.<br>Market Value<br>in U.S. \$ | Equity<br>Market Value<br>in U.S. \$ | Real Estate<br>Market Value<br>in U.S. \$ | International                          |   |
|---------------------------|----------------|----------|--|--------------------------------------|---|--|---|
|                           |                |          |  |                                      |   | Equities<br>Market Value<br>in U.S. \$ | Derivatives<br>Market Value<br>in U.S. \$ * |
| <b><u>AMERICA</u></b>     |                |          |  |                                      |   |  |   |
|                           | Brazil         | Real     |  | \$ 12                                |   |  |   |
|                           | Canada         | Dollar   |  |                                      |   |  | \$ 3  |
|                           | Mexico         | Peso     |  | 21                                   |   |  |   |
| <b><u>EUROPE</u></b>      |                |          |  |                                      |   |  |   |
|                           | European Union | Euro     | \$ 4,066                                   | 67                                   |   | \$ 148                                 | 83  |
|                           | Switzerland    | Franc    |  | 370                                  |   | 38                                     | 19  |
|                           | Sweden         | Krona    |  |                                      |   | 49                                     | 2   |
|                           | Denmark        | Krone    |  | 15                                   |   | 12                                     |   |
|                           | Norway         | Krone    |  |                                      |   |  |   |
|                           | U.K.           | Sterling | 47   | 153                                  |   | 240                                    | 81  |
| <b><u>PACIFIC</u></b>     |                |          |  |                                      |   |  |   |
|                           | Australia      | Dollar   |  |                                      |   |  | 49  |
|                           | China          | Renminbi |  | 6                                    |   |  |   |
|                           | Hong Kong      | Dollar   |  |                                      |   | 21                                     | 21  |
|                           | Japan          | Yen      |  |                                      |   | 2                                      | 4   |
|                           | New Zealand    | Dollar   |  |                                      |   |  | 1   |
|                           | Singapore      | Dollar   |  |                                      |   | 43                                     | 21  |
|                           | South Korea    | Won      |  |                                      |   | 43                                     | 35  |
| <b><u>MIDDLE EAST</u></b> |                |          |  |                                      |   |  |   |
|                           | Israel         | Shekel   |  | 367                                  |   |  |   |
| <b><u>AFRICA</u></b>      |                |          |  |                                      |   |  |   |
|                           | South Africa   | Rand     |  | 1                                    |   |  |   |
| <b><u>VARIOUS</u></b>     |                |          |  |                                      |   |  |   |
|                           |                |          |  |                                      | \$ 6,737                                  | 30,356                                 |   |
|                           | Total          |          | \$ 4,113                                   | \$ 1,012                             | \$ 6,737                                  | \$ 30,952                              | \$ 319                                      |

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

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

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

| Region                    | Country        | Currency | Alt. Invest.<br>Market Value<br>in U.S. \$ | Equity<br>Market Value<br>in U.S. \$ | Real Estate<br>Market Value<br>in U.S. \$ | International                          |   |
|---------------------------|----------------|----------|--|--------------------------------------|---|--|---|
|                           |                |          |  |                                      |   | Equities<br>Market Value<br>in U.S. \$ | Derivatives<br>Market Value<br>in U.S. \$ * |
| <b><u>AMERICA</u></b>     |                |          |  |                                      |   |  |   |
|                           | Canada         | Dollar   |  |                                      |   |  | \$ 28                                       |
|                           | Mexico         | Peso     |  | \$ 13                                |   |  |   |
| <b><u>EUROPE</u></b>      |                |          |  |                                      |   |  |   |
|                           | European Union | Euro     | \$ 4,028                                   | 32                                   |   | \$ 48                                  | (45)  |
|                           | Switzerland    | Franc    |  | 423                                  |   |  | 89  |
|                           | Sweden         | Krona    |  |                                      |   | 40                                     | 70  |
|                           | Denmark        | Krone    |  |                                      |   | 7                                      | 6   |
|                           | Norway         | Krone    |  |                                      |   |  | 23  |
|                           | U.K.           | Sterling | 52   | 434                                  |   | 16                                     | 105   |
| <b><u>PACIFIC</u></b>     |                |          |  |                                      |   |  |   |
|                           | Australia      | Dollar   |  |                                      |   |  | 86  |
|                           | China          | Renminbi |  | 4                                    |   |  |   |
|                           | Hong Kong      | Dollar   |  | 34                                   |   |  | 1   |
|                           | Japan          | Yen      | 3  |                                      |   | 2                                      | 186   |
|                           | New Zealand    | Dollar   |  |                                      |   |  | 17  |
|                           | Singapore      | Dollar   |  | 40                                   |   | 46                                     | (8)   |
|                           | South Korea    | Won      |  |                                      |   | 34                                     | 37  |
| <b><u>MIDDLE EAST</u></b> |                |          |  |                                      |   |  |   |
|                           | Israel         | Shekel   |  | 85                                   |   |  |   |
| <b><u>AFRICA</u></b>      |                |          |  |                                      |   |  |   |
|                           | South Africa   | Rand     |  | 2                                    |   |  |   |
| <b><u>VARIOUS</u></b>     |                |          |  |                                      |   |  |   |
|                           |                |          |  |                                      | \$ 5,770                                  | 17,987                                 |   |
|                           | Total          |          | \$ 4,083                                   | \$ 1,067                             | \$ 5,770                                  | \$ 18,180                              | \$ 595                                      |

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

# FINANCIAL SECTION

## Notes to Basic Financial Statements (continued)

### NOTE 5 – ACCOUNTING CHANGES

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

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

### NOTE 6 - 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 .5% or \$99,839 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 over-funded 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<br>Date<br>Sept 30 | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability<br>(AAL) Entry Age<br>(b) | Unfunded<br>(Overfunded)<br>Accrued Liability<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a %<br>of Covered Payroll<br>((b-a)/c) |
|------------------------------|--|---|--|--------------------------|---------------------------|--|
| 2003                         | \$ 292.3                               | \$ 235.2  | \$ (57.1)  | 124.3 %                  | \$ 38.9                   | (146.6) %                                      |
| 2004 <sup>1</sup>            | 286.9                                  | 236.4   | (50.5)   | 121.3                    | 37.5                      | (134.6)  |
| 2005                         | 278.4                                  | 243.4   | (35.0)   | 114.4                    | 34.9                      | (100.3)  |
| 2006                         | 282.8                                  | 243.7   | (39.1)   | 116.0                    | 33.1                      | (118.1)  |
| 2007                         | 301.0                                  | 247.1   | (53.9)   | 121.8                    | 29.7                      | (181.5)  |
| 2008                         | 303.7                                  | 247.0   | (56.7)   | 123.0                    | 29.5                      | (192.2)  |
| 2009                         | 295.6                                  | 245.2   | (50.4)   | 120.6                    | 27.0                      | (186.6)  |
| 2010                         | 284.4                                  | 251.7   | (32.7)   | 113.0                    | 25.5                      | (128.4)  |
| 2011 <sup>2</sup>            | 266.8                                  | 251.7   | (15.1)   | 106.0                    | 23.6                      | (64.1)   |
| 2012                         | 245.6                                  | 249.6   | 4.0  | 98.4                     | 22.9                      | 17.4   |

<sup>1</sup> Revised actuarial assumptions

<sup>2</sup> Restated based on more complete information.

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

| Valuation<br>Date<br>Sept 30 | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability<br>(AAL) Entry Age<br>(b) | Unfunded<br>(Overfunded)<br>Accrued Liability<br>(UAAL)<br>(b-a) | Funded<br>Ratio<br>(a/b) | Covered<br>Payroll<br>(c) | UAAL as a %<br>of Covered Payroll<br>((b-a)/c) |
|------------------------------|--|---|--|--------------------------|---------------------------|--|
| 2006                         |  | \$ 6.4  | \$ 6.4   | 0 %                      | \$ 6.1                    | 105.3 %  |
| 2007                         |  | 6.6   | 6.6  | 0                        | 6.1                       | 107.5  |
| 2008                         |  | 6.7   | 6.7  | 0                        | 5.9                       | 113.0  |
| 2009                         |  | 6.6   | 6.6  | 0                        | 6.1                       | 108.2  |
| 2010                         |  | 7.4   | 7.4  | 0                        | 5.9                       | 124.5  |
| 2011                         |  | 7.9   | 7.9  | 0                        | 5.4                       | 145.3  |
| 2012                         |  | 8.5   | 8.5  | 0                        | 6.2                       | 137.5  |

# FINANCIAL SECTION

## Required Supplementary Information (continued)

### Schedules of Employer and Other Contributions

#### Pension Benefits

| <u>Fiscal Year<br/>Ended<br/>Sept. 30</u> | <u>Annual<br/>Required<br/>Contribution<br/>(ARC)</u> | <u>Actual<br/>Contribution</u> | <u>Percentage<br/>Contributed</u> |
|---|---|--------------------------------|-----------------------------------|
| 2003                                      | \$ (135,812)  |                                | 0.0 %                             |
| 2004                                      | (85,580)  |                                | 0.0                               |
| 2005 <sup>1</sup>                         | (441,948)   | \$ 34,765                      | 0.0                               |
| 2006                                      | 607,883   | 653,587                        | 108.0                             |
| 2007                                      | 186,180   | 231,235                        | 124.0                             |
| 2008                                      |   | 44,406                         | N/A                               |
| 2009                                      |   | 43,108                         | N/A                               |
| 2010                                      |   | 43,181                         | N/A                               |
| 2011                                      |   | 43,185                         | N/A                               |
| 2012                                      | 1,068,484   | 1,111,026                      | 104.0                             |

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

#### Other Postemployment Benefits

| <u>Fiscal Year<br/>Ended<br/>Sept. 30</u> | <u>Annual<br/>Required<br/>Contribution<br/>(ARC)</u> | <u>Actual<br/>Contribution</u> | <u>Other Governmental<br/>Contribution</u> | <u>Percentage<br/>Contributed</u> |
|---|---|--------------------------------|--|-----------------------------------|
| 2007                                      | \$ 473,742  | \$ 115,000                     |  | 24.3 %                            |
| 2008                                      | 481,673   | 115,000                        |  | 23.9                              |
| 2009                                      | 514,850   | 335,000                        |  | 65.1                              |
| 2010                                      | 490,129   | 712,000                        |  | 145.3                             |
| 2011                                      | 605,112   | 310,000                        | \$ 1,617                                   | 51.5                              |
| 2012                                      | 596,965   | 100,000                        |  | 16.8                              |

# **FINANCIAL SECTION**

## **Note to Required Supplementary Information**

### **NOTE A - DESCRIPTION**

Ten year historical trend information designed to provide information about the System's progress made in accumulating sufficient assets to pay benefits when due is presented in the preceding schedules. Other ten-year historical trend information related to the System is presented in the Statistical and Actuarial Sections of the report. This information is presented to enable the reader to assess the progress made by the System in accumulating sufficient assets to pay pension and other postemployment benefits as they become due. Because this is the seventh year the System is reporting other postemployment benefits in accordance with GASB Statement No. 43, only seven 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.

# FINANCIAL SECTION

## Supporting Schedules

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

|   | <u>2012</u>       | <u>2011</u>       |
|---|-------------------|-------------------|
| <b>Personnel Services:</b>                      |                   |                   |
| Staff Salaries                                  | \$ 9,853          | \$ 9,822          |
| Retirement and Social Security                  | 4,616             | 3,429             |
| Other Fringe Benefits                           | 2,361             | 2,373             |
| <b>Total</b>                                    | <u>16,830</u>     | <u>15,624</u>     |
| <b>Professional Services:</b>                   |                   |                   |
| Accounting                                      | 1,684             | 2,324             |
| Actuarial                                       | 28,545            | 49,970            |
| Attorney General                                | 7,650             | 15,523            |
| Audit   | 36,951            | 36,951            |
| <b>Total</b>                                    | <u>74,829</u>     | <u>104,768</u>    |
| <b>Building Equipment:</b>                      |                   |                   |
| Building Rentals                                | 1,256             | 1,543             |
| Equipment Purchase, Maintenance,<br>and Rentals | 82                | 55                |
| <b>Total</b>                                    | <u>1,338</u>      | <u>1,598</u>      |
| <b>Miscellaneous:</b>                           |                   |                   |
| Bond Guarantee                                  | 99,839            |                   |
| Travel and Board Meetings                       | 339               | 26                |
| Office Supplies                                 | 90                | 64                |
| Postage, Telephone and Other                    | 4,958             | 5,038             |
| Printing  | 956               | 1,681             |
| Technological Support                           | 8,260             | 12,355            |
| <b>Total</b>                                    | <u>114,441</u>    | <u>19,164</u>     |
| <b>Total Administrative and Other Expenses</b>  | <u>\$ 207,439</u> | <u>\$ 141,154</u> |

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

|  | <u>2012</u>      | <u>2011</u>      |
|--|------------------|------------------|
| Health Fees                                    | \$ 30,594        | \$ 29,703        |
| Dental Fees                                    | 3,337            | 4,832            |
| Vision Fees                                    | 1,028            | 1,005            |
| <b>Total Administrative and Other Expenses</b> | <u>\$ 34,959</u> | <u>\$ 35,540</u> |

# FINANCIAL SECTION

## Supporting Schedules (continued)

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

|  | <u>2012</u>       | <u>2011</u>       |
|--|-------------------|-------------------|
| Real Estate Operating Expenses         | \$ 12,271         | \$ 19,474         |
| Securities Lending Expenses            | 70,106            | 109,117           |
| Other Investment Expenses <sup>1</sup> |                   |                   |
| ORS-Investment Expenses <sup>2</sup>   | 68,223            | 62,637            |
| Custody Fees                           | 4,060             | 4,287             |
| Management Fees                        | 690,375           | 678,901           |
| Research Fees                          | 13,913            | 12,188            |
| <b>Total Investment Expenses</b>       | <b>\$ 858,948</b> | <b>\$ 886,604</b> |

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

<sup>2</sup>Does not exclude Treasury Civil Service fees recorded as a pass-through in the Schedule of Investment Fees - State Treasurer.

As of September 30 2012 and 2011, fees totaled \$730.94 and \$755.01 respectively.

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

|  | <u>2012</u>      | <u>2011</u>       |
|--|------------------|-------------------|
| Accounting                                     | \$ 1,684         | \$ 2,324          |
| Actuary  | 28,545           | 49,970            |
| Attorney General                               | 7,650            | 15,523            |
| Independent Auditors                           | 36,951           | 36,951            |
| <b>Total Payment for Professional Services</b> | <b>\$ 74,829</b> | <b>\$ 104,768</b> |

# FINANCIAL SECTION

## Supporting Schedules (continued)

### Detail of Changes in Plan Net Assets (Pension and Other Postemployment Benefits)

For the Year Ended September 30, 2012

|  | <u>Employee<br/>Contributions</u> | <u>Employer<br/>Contributions</u> | <u>Retired<br/>Benefit<br/>Payments</u> | <u>Undistributed<br/>Investment<br/>Income</u> | <u>OPEB</u>       | <u>Total</u>          |
|--|-----------------------------------|-----------------------------------|---|--|-------------------|-----------------------|
| <b>Additions</b>   |                                   |                                   |   |  |                   |                       |
| Member contributions   | \$ 1,353,949                      |                                   |   |  | \$ 522,042        | \$ 1,875,991          |
| Other governmental contributions                               |                                   |                                   |   |  |                   |                       |
| Investment income (loss):                                      |                                   |                                   |   |  |                   |                       |
| Net appreciation (depreciation) of fair value of investments   |                                   |                                   |   | \$ 30,178,520                                  | 81,470            | 30,259,990            |
| Interest, dividends, and other                                 |                                   |                                   |   | 4,863,082                                      | 13,279            | 4,876,361             |
| Investment expenses:   |                                   |                                   |   |  |                   |                       |
| Real estate operating expenses                                 |                                   |                                   |   | (12,233)                                       | (38)              | (12,271)              |
| Other investment expenses                                      |                                   |                                   |   | (774,564)                                      | (2,007)           | (776,571)             |
| Securities lending activities:                                 |                                   |                                   |   |  |                   |                       |
| Securities lending income                                      |                                   |                                   |   | 526,229  | 1,533             | 527,762               |
| Securities lending expenses                                    |                                   |                                   |   | (69,915)                                       | (191)             | (70,106)              |
| Net investment income (loss)                                   |                                   |                                   |   | 34,711,119                                     | 94,045            | 34,805,165            |
| Court fees   |                                   | \$ 1,068,484                      | \$ 42,542                               |  | 100,000           | 1,211,026             |
| Miscellaneous income   |                                   |                                   | 1,091                                   | 15   |                   | 1,106                 |
| <b>Total additions</b>   | <u>1,353,949</u>                  | <u>1,068,484</u>                  | <u>43,633</u>                           | <u>34,711,134</u>                              | <u>716,087</u>    | <u>37,893,288</u>     |
| <b>Deductions:</b>   |                                   |                                   |   |  |                   |                       |
| Benefits paid to plan members and beneficiaries:               |                                   |                                   |   |  |                   |                       |
| Retirement benefits  |                                   |                                   | 20,792,225                              |  |                   | 20,792,225            |
| Health benefits  |                                   |                                   |   |  | 425,647           | 425,647               |
| Dental/vision benefits   |                                   |                                   |   |  | 118,702           | 118,702               |
| Refund of contributions  |                                   |                                   |   |  | 90                | 90                    |
| Administrative and other expenses                              |                                   |                                   |   | 207,439  | 34,959            | 242,398               |
| <b>Total deductions</b>  |                                   |                                   | <u>20,792,225</u>                       | <u>207,439</u>                                 | <u>579,399</u>    | <u>21,579,063</u>     |
| <b>Net Increase (Decrease)</b>                                 |                                   |                                   |   |  |                   |                       |
| Before Other Changes   | <u>1,353,949</u>                  | <u>1,068,484</u>                  | <u>(20,748,592)</u>                     | <u>34,503,695</u>                              | <u>136,688</u>    | <u>16,314,225</u>     |
| <b>Other Changes in Net Assets:</b>                            |                                   |                                   |   |  |                   |                       |
| Interest allocation  | 3,992,140                         |                                   | 9,441,770                               | (13,433,910)                                   |                   |                       |
| Transfers upon retirement                                      | (2,824,310)                       |                                   | 2,824,310                               |  |                   |                       |
| Transfers of employer shares                                   |                                   | (8,738,679)                       | 8,738,679                               |  |                   |                       |
| <b>Total other changes in net assets</b>                       | <u>1,167,830</u>                  | <u>(8,738,679)</u>                | <u>21,004,759</u>                       | <u>(13,433,910)</u>                            |                   |                       |
| <b>Net Increase (Decrease)</b>                                 | 2,521,780                         | (7,670,195)                       | 256,167                                 | 21,069,785                                     | 136,688           | 16,314,225            |
| <b>Net Assets Held in Trust for Pension and OPEB Benefits:</b> |                                   |                                   |   |  |                   |                       |
| <b>Beginning of Year</b>                                       | <u>48,544,883</u>                 | <u>(15,825,936)</u>               | <u>154,783,111</u>                      | <u>36,464,983</u>                              | <u>597,947</u>    | <u>224,564,987</u>    |
| <b>End of Year</b>   | <u>\$ 51,066,663</u>              | <u>\$ (23,496,131)</u>            | <u>\$ 155,039,278</u>                   | <u>\$ 57,534,768</u>                           | <u>\$ 734,635</u> | <u>\$ 240,879,212</u> |

# FINANCIAL SECTION

## Supporting Schedules (continued)

### Detail of Changes in Plan Net Assets (Pension and Other Postemployment Benefits)

For the Year Ended September 30, 2011

|  | Employee<br>Contributions | Employer<br>Contributions | Retired<br>Benefit<br>Payments | Undistributed<br>Investment<br>Income | OPEB              | Total                 |
|--|---------------------------|---------------------------|--------------------------------|---------------------------------------|-------------------|-----------------------|
| <b>Additions</b>   |                           |                           |                                |                                       |                   |                       |
| Member contributions   | \$ 1,468,068              |                           |                                |                                       | \$ 551,783        | \$ 2,019,851          |
| Other governmental contributions                               |                           |                           |                                |                                       | 1,617             | 1,617                 |
| Investment income (loss):                                      |                           |                           |                                |                                       |                   |                       |
| Net appreciation (depreciation) of fair value of investments   |                           |                           |                                | \$ 5,010,227                          | 13,096            | 5,023,323             |
| Interest, dividends, and other                                 |                           |                           |                                | 5,373,883                             | 24,880            | 5,398,763             |
| Investment expenses:   |                           |                           |                                |                                       |                   |                       |
| Real estate operating expenses                                 |                           |                           |                                | (19,423)                              | (51)              | (19,474)              |
| Other investment expenses                                      |                           |                           |                                | (756,037)                             | (1,976)           | (758,013)             |
| Securities lending activities:                                 |                           |                           |                                |                                       |                   |                       |
| Securities lending income                                      |                           |                           |                                | 472,505                               | 1,235             | 473,740               |
| Securities lending expenses                                    |                           |                           |                                | (108,833)                             | (284)             | (109,117)             |
| Net investment income (loss)                                   |                           |                           |                                | 9,972,322                             | 36,900            | 10,009,222            |
| Court fees   |                           |                           | \$ 43,185                      |                                       | 310,000           | 353,185               |
| Miscellaneous income   |                           |                           | 7,813                          | 1,011                                 |                   | 8,824                 |
| <b>Total additions</b>   | <b>1,468,068</b>          |                           | <b>50,998</b>                  | <b>9,973,333</b>                      | <b>900,300</b>    | <b>12,392,699</b>     |
| <b>Deductions</b>  |                           |                           |                                |                                       |                   |                       |
| Benefits paid to plan members and beneficiaries:               |                           |                           |                                |                                       |                   |                       |
| Retirement benefits  |                           |                           | 20,580,971                     |                                       |                   | 20,580,971            |
| Health benefits  |                           |                           |                                |                                       | 265,202           | 265,202               |
| Dental/vision benefits   |                           |                           |                                |                                       | 135,825           | 135,825               |
| Administrative and other expenses                              |                           |                           |                                | 141,155                               | 35,539            | 176,694               |
| <b>Total deductions</b>  |                           |                           | <b>20,580,971</b>              | <b>141,155</b>                        | <b>436,566</b>    | <b>21,158,692</b>     |
| <b>Net Increase (Decrease) Before Other Changes</b>            | <b>1,468,068</b>          |                           | <b>(20,529,973)</b>            | <b>9,832,179</b>                      | <b>463,734</b>    | <b>(8,765,993)</b>    |
| <b>Other Changes in Net Assets:</b>                            |                           |                           |                                |                                       |                   |                       |
| Interest allocation  |                           |                           | 11,921,384                     | (11,921,384)                          |                   |                       |
| Transfers upon retirement                                      | (3,910,363)               |                           | 3,910,363                      |                                       |                   |                       |
| Transfers of employer shares                                   |                           | \$ (10,464,038)           | 10,464,038                     |                                       |                   |                       |
| <b>Total other changes in net assets</b>                       | <b>(3,910,363)</b>        | <b>(10,464,038)</b>       | <b>26,295,785</b>              | <b>(11,921,384)</b>                   |                   |                       |
| <b>Net Increase (Decrease)</b>                                 | <b>(2,442,295)</b>        | <b>(10,464,038)</b>       | <b>5,765,812</b>               | <b>(2,089,206)</b>                    | <b>463,734</b>    | <b>(8,765,993)</b>    |
| <b>Net Assets Held in Trust for Pension and OPEB Benefits:</b> |                           |                           |                                |                                       |                   |                       |
| <b>Beginning of Year</b>                                       | <b>50,987,178</b>         | <b>(5,361,898)</b>        | <b>149,017,299</b>             | <b>38,554,188</b>                     | <b>134,213</b>    | <b>233,330,979</b>    |
| <b>End of Year</b>   | <b>\$ 48,544,883</b>      | <b>\$ (15,825,936)</b>    | <b>\$ 154,783,111</b>          | <b>\$ 36,464,983</b>                  | <b>\$ 597,947</b> | <b>\$ 224,564,987</b> |

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# INVESTMENT SECTION

Prepared by Michigan Department of Treasury, Bureau of Investments

Jon M. Braeutigam, Director

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

# **INVESTMENT SECTION**

## **Report on Investment Activity**

### **INTRODUCTION**

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

The Investment Advisory Committee was created by Act 380 of the Public Acts of 1965. The three public members of the five-member committee are appointed by the Governor with the advice and consent of the Senate for three-year terms. The Director of the Department of Licensing and Regulatory Affairs and the Director of the Department of Technology, Management and Budget are ex-officio members. As of September 30, 2012, members of the Committee were as follows: Naif A. Khouri (public member), James B. Nicholson (public member), L. Erik Lundberg, CFA (public member), Steven H. Hilfinger (ex-officio member), and John E. Nixon, CPA (ex-officio member). The public members serve without pay, but may be paid actual and necessary travel and other expenses.

### **INVESTMENT POLICY & GOALS**

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

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

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

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

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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.

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

| <u>Investment Category</u>           | <u>As of 9/30/12<br/>Actual %</u> | <u>Five Year<br/>Target %</u> |
|--------------------------------------|-----------------------------------|-------------------------------|
| Domestic Equity Pools                | 27.8 %                            | 29.0 %                        |
| International Equity Pools           | 14.7                              | 12.8                          |
| Alternative Investment Pools         | 15.7                              | 16.4                          |
| Real Estate and Infrastructure Pools | 13.8                              | 13.8                          |
| Fixed Income Pools                   | 15.5                              | 17.7                          |
| Absolute Return Pools                | 9.6                               | 6.7                           |
| Short Term Investment Pools          | 2.9                               | 3.6                           |
| <b>TOTAL</b>                         | <b><u>100.0</u> %</b>             | <b><u>100.0</u> %</b>         |

## INVESTMENT AUTHORITY

Pursuant to State Law (Section 91 of Act No. 380 of the Public Acts of 1965, as amended), the State Treasurer, State of Michigan, is the investment fiduciary for the following four State sponsored retirement systems: Michigan Public School Employees' Retirement System, Michigan State Employees' Retirement System, Michigan State Police Retirement System, and Michigan Judges' Retirement System.

Act No. 314 of the Public Acts of 1965, as amended, authorizes the investment of assets of public employee retirement systems or plans created and established by the State or any political subdivision.

## INVESTMENT RESULTS

### *Total Portfolio Results*

For the fiscal year ended September 30, 2012, the total System's rate of return was 13.9% for the Pension Plan and 14.0% for the OPEB Plan as compiled by State Street Investment Analytics. Annualized rates of return for the three, five, and ten year periods ending September 30, 2012 were: 9.0%, 1.4%, and 7.3% 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

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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.

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 13.9%.

### *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.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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.

The pools invest in equities and equity related securities that are listed on U.S. national securities exchanges, including American Depositary 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:

|              |                       |
|--------------|-----------------------|
| Active       | 54.2 %                |
| Passive      | 45.8                  |
| <b>Total</b> | <b><u>100.0 %</u></b> |

|              |                       |
|--------------|-----------------------|
| Large Cap    | 80.2 %                |
| Mid Cap      | 9.3                   |
| Multi Cap    | 5.9                   |
| Small Cap    | 4.6                   |
| <b>Total</b> | <b><u>100.0 %</u></b> |

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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 27.8% of total investments. This compares to 29.0% for fiscal year 2011. The following summarizes the System's 0.6% ownership share of the Domestic Equity pools at September 30, 2012:

| <b>Domestic Equity Pools</b>     |                  |
|----------------------------------|------------------|
| <b>(in thousands)</b>            |                  |
| Short Term Pooled Investments    | \$ 1,092         |
| Equities                         | 67,405           |
| Market Value of Equity Contracts | 162              |
| Other Investments                | (1)              |
| Long Term Obligations            | 30               |
| Settlement Principal Payable     | (17)             |
| Settlement Proceeds Receivable   | 9                |
| Accrued Dividends                | 72               |
| <b>Total</b>                     | <b>\$ 68,752</b> |

### *International Equity Pools*

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

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

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

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

Passive exposure to international equity returns is achieved primarily by investing in a combination of fixed income LIBOR notes, short-term fixed income investments, and equity swap agreements on foreign stock indices in developed markets. Interest on the dedicated notes and short-term fixed income investments is exchanged for international stock returns, and the total notional amount of the swap agreements is invested in the approximate proportions of the S&P Broad Market Index (BMI) Europe and Pacific Composite (EPAC) country weightings in related indices. Use of swap agreements for a core position began in 1993, an American Depository Receipts (ADR) and index-related security portfolio was added in June of 1999 to increase portfolio management flexibility, and a multiple country fund portfolio with smaller capitalization stocks was added in September of 2002 to improve exposure to the smallest companies in

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

the BMI index. Use of futures as an investment to hedge cash flows and balances began in December of 2008, and this use is expected to continue in the future. The combined Swap agreements, notes and short-term investments together continue to perform like a stock index fund that realizes all gains and losses on a rolling three year basis.

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

The following summarizes the weightings of the pools as of September 30, 2012:

|              |                       |
|--------------|-----------------------|
| Active       | 44.3 %                |
| Passive      | 55.7                  |
| <b>Total</b> | <b><u>100.0 %</u></b> |

|              |                       |
|--------------|-----------------------|
| Developed    | 74.9 %                |
| Emerging     | 25.1                  |
| <b>Total</b> | <b><u>100.0 %</u></b> |

The System's International Equity pools total rate of return was 17.4% for the Pension Plan and 17.2 for the OPEB Plan for fiscal year 2012. This compared with 15.0% for the MSCI ACWI Ex US Gross.

At the close of fiscal year 2012, the International Equity pools represented 14.7% of total investments. This compares to 12.8% for fiscal year 2011. The following summarizes the System's 0.6% ownership share of the International Equity Pools at September 30, 2012:

### International Equity Pools (in thousands)

|                                  |           |                      |
|----------------------------------|-----------|----------------------|
| Short Term Pooled Investments    | \$        | 302                  |
| Equities                         |           | 31,756               |
| Fixed Income Securities          |           | 3,865                |
| Market Value of Equity Contracts |           | 359                  |
| Accrued Dividends and Interest   |           | 9                    |
| <b>Total</b>                     | <b>\$</b> | <b><u>36,291</u></b> |

# INVESTMENT SECTION

## 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:

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

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

At the close of fiscal year 2012, the Alternative Investment pools represented 15.7% of total investments. This compares to 16.4% for fiscal year 2011. The following summarizes the System's 0.4% ownership share of the Alternative Investment pools at September 30, 2012:

### **Alternative Investment Pools (in thousands)**

|                                |                         |
|--------------------------------|-------------------------|
| Short Term Pooled Investments  | \$ 719                  |
| Equities                       | 37,861                  |
| Settlement Proceeds Receivable | 4                       |
| <b>Total</b>                   | <b><u>\$ 38,584</u></b> |

### *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.



# INVESTMENT SECTION

## Report on Investment Activity (Continued)

The Real Estate and Infrastructure pools diversify its holdings by:

- Geography - The pools are invested globally and are diversified geographically so that it is not concentrated in a limited number of cities or geographic areas.
- Size and Value - The pools diversify its holdings by size so that it is not concentrated in a limited number of large investments.
- Investment Type – As summarized below, the pools are diversified by investment type including a new sub-strategy in infrastructure that was initiated during the fiscal year.

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

The pool generated a return of 8.4% for fiscal year 2012. The two benchmark returns from the National Council of Real Estate Investment Fiduciaries: the National Property 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 13.8% of total investments. This compares to 13.8% for fiscal year 2011. The following summarizes the System's 0.6% ownership share of the Real Estate and Infrastructure pools at September 30, 2012:

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

|                               |           |                      |
|-------------------------------|-----------|----------------------|
| Short Term Pooled Investments | \$        | 623                  |
| Real Estate Equities          |           | 32,065               |
| Infrastructure Equities       |           | 1,226                |
| <b>Total</b>                  | <b>\$</b> | <b><u>33,914</u></b> |

### *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.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

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 6.1% 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 15.5% of total investments. This compares to 17.7% for fiscal year 2011. The following summarizes the System's 0.6% ownership share of the Fixed Income pools at September 30, 2012:

### Fixed Income Pools (in thousands)

|                                |           |                      |
|--------------------------------|-----------|----------------------|
| Short Term Pooled Investments  | \$        | 1,462                |
| Fixed Income Securities        |           | 36,481               |
| Settlement Proceeds Receivable |           | 67                   |
| Settlement Principal Payable   |           | (39)                 |
| Accrued interest               |           | 250                  |
| <b>Total</b>                   | <b>\$</b> | <b><u>38,221</u></b> |

### *Absolute Return Pools*

The Absolute Return pools consist of Absolute Return Strategies pool and the Real Return and Opportunistic Investment pools.

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 Pools 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.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

The Real Return and Opportunistic Investments pools rate of return for the fiscal year was 6.4%.

At the close of fiscal year 2012, the Absolute Return pools represented 9.6% of total investments. This compares to 6.7% for fiscal year 2011. The following summarizes the System's 0.5% ownership share of the Absolute Return pools at September 30, 2012:

### Absolute Return Pools (in thousands)

|                                  |           |               |
|----------------------------------|-----------|---------------|
| Short Term Pooled investments    | \$        | 2,177         |
| Equities                         |           | 21,202        |
| Market Value of Equity Contracts |           | (1)           |
| Long Term Obligations            |           | 287           |
| Accrued Dividends and Interest   |           | 8             |
| <b>Total</b>                     | <b>\$</b> | <b>23,673</b> |

### Short Term Investment Pools

The objective of the Short Term Investment pools is to closely match the return performance of its benchmark, the 30 day Treasury bill. The Short Term Investment pools return for the fiscal year was 0.3% versus the benchmark's 0.0%.

Potential areas of investment are:

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

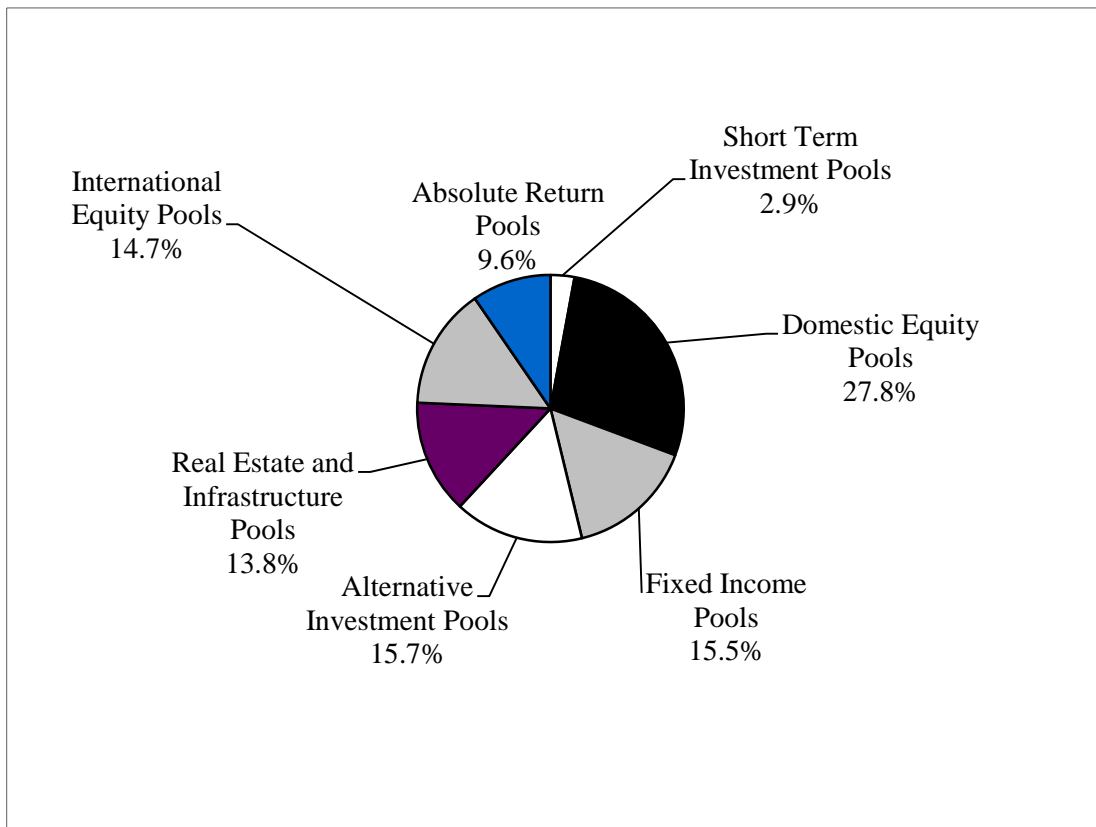
At the close of fiscal year 2012, the Short Term Investment pools represented 2.9% of total investments. This compares to 3.6% for fiscal year 2011. The following summarizes the System's 1.0% ownership share of the Short Term Investment pools at September 30, 2012:

### Short Term Investment Pools (in thousands)

|                               |           |              |
|-------------------------------|-----------|--------------|
| Short Term Pooled Investments | \$        | 4,056        |
| Fixed Income Securities       |           | 3,027        |
| <b>Total</b>                  | <b>\$</b> | <b>7,083</b> |

# INVESTMENT SECTION

## Asset Allocation – Security Type Only



# INVESTMENT SECTION

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

| <u>Investment Category</u>                   | <u>Current Year</u> | <u>Annualized Rate of Return<sup>1</sup></u> |                |                 |
|--|---------------------|--|----------------|-----------------|
|  |                     | <u>3 Years</u>                               | <u>5 Years</u> | <u>10 Years</u> |
| Total Portfolio                              | 13.9 %              | 9.0 %  | 1.4 %          | 7.3 %           |
| 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  | (4.2)          | 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            | 12.6            |
| 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                           | 6.1                 | 6.9  | 7.5            | 5.9             |
| Barclays Government/Credit                   | 5.7                 | 6.5  | 6.6            | 5.4             |
| Absolute Return Pools                        |                     |  |                |                 |
| Total Absolute Return                        | 4.9                 | 5.2  |                |                 |
| HFRI Fund of Fund Cons 1 month lag           | 0.0                 | 2.0  |                |                 |
| Total Real Return and Opportunistic          | 6.4                 | 8.7  |                |                 |
| Short Term Investment Pools                  | 0.3                 | 0.5  | 0.2            | 1.6             |
| 30 Day Treasury Bill                         | 0.0                 | 0.1  | 0.5            | 1.6             |

1 Calculations used a time-weighted rate of return based on the market rate of return in accordance with industry standards.

Excludes income and investment gains and losses from securities lending.

2 As of 10/1/10, index is MSCI ACWI Ex US Gross. History 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.

# INVESTMENT SECTION

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

| <u>Investment Category</u>                   | <u>Current Year</u> <sup>1</sup> |
|--|----------------------------------|
| Total Portfolio                              | 14.0 %                           |
| Domestic Equity Pools                        | 29.5                             |
| S&P 1500 Index                               | 30.2                             |
| International Equity Pools                   | 17.2                             |
| 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                           | 6.1                              |
| Barclays Government/Credit                   | 5.7                              |
| Absolute Return Pools                        |                                  |
| Total Absolute Return                        | 4.9                              |
| HFRI Fund of Fund Cons 1 month lag           | 0.0                              |
| Total Real Return and Opportunistic          | 6.4                              |
| Short Term Investment Pools                  | 0.3                              |
| 30 Day Treasury Bill                         | 0.0                              |

1 Calculations used a time-weighted rate of return based on the market rate of return in accordance with industry standards.

Excludes income and investment gains and losses from securities lending.

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

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

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

# INVESTMENT SECTION

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

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

| Rank | Shares | Stocks                  | Market Value |
|------|--------|-------------------------|--------------|
| 1    | 4,506  | Apple Inc               | \$ 3,006,816 |
| 2    | 1,778  | Google Inc              | 1,341,488    |
| 3    | 8,662  | SPDR S&P 500 ETF Trust  | 1,246,778    |
| 4    | 12,416 | Exxon Mobil Corporation | 1,135,418    |
| 5    | 16,223 | Johnson & Johnson       | 1,117,900    |
| 6    | 20,592 | Merck & Company Inc     | 928,711      |
| 7    | 30,838 | Microsoft Corp          | 918,360      |
| 8    | 12,940 | Abbott Laboratories     | 887,146      |
| 9    | 7,514  | Chevron Corp            | 875,862      |
| 10   | 12,092 | Procter & Gamble Co     | 838,682      |

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

| Rank | Par Amount   | Description   | Market Value |
|------|--------------|---|--------------|
| 1    | \$ 1,251,606 | General Electric Cap Corp .60450% FRN Due 2-15-2017 | \$ 1,202,567 |
| 2    | 580,125      | Barclays Bank PLC Due 11-01-18                      | 569,161      |
| 3    | 500,000      | Barclays Bank PLC Due 7-24-19                       | 523,900      |
| 4    | 485,796      | JPMorgan Chase & Co .59460% FRN Due 11-01-2012      | 485,935      |
| 5    | 485,796      | Barclays Bank PLC 1.31760% FRN Due 1-13-2014        | 483,398      |
| 6    | 500,000      | Barclays Bank PLC Due 2-02-18                       | 468,050      |
| 7    | 388,953      | Private Export Funding 4.95% Due 11/15/15           | 441,904      |
| 8    | 333,423      | Cal Dive I- Title XI Inc 4.93% Due 2/01/27          | 388,801      |
| 9    | 376,282      | General Electric Cap Corp .64875% FRN Due 9-15-2014 | 374,255      |
| 10   | 300,183      | Dow Chemical Co 5.7% Due 5-15-18                    | 361,347      |

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

2 Largest Bond Holdings are exclusive of securities lending collateral.

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

# INVESTMENT SECTION

## Schedule of Investment Fees

The State Treasurer is the investment fiduciary and custodian of the System's funds pursuant to State law. Outside advisors are utilized to augment the State Treasurer's internal staff. 55.96% 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 \$ 69 thousand or six and four-tenths basis points (0.064%) 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 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:

|                                | <b>Assets under<br/>Management<br/>(in thousands)</b> | <b>Fees<br/>(in thousands)</b> | <b>Basis<br/>Points*</b> |
|--------------------------------|---|--------------------------------|--------------------------|
| State Treasurer                | \$ 108,570  | \$ 69                          | 6.4                      |
| Outside Advisors for           |   |                                |                          |
| Fixed Income                   | 9,107   | 15                             | 16.7                     |
| Absolute Return                | 22,438  | 103                            | 45.8                     |
| International Equity           | 14,973  | 44                             | 29.3                     |
| Domestic Equity                | 18,931  | 119                            | 62.9                     |
| Alternative                    | 38,585  | 325                            | 84.2                     |
| Real Estate and Infrastructure | 33,914  | 85                             | 25.0                     |
| <b>Total</b>                   | <b>\$ 246,518</b>                                     | <b>\$ 760</b>                  |                          |

#### Other Investment Services Fees:

|                    |            |       |
|--------------------|------------|-------|
| Assets in Custody  | \$ 243,799 | \$ 18 |
| Securities on Loan | 25,019     | 49    |

\* 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 point. These fees, in most cases, are netted against income.



# INVESTMENT SECTION

## Schedule of Investment Commissions

|  | Fiscal Year Ended September 30, 2012 |                     |                |                |                |                 |                 |
|--|--------------------------------------|---------------------|----------------|----------------|----------------|-----------------|-----------------|
|  | Actual                               | Actual              | Average        | Estimated      | Estimated      | Estimated       | Estimated       |
|  | Commissions                          | Number of           | Commission     | Trade          | Research       | Trade           | Research        |
|  | Paid <sup>1</sup>                    | Shares              | Per Share      | Costs          | Costs          | Costs           | Costs           |
|  |                                      | Traded <sup>1</sup> |                | Per Share      | Per Share      |                 |                 |
| <b>Investment Brokerage Firms:</b>         |                                      |                     |                |                |                |                 |                 |
| Banc Of America Securities LLC             | \$ 501                               | 15,932              | \$ 0.03        | \$ 0.01        | \$ 0.02        | \$ 159          | \$ 319          |
| Barclays Capital Inc.                      | 1,427                                | 47,538              | 0.03           | 0.01           | 0.02           | 475             | 951             |
| BNY Convergenx Execution Solutions LLC     | 372                                  | 19,839              | 0.02           | 0.01           | 0.01           | 198             | 198             |
| BTIG LLC                                   | 1,291                                | 102,801             | 0.01           | 0.01           |                | 1,028           |                 |
| The Buckingham Research Group Inc.         | 419                                  | 13,962              | 0.03           | 0.01           | 0.02           | 140             | 279             |
| Cantor Fitzgerald & Co.                    | 295                                  | 15,917              | 0.02           | 0.01           | 0.01           | 159             | 159             |
| Capital Institutional Services Inc.        | 1,085                                | 35,710              | 0.03           | 0.01           | 0.02           | 357             | 714             |
| Citigroup Global Markets Inc.              | 1,103                                | 41,575              | 0.03           | 0.01           | 0.02           | 416             | 831             |
| Cowen & Company LLC                        | 536                                  | 17,868              | 0.03           | 0.01           | 0.02           | 179             | 357             |
| Credit Suisse Securities LLC               | 1,592                                | 59,882              | 0.03           | 0.01           | 0.02           | 599             | 1,197           |
| Dahlman Rose & Company LLC                 | 191                                  | 15,442              | 0.01           | 0.01           |                | 154             |                 |
| Deutsche Bank - Alex Brown                 | 4                                    | 90                  | 0.04           | 0.01           | 0.03           | 1               | 3               |
| Deutsche Bank Securities Inc.              | 53                                   | 3,506               | 0.02           | 0.01           | 0.01           | 35              | 35              |
| Drexel Hamilton                            | 61                                   | 2,021               | 0.03           | 0.01           | 0.02           | 20              | 40              |
| Goldman, Sachs & Co.                       | 273                                  | 9,101               | 0.03           | 0.01           | 0.02           | 91              | 182             |
| The Griswold Company Inc.                  | 657                                  | 43,810              | 0.01           | 0.01           | 0.01           | 438             | 438             |
| Guggenheim Partners LLC                    | 327                                  | 10,912              | 0.03           | 0.01           | 0.02           | 109             | 218             |
| ISI Capital LLC                            | 1,140                                | 37,961              | 0.03           | 0.01           | 0.02           | 379             | 759             |
| Investment Technology Group Inc.           | 47                                   | 1,570               | 0.03           | 0.01           | 0.02           | 16              | 31              |
| J. P. Morgan Securities Inc.               | 1,130                                | 47,646              | 0.02           | 0.01           | 0.01           | 476             | 476             |
| Merrill Lynch, Pierce, Fenner & Smith Inc. | 415                                  | 13,968              | 0.03           | 0.01           | 0.02           | 140             | 279             |
| MF Global Inc                              | 98                                   | 3,252               | 0.03           | 0.01           | 0.02           | 33              | 65              |
| Mischler Financial Group Inc.              | 345                                  | 11,490              | 0.03           | 0.01           | 0.02           | 115             | 230             |
| Morgan Stanley & Co. Inc.                  | 897                                  | 30,670              | 0.03           | 0.01           | 0.02           | 307             | 613             |
| OTA LLC                                    | 354                                  | 11,807              | 0.03           | 0.01           | 0.02           | 118             | 236             |
| RBC Capital Markets                        | 1                                    | 51                  | 0.02           | 0.01           | 0.01           | 1               |                 |
| Sanford C. Bernstein & Co. LLC             | 1,064                                | 35,480              | 0.03           | 0.01           | 0.02           | 355             | 710             |
| Stifel, Nicolaus & Co. Inc.                | 74                                   | 2,482               | 0.03           | 0.01           | 0.02           | 25              | 50              |
| UBS Securities LLC                         | 4                                    | 129                 | 0.03           | 0.01           | 0.02           | 1               | 3               |
| Weeden & Co. LP                            | 447                                  | 44,729              | 0.01           | 0.01           |                | 447             |                 |
| Western International Securities Inc.      | 229                                  | 11,466              | 0.02           | 0.01           | 0.01           | 115             | 115             |
| <b>Total</b>                               | <b>\$ 16,432</b>                     | <b>708,607</b>      | <b>\$ 0.03</b> | <b>\$ 0.01</b> | <b>\$ 0.02</b> | <b>\$ 7,086</b> | <b>\$ 9,488</b> |

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

# INVESTMENT SECTION

## Investment Summary

Fiscal Year Ended September 30, 2012

|                                      | <u>Market Value<sup>1</sup></u> | <u>Percent of<br/>Total Market<br/>Value</u> | <u>Investment &amp;<br/>Interest Income<sup>2</sup></u> | <u>Percent of Total<br/>Investment &amp;<br/>Interest Income</u> |
|--------------------------------------|---------------------------------|--|---|--|
| Fixed Income Pools                   | \$ 38,221,100                   | 15.5%  | \$ 2,165,902  | 6.4%   |
| Domestic Equity Pools                | 68,752,209                      | 27.8%  | 18,231,410  | 53.4%  |
| Real Estate and Infrastructure Pools | 33,914,462                      | 13.8%  | 2,663,651   | 7.8%   |
| Alternative Investment Pools         | 38,584,080                      | 15.7%  | 4,350,091   | 12.8%  |
| International Equity Pools           | 36,290,565                      | 14.7%  | 5,088,423   | 14.9%  |
| Absolute Return Pools                | 23,672,845                      | 9.6%   | 1,558,767   | 4.6%   |
| Short Term Investment Pools          | <u>7,082,937</u>                | <u>2.9%</u>                                  | <u>17,187</u>   | <u>0.1%</u>  |
| <b>Total</b>                         | <u>\$ 246,518,198</u>           | <u>100.0%</u>                                | <u>\$ 34,075,431</u>                                    | <u>100.0%</u>  |

1 Market value excludes \$19,535,974 in securities lending collateral for fiscal year 2012.

2 Total Investment & Interest Income excludes net security lending income of \$457,656 and gain of \$1,060,889 for securities lending collateral.

# INVESTMENT SECTION

## Investment Summary

Fiscal Year Ended September 30, 2011

|                              | <u>Market Value<sup>1</sup></u> | <u>Percent of<br/>Total Market<br/>Value</u> | <u>Investment &amp;<br/>Interest Income<sup>2</sup></u> | <u>Percent of Total<br/>Investment &amp;<br/>Interest Income</u> |
|------------------------------|---------------------------------|--|---|--|
| Fixed Income Pools           | \$ 41,001,278                   | 17.7%  | \$ 1,677,492  | 17.9%  |
| Domestic Equity Pools        | 66,922,397                      | 29.0%  | 463,830   | 4.9%   |
| Real Estate Pool             | 31,853,653                      | 13.8%  | 3,935,961   | 42.0%  |
| Alternative Investment Pools | 37,907,218                      | 16.4%  | 6,207,759   | 66.2%  |
| International Equity Pools   | 29,585,074                      | 12.8%  | (3,040,843)   | (32.4%)  |
| Absolute Return Pools        | 15,511,483                      | 6.7%   | 127,382   | 1.3%   |
| Short Term Investment Pools  | 8,355,419                       | 3.6%   | 7,426   | 0.1%   |
| <b>Total</b>                 | <u>\$ 231,136,522</u>           | <u>100.0%</u>                                | <u>\$ 9,379,007</u>                                     | <u>100.0%</u>  |

1 Market value excludes \$27,203,542 in securities lending collateral for fiscal year 2011.

2 Total Investment & Interest Income excludes net security lending income of \$364,623 and gain of \$1,042,982 for securities lending collateral.

# ***INVESTMENT SECTION***

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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 Retirement Rolls  
Prioritized Solvency Test  
Analysis of System Experience  
Summary of Plan Provisions

# ACTUARIAL SECTION

## Actuary's Certification

**GRS**

Gabriel Roeder Smith & Company  
Consultants & Actuaries

One Towne Square  
Suite 800  
Southfield, MI 48076-3723

248.799.9000 phone  
248.799.9020 fax  
www.gabrielroeder.com

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November 21, 2012

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

Ladies and Gentlemen:

The basic financial objective of the Michigan Judges' Retirement System (JRS) 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, 2012 annual actuarial valuations was to determine the contribution requirements for the fiscal year ending September 30, 2013, 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, 2012.

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  
November 21, 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
- Schedule of Retired Members by Type of Health Benefit
- Schedules 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, 2012 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.

# ACTUARIAL SECTION

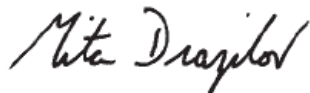
## Actuary's Certification (continued)

Mr. John E. Nixon  
November 21, 2012  
Page 3

The signing actuaries are independent of the plan sponsor.

The actuarial valuations of JRS as of September 30, 2012 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,



Mita D. Drazilov, ASA, MAAA



Curtis L. Powell, EA, MAAA

MB:rmn

Gabriel Roeder Smith & Company



## Summary of Actuarial Assumptions and Methods

1. 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 8% investment return rate translates to an assumed long-term real rate of return of 4.5%. Adopted 2004.
2. The healthy life mortality table used in evaluating allowances to be paid was 95% of the RP-2000 Male Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA, and 107% of the RP-2000 Female Combined Healthy Mortality Table, adjusted for mortality improvements to 2020 using projection scale AA. Adopted 2010.
3. Sample probabilities of retirement with an age and service allowance are shown in Schedule 1 on the next page. Adopted 2010.
4. Sample probabilities of withdrawal from service and disability, together with individual pay increase assumptions, are shown in Schedule 2 on the next page. Adopted 2010.
5. The active member population is closed to new hires. This will result in a gradual reduction in the total active member payroll over time. Adopted 1997.
6. An individual entry age actuarial cost method of valuation was used in determining age and service and deferred retirement actuarial liabilities and normal cost. Adopted 1975. Unfunded actuarial accrued liabilities, including actuarial gains and losses, are financed over a declining 40-year period beginning October 1, 1996. Adopted or re-adopted 1996.
7. The Department of Technology, Management & Budget approved the use of market value of assets as of September 30, 1997, for actuarial valuation purposes. For investment gains or 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 1997.
8. The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.
9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The assumptions used in the actuarial valuations were adopted by the System's Board and the Department of Technology, Management & Budget after consulting with the actuary.
10. A 5-year experience investigation, covering the period from September 30, 2002 through September 30, 2007 was completed in May 2010. The purpose of the study was to analyze the actual experience of the System versus that anticipated by actuarial assumptions then in use. The combined effect of the recommended changes in assumptions was an increase in actuarial accrued liabilities of approximately 1.8% and no change in computed employer contributions (remains at zero). Adopted 2010.
11. Gabriel, Roeder, Smith & Company was awarded the actuarial and consulting services contract beginning October 4, 2006.

# ACTUARIAL SECTION

## Summary of Actuarial Assumptions and Methods (continued)

### SCHEDULE 1

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

| <u>Retirement<br/>Ages</u> |     |
|----------------------------|-----|
| 55-59                      | 6 % |
| 60                         | 10  |
| 61                         | 8   |
| 62                         | 10  |
| 63                         | 8   |
| 64                         | 8   |
| 65                         | 18  |
| 66-68                      | 8   |
| 69                         | 12  |
| 70                         | 25  |
| 71                         | 30  |
| 72                         | 35  |
| 73                         | 40  |
| 74                         | 50  |
| 75                         | 100 |

### SCHEDULE 2

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

| <u>Sample<br/>Ages</u> | <u>Percent of Active<br/>Members Withdrawing<br/>Within Next Year<br/>(Men and Women)</u> | <u>Percent of<br/>Active Members<br/>Becoming Disabled<br/>Within<br/>Next Year</u> | <u>Percent<br/>Increase<br/>In Pay During<br/>Next Year</u> |
|------------------------|---|---|---|
| 20                     |   | 0.00 %  | 4.0 %   |
| 25                     |   | 0.00  | 4.0   |
| 30                     | 2.25 %  | 0.00  | 4.0   |
| 35                     | 2.25  | 0.02  | 4.0   |
| 40                     | 2.25  | 0.06  | 4.0   |
| 45                     | 2.25  | 0.12  | 4.0   |
| 50                     | 2.25  | 0.18  | 4.0   |
| 55                     | 2.25  | 0.24  | 4.0   |
| 60                     | 2.25  | 0.36  | 4.0   |

# ACTUARIAL SECTION

## Actuarial Valuation Data

### Schedule of Active Member Valuation Data

| Valuation<br>Date<br>Sept. 30 | Inactive<br>Number | Active |                                |                          |                        |                |                    |
|-------------------------------|--------------------|--------|--------------------------------|--------------------------|------------------------|----------------|--------------------|
|                               |                    | Number | Reported<br>Annual<br>Payroll* | Average<br>Annual<br>Pay | % Increase<br>Decrease | Average<br>Age | Average<br>Service |
| 2003                          | 13                 | 337    | 38,900,163                     | 115,431                  | (0.2)                  | 55.4           | 13.2               |
| 2004                          | 11                 | 325    | 37,453,179                     | 115,241                  | (0.2)                  | 56.1           | 13.6               |
| 2005                          | 18                 | 302    | 34,935,846                     | 115,682                  | 0.4                    | 57.0           | 14.8               |
| 2006                          | 16                 | 291    | 33,066,573                     | 113,631                  | (1.8)                  | 57.8           | 15.9               |
| 2007                          | 16                 | 260    | 29,716,615                     | 114,295                  | 0.6                    | 58.4           | 16.5               |
| 2008                          | 13                 | 257    | 29,475,726                     | 114,692                  | 0.3                    | 59.4           | 17.5               |
| 2009                          | 9                  | 234    | 27,027,185                     | 115,501                  | 0.7                    | 59.9           | 18.3               |
| 2010                          | 11                 | 221    | 25,504,058                     | 115,403                  | (0.1)                  | 60.7           | 19.1               |
| 2011                          | 11                 | 205    | 23,565,252                     | 114,952                  | (0.4)                  | 61.5           | 20.1               |
| 2012                          | 6                  | 199    | 22,922,327                     | 115,188                  | 0.2                    | 62.5           | 21.1               |

\* Prior to 2006, reported annual payroll in this schedule is 2% higher than the actual data reported to the actuary.

### Schedule of Changes in the Retirement Rolls

| Year<br>Ended<br>Sept. 30 | Added to Rolls |                      | Removed from Rolls |                      | Rolls--End of Year |                      | % Increase<br>in Annual<br>Allowances | Average<br>Annual<br>Allowances |
|---------------------------|----------------|----------------------|--------------------|----------------------|--------------------|----------------------|---------------------------------------|---------------------------------|
|                           | No.            | Annual<br>Allowances | No.                | Annual<br>Allowances | No.                | Annual<br>Allowances |                                       |                                 |
| 2003                      | 27             | 1,099,372            | 11                 | 520,658              | 551                | 17,144,956           | 9.4                                   | 31,116                          |
| 2004                      | 13             | 836,992              | 15                 | 562,582              | 549                | 17,572,770           | 2.5                                   | 32,009                          |
| 2005                      | 16             | 816,849              | 13                 | 387,731              | 552                | 18,001,888           | 2.4                                   | 32,612                          |
| 2006                      | 19             | 827,419              | 38                 | 877,683              | 533                | 17,951,624           | (0.3)                                 | 33,680                          |
| 2007                      | 38             | 1,797,377            | 29                 | 657,528              | 542                | 19,091,473           | 6.3                                   | 35,224                          |
| 2008                      | 25             | 879,299              | 27                 | 927,730              | 540                | 19,043,042           | (0.3)                                 | 35,265                          |
| 2009*                     | 44             | 1,987,777            | 42                 | 1,316,828            | 542                | 19,713,991           | 3.5                                   | 36,373                          |
| 2010                      | 23             | 1,104,282            | 24                 | 722,169              | 541                | 20,096,104           | 1.9                                   | 37,146                          |
| 2011                      | 24             | 1,305,312            | 26                 | 815,215              | 539                | 20,586,201           | 2.4                                   | 38,193                          |
| 2012                      | 27             | 1,043,822            | 25                 | 970,308              | 541                | 20,659,715           | 0.4                                   | 38,188                          |

\* Restated based on more complete information.

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

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

### Pension Benefits (\$ in thousands)

| Valuation<br>Date | Actuarial Accrued Liability (AAL) |                                   |   | Valuation<br>Assets | Portion of AAL Covered by Assets |       |         |                  |
|-------------------|-----------------------------------|-----------------------------------|---|---------------------|----------------------------------|-------|---------|------------------|
|                   | (1)                               | (2)                               | (3)   |                     | (1)                              | (2)   | (3)     | (4) <sup>1</sup> |
|                   | Active Member<br>Contributions    | Retirants<br>and<br>Beneficiaries | Active and Inactive<br>Members (Employer<br>Financed Portion) |                     |                                  |       |         |                  |
| Sept. 30          |                                   |                                   |   |                     |                                  |       |         |                  |
| 2003              | \$ 34,355                         | \$ 131,719                        | \$ 69,167   | \$ 292,258          | 100 %                            | 100 % | 182.4 % | 124.2 %          |
| 2004 <sup>2</sup> | 37,089                            | 138,141                           | 61,219  | 286,873             | 100                              | 100   | 182.4   | 121.3            |
| 2005              | 38,695                            | 142,689                           | 61,987  | 278,423             | 100                              | 100   | 156.5   | 114.4            |
| 2006              | 43,094                            | 142,384                           | 58,230  | 282,822             | 100                              | 100   | 167.2   | 116.0            |
| 2007              | 42,250                            | 151,691                           | 53,142  | 301,047             | 100                              | 100   | 201.5   | 121.8            |
| 2008              | 48,109                            | 149,608                           | 49,293  | 303,746             | 100                              | 100   | 215.1   | 123.0            |
| 2009              | 46,561                            | 154,758                           | 43,879  | 295,625             | 100                              | 100   | 214.9   | 120.6            |
| 2010              | 48,853                            | 159,481                           | 43,361  | 284,439             | 100                              | 100   | 175.5   | 113.0            |
| 2011 <sup>3</sup> | 50,099                            | 163,522                           | 38,071  | 266,804             | 100                              | 100   | 139.7   | 106.0            |
| 2012              | 53,660                            | 162,840                           | 33,056  | 245,575             | 100                              | 100   | 88.0    | 98.4             |

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

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

<sup>3</sup> Restated based on more complete information.

## Prioritized Solvency Test (continued)

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

| Valuation<br>Date<br><u>Sept. 30</u> | <u>Actuarial Accrued Liability (AAL)</u> |                                   |   | Valuation<br>Assets | <u>Portion of AAL Covered by Assets</u> |            |            |                        |
|--------------------------------------|--|-----------------------------------|---|---------------------|---|------------|------------|------------------------|
|                                      | <u>(1)</u>                               | <u>(2)</u>                        | <u>(3)</u>  |                     | <u>(1)</u>                              | <u>(2)</u> | <u>(3)</u> | <u>(4)<sup>1</sup></u> |
|                                      | Active<br>Member<br>Contributions        | Retirants<br>and<br>Beneficiaries | Active and Inactive<br>Members (Employer<br>Financed Portion) |                     |   |            |            |                        |
| 2007                                 | \$ -                                     | \$ 3,082                          | \$ 3,633  | \$ -                | 0%                                      | 0%         | 0%         | 0%                     |
| 2008                                 | -  | 3,082                             | 3,633   | -                   | 0                                       | 0          | 0          | 0                      |
| 2009                                 | -  | 2,974                             | 3,619   | -                   | 0                                       | 0          | 0          | 0                      |
| 2010                                 | -  | 3,207                             | 4,186   | -                   | 0                                       | 0          | 0          | 0                      |
| 2011                                 | -  | 2,799                             | 5,068   | -                   | 0                                       | 0          | 0          | 0                      |
| 2012                                 | -  | 2,945                             | 5,565   | -                   | 0                                       | 0          | 0          | 0                      |

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

# ACTUARIAL SECTION

## Analysis of System Experience

### Gains/(Losses) in Accrued Liabilities During Year Ended September 30, 2012 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. | \$ 2,775,350                  |
| 2. <b>Withdrawal From Employment</b> (including death-in-service). If more liabilities are released by withdrawals and deaths than assumed, there is a gain. If smaller releases, a loss.               | (160,215)                     |
| 3. <b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.  | 3,095,820                     |
| 4. <b>Investment Income.</b> If there is greater investment income than assumed, there is a gain. If less income, a loss.   | (23,535,790)                  |
| 5. <b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. If not as long, a gain.   | (1,520,905)                   |
| 6. <b>Rehires.</b> Rehires into the System will generally result in an actuarial loss.  | -                             |
| 7. <b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.   | <u>424,918</u>                |
| 8. <b>Composite Gain (or Loss) During Year</b>  | <u><u>\$ (18,920,822)</u></u> |

## Summary of Plan Provisions

Our actuarial valuation of the System as of September 30, 2012, is based on the present provisions of the Judges' Retirement Act (Public Act No. 234 of 1992, as amended).

### ***Regular Retirement***

Eligibility - Age 60 with 8 years credited service; or age 55 with 18 years credited service, or 25 years with no age requirement.

Annual Amount - If less than 12 years of credited service, 3% of final annual compensation times years of credited service; for 12 or more years of credited service, 50% of final annual compensation plus 2.5% of such compensation for each year of credited service in excess of 12 years to a maximum of 60%. Former System members receive 3% of final annual compensation times years of credited service to a maximum of the greater of 40% of final annual compensation or \$15,000, but not to exceed 66.67% of final annual compensation when added to a local retirement system benefit; or 3.5% of final annual compensation times years of credited service to a maximum of 66.67% of final annual compensation if elected.

Final Annual Compensation - Annual state salary at time of retirement plus state salary standardization, if any. For former Probate System members, final annual compensation is member's certified salary at time of retirement. For 36<sup>th</sup> District Court judges, final annual compensation is total state and district control unit salary at time of retirement. For Probate Court judges serving in a single county of less than 15,000 population, final annual compensation is total judicial salary at the time of retirement.

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

Eligibility - Age 55 with 12 but less than 18 years credited service.

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

### ***Deferred Retirement (vested benefit)***

Eligibility - 8 years of credited service.

Annual Amount - Regular retirement benefit. If less than 12 years of credited service, payable at age 60; if 18 or more years of credited service payable at age 55; if more than 12 but less than 18 years of credited service reduced amount payable at age 55.

### ***Disability Retirement***

Eligibility - 8 years of credited service.

Annual Amount - Regular retirement benefit, based upon member's credited service and final salary at time of disability.

### ***Death Before or After Retirement (Spouse or Dependent Children)***

Eligibility - 8 years of credited service.

Annual Amount - 50% of the member's accrued pension.

# **ACTUARIAL SECTION**

## **Summary of Plan Provisions (continued)**

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

None, except that judges who were active judges prior to September 8, 1961, (and their survivors) have their benefits adjusted as active judges' salaries change.

### ***Member Contributions***

Non-Trial Judges - 5% of salary (2% for health benefits).

Trial Judges with Full Standardization - 7% of salary.

Trial Judges without Full Standardization - 3.5% of salary.

Probate Judges under 3% Formula - 7% of salary to maximum of \$980.

Probate Judges under 3.5% Formula - 7% of salary (no maximum).

District Court Judges of the Thirty-sixth District - 3.5% of salary.

### ***Defined Contribution Legislation - (Public Act 523 of 1996)***

New employees hired on or after March 31, 1997, become participants in Tier 2 (i.e. a 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.



# STATISTICAL SECTION

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

# STATISTICAL SECTION

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

## Contents

### *Financial Trends*

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

- Schedule of Pension Plan Additions by Source
- Schedule of OPEB Plan Additions by Source
- Schedule of Pension Plan Deductions by Type
- Schedule of OPEB Plan Deductions by Type
- Schedule of Changes in Net Assets – Pension Plan
- Schedule of Changes in Net Assets – OPEB Plan
- Schedule of Pension Benefits and Refunds by Type
- Schedule of OPEB Benefits 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 - OPEB
- Schedule of Principal Participating Employers
- Ten Year History of Membership
- Schedule of Participating Employers

# STATISTICAL SECTION

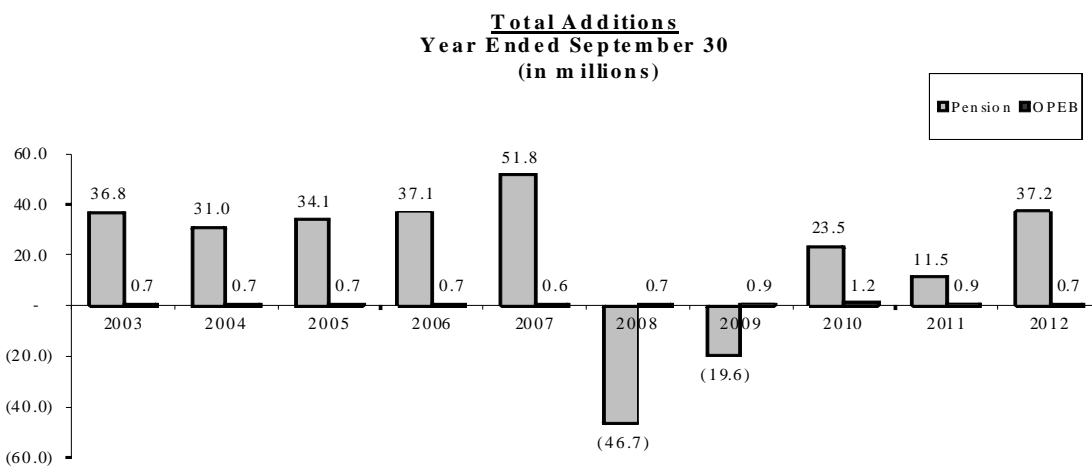
## Schedule of Pension Plan Additions by Source Last Ten Years

| <u>Fiscal Year</u><br><u>Ended</u><br><u>Sept. 30</u> | <u>Member</u><br><u>Contributions</u> | <u>Net Investment &amp;</u><br><u>Other Income</u> | <u>Total</u>  |
|---|---------------------------------------|--|---------------|
| 2003  | \$ 2,288,608                          | \$ 34,560,288                                      | \$ 36,848,896 |
| 2004  | 2,143,714                             | 28,818,651   | 30,962,365    |
| 2005  | 2,077,550                             | 32,011,495   | 34,089,045    |
| 2006  | 2,017,943                             | 35,106,967   | 37,124,910    |
| 2007  | 1,845,878                             | 49,974,396   | 51,820,274    |
| 2008  | 1,738,459                             | (48,472,838)                                       | (46,734,379)  |
| 2009  | 1,644,585                             | (21,294,298)                                       | (19,649,713)  |
| 2010  | 1,539,822                             | 21,966,046   | 23,505,868    |
| 2011  | 1,468,068                             | 10,024,331   | 11,492,399    |
| 2012  | 1,353,949                             | 35,823,251   | 37,177,201    |

Since System is fully funded, no employer contributions are required.

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

| <u>Fiscal Year</u><br><u>Ended</u><br><u>Sept. 30</u> | <u>Member</u><br><u>Contributions</u> | <u>Net Investment &amp;</u><br><u>Other Income</u> | <u>Total</u> |
|---|---------------------------------------|--|--------------|
| 2003  | \$ 451,035                            | \$ 265,000   | \$ 716,035   |
| 2004  | 483,966                               | 215,000  | 698,966      |
| 2005  | 450,657                               | 215,000  | 665,657      |
| 2006  | 518,057                               | 215,000  | 733,057      |
| 2007  | 530,336                               | 115,535  | 645,871      |
| 2008  | 539,440                               | 145,130  | 684,570      |
| 2009  | 528,402                               | 336,280  | 864,682      |
| 2010  | 520,707                               | 726,109  | 1,246,816    |
| 2011  | 551,783                               | 348,517  | 900,300      |
| 2012  | 522,042                               | 194,045  | 716,087      |



# STATISTICAL SECTION

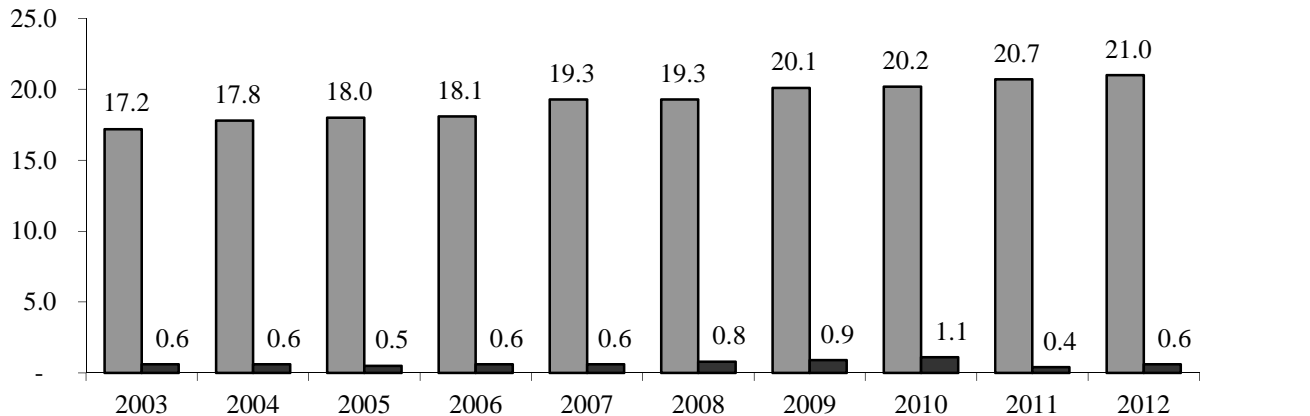
## Schedule of Pension Plan Deductions by Type Last Ten Years

| Fiscal Year<br>Ended<br>Sept. 30 | Benefit<br>Payments | Refunds<br>and Transfers | Administrative<br>and Other<br>Expenses | Total         |
|----------------------------------|---------------------|--------------------------|---|---------------|
| 2003                             | \$ 16,728,017       | \$ 1,074                 | \$ 500,590                              | \$ 17,229,681 |
| 2004                             | 17,540,889          | 67,792                   | 210,178                                 | 17,818,859    |
| 2005                             | 17,797,840          |                          | 167,993                                 | 17,965,833    |
| 2006                             | 17,952,735          |                          | 170,023                                 | 18,122,758    |
| 2007                             | 18,919,433          | 247,941                  | 181,848                                 | 19,349,222    |
| 2008                             | 19,180,381          |                          | 144,188                                 | 19,324,569    |
| 2009                             | 19,897,368          |                          | 158,909                                 | 20,056,277    |
| 2010                             | 20,079,292          |                          | 143,470                                 | 20,222,762    |
| 2011                             | 20,580,971          |                          | 141,155                                 | 20,722,126    |
| 2012                             | 20,792,225          |                          | 207,439                                 | 20,999,664    |

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

| Fiscal Year<br>Ended<br>Sept. 30 | Benefit<br>Payments | Refunds<br>and Transfers | Administrative<br>and Other<br>Expenses | Total      |
|----------------------------------|---------------------|--------------------------|---|------------|
| 2003                             | \$ 564,801          |                          |   | \$ 564,801 |
| 2004                             | 576,043             |                          |   | 576,043    |
| 2005                             | 510,152             |                          |   | 510,152    |
| 2006                             | 596,769             |                          |   | 596,769    |
| 2007                             | 611,246             |                          |   | 611,246    |
| 2008                             | 789,975             |                          | \$ 41,978                               | 831,953    |
| 2009                             | 820,694             |                          | 45,133                                  | 865,827    |
| 2010                             | 1,078,915           |                          | 35,212                                  | 1,114,127  |
| 2011                             | 401,027             |                          | 35,539                                  | 436,566    |
| 2012                             | 544,349             | \$ 90                    | 34,959                                  | 579,399    |

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



# STATISTICAL SECTION

## Schedule of Changes in Net Assets - Pension Plan

### Last Ten Years

(in thousands)

|                                   | Fiscal Year      |                  |                  |                  |                  |                    |                    |                 |                   |                  |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------|-----------------|-------------------|------------------|
|                                   | 2003             | 2004             | 2005             | 2006             | 2007             | 2008               | 2009               | 2010            | 2011              | 2012             |
| Member contributions              | \$ 2,289         | \$ 2,144         | \$ 2,078         | \$ 2,018         | \$ 1,846         | \$ 1,738           | \$ 1,645           | \$ 1,540        | \$ 1,468          | \$ 1,354         |
| Employer contributions            |                  |                  |                  |                  |                  |                    |                    |                 |                   |                  |
| Net investment income             | 34,560           | 28,818           | 31,977           | 34,452           | 49,716           | (48,525)           | (21,344)           | 21,918          | 9,972             | 34,711           |
| Court fees                        |                  |                  | 34               | 654              | 231              | 44                 | 43                 | 43              | 43                | 1,111            |
| Miscellaneous income              |                  |                  |                  | 1                | 27               | 8                  | 7                  | 5               | 9                 | 1                |
| <b>Total Additions</b>            | <u>36,849</u>    | <u>30,962</u>    | <u>34,089</u>    | <u>37,125</u>    | <u>51,820</u>    | <u>(46,735)</u>    | <u>(19,650)</u>    | <u>23,506</u>   | <u>11,492</u>     | <u>37,177</u>    |
| Pension benefits                  | 16,728           | 17,541           | 17,798           | 17,953           | 18,919           | 19,180             | 19,897             | 20,079          | 20,581            | 20,792           |
| Refunds of member contributions   | 1                | 67               |                  |                  | 248              |                    |                    |                 |                   |                  |
| Administrative and other expenses | 501              | 210              | 168              | 170              | 182              | 144                | 159                | 143             | 141               | 207              |
| <b>Total Deductions</b>           | <u>17,230</u>    | <u>17,818</u>    | <u>17,966</u>    | <u>18,123</u>    | <u>19,349</u>    | <u>19,324</u>      | <u>20,056</u>      | <u>20,222</u>   | <u>20,722</u>     | <u>20,999</u>    |
| <b>Changes in net assets</b>      | <u>\$ 19,619</u> | <u>\$ 13,144</u> | <u>\$ 16,123</u> | <u>\$ 19,002</u> | <u>\$ 32,471</u> | <u>\$ (66,059)</u> | <u>\$ (39,706)</u> | <u>\$ 3,283</u> | <u>\$ (9,230)</u> | <u>\$ 16,178</u> |

## 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              | \$ 451        | \$ 484        | \$ 451        | \$ 518        | \$ 530       | \$ 539          | \$ 528        | \$ 521        | \$ 552        | \$ 522        |
| Other gov't. contributions        |               |               |               |               |              |                 |               |               | \$ 1          |               |
| Net investment income             |               |               |               |               |              | 8               | 1             | 13            | 37            | 94            |
| Court fees                        | 265           | 215           | 215           | 215           | 115          | 115             | 335           | 712           | 310           | 100           |
| Transfer from other systems       |               |               |               |               |              | 15              |               |               |               |               |
| Miscellaneous income              |               |               |               |               | 1            | 7               | 1             | 1             |               |               |
| <b>Total Additions</b>            | <u>716</u>    | <u>699</u>    | <u>666</u>    | <u>733</u>    | <u>646</u>   | <u>684</u>      | <u>865</u>    | <u>1,247</u>  | <u>900</u>    | <u>716</u>    |
| Health care benefits              | 565           | 576           | 510           | 597           | 611          | 790             | 821           | 1,079         | 401           | 544           |
| Refund of contributions           |               |               |               |               |              |                 |               |               |               | 0 *           |
| Administrative and other expenses |               |               |               |               |              | 42              | 45            | 35            | 36            | 35            |
| <b>Total Deductions</b>           | <u>565</u>    | <u>576</u>    | <u>510</u>    | <u>597</u>    | <u>611</u>   | <u>832</u>      | <u>866</u>    | <u>1,114</u>  | <u>437</u>    | <u>579</u>    |
| <b>Changes in net assets</b>      | <u>\$ 151</u> | <u>\$ 123</u> | <u>\$ 156</u> | <u>\$ 136</u> | <u>\$ 35</u> | <u>\$ (148)</u> | <u>\$ (1)</u> | <u>\$ 133</u> | <u>\$ 464</u> | <u>\$ 137</u> |

\* The amount represents less than \$100.00

# STATISTICAL SECTION

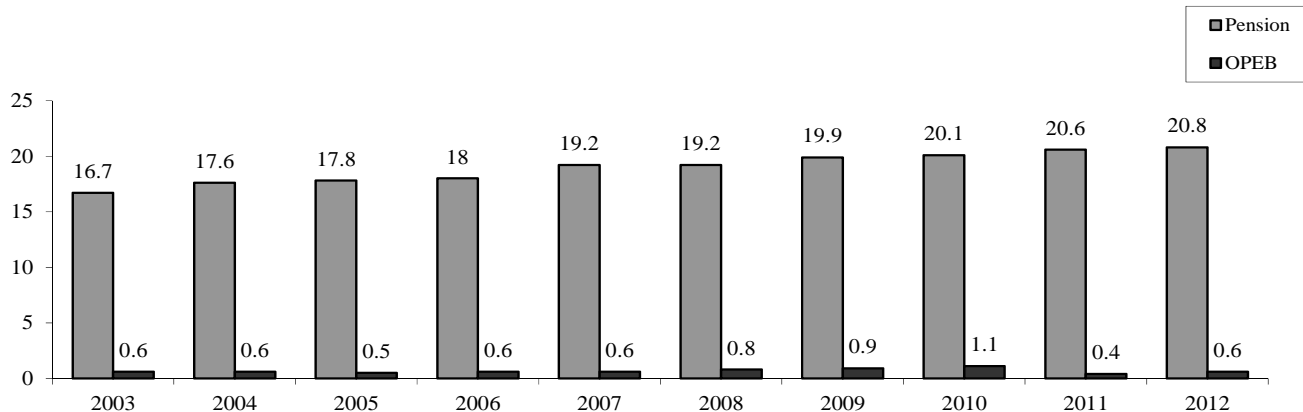
## Schedule of Pension Benefits and Refunds by Type Last Ten Years

| Fiscal Year<br>Ended<br>Sept. 30 | Regular<br>Benefits | Disability<br>Benefits | Survivor<br>Benefits | Refunds                  |                    | Total         |
|----------------------------------|---------------------|------------------------|----------------------|--------------------------|--------------------|---------------|
|                                  |                     |                        |                      | Employee<br>Contribution | Retired<br>Benefit |               |
| 2003                             | \$ 16,236,804       | \$ 491,213             |                      | \$ 1,074                 |                    | \$ 16,729,091 |
| 2004                             | 17,011,125          | 529,764                |                      | 67,792                   |                    | 17,608,681    |
| 2005                             | 17,269,422          | 528,418                |                      |                          |                    | 17,797,840    |
| 2006                             | 14,611,531          | 297,408                | 3,043,796            |                          |                    | 17,952,735    |
| 2007                             | 14,996,160          | 260,585                | \$ 3,662,688         | 246,389                  | \$ 1,552           | 19,167,374    |
| 2008                             | 15,231,453          | 233,700                | 3,715,228            |                          |                    | 19,180,381    |
| 2009                             | 15,741,513          | 211,077                | 3,944,778            |                          |                    | 19,897,368    |
| 2010                             | 15,694,797          | 211,078                | 4,173,417            |                          |                    | 20,079,292    |
| 2011                             | 16,134,758          | 211,078                | 4,235,135            |                          |                    | 20,580,971    |
| 2012                             | 16,209,640          | 210,948                | 4,371,637            |                          |                    | 20,792,225    |

## Schedule of OPEB Benefits by Type Last Ten Years

| Fiscal Year<br>Ended<br>Sept. 30 | Health<br>Benefits | Dental<br>Benefits | Vision<br>Benefits | Health<br>Refunds | Administrative<br>Expenses | Total     |
|----------------------------------|--------------------|--------------------|--------------------|-------------------|----------------------------|-----------|
| 2003                             | \$ 482,449         | \$ 73,619          | 8,733              |                   |                            | 564,801   |
| 2004                             | 489,225            | 77,691             | 9,127              |                   |                            | 576,043   |
| 2005                             | 422,261            | 78,495             | 9,396              |                   |                            | 510,152   |
| 2006                             | 486,112            | 98,652             | 12,005             |                   |                            | 596,769   |
| 2007                             | 500,954            | 98,160             | \$ 12,132          |                   |                            | 611,246   |
| 2008                             | 720,335            | 62,770             | 6,870              |                   | \$ 41,978                  | 831,953   |
| 2009                             | 747,808            | 65,013             | 7,873              |                   | 45,133                     | 865,827   |
| 2010                             | 859,602            | 167,845            | 51,468             |                   | 35,212                     | 1,114,127 |
| 2011                             | 265,202            | 136,341            | (516)              |                   | 35,539                     | 436,566   |
| 2012                             | 425,647            | 118,185            | 517                | \$ 90             | 34,959                     | 579,399   |

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



# STATISTICAL SECTION

## Schedule of Retired Members by Type of Pension Benefit

September 30, 2012

| Amount of<br>Monthly<br>Pension Benefit | Number of<br>Retirees | <u>Type of Retirement *</u> |            |           |          |          | <u>Selected Option**</u> |              |              |
|---|-----------------------|-----------------------------|------------|-----------|----------|----------|--------------------------|--------------|--------------|
|   |                       | <u>1</u>                    | <u>2</u>   | <u>3</u>  | <u>4</u> | <u>5</u> | <u>Opt 1</u>             | <u>Opt 2</u> | <u>Opt 3</u> |
| \$ 1 - 400                              | 3                     | 1                           | 1          | 1         |          |          | 3                        |              |              |
| 401 - 800                               | 32                    | 9                           | 19         | 4         |          |          | 27                       | 5            |              |
| 801 - 1,200                             | 40                    | 22                          | 13         | 2         | 2        | 1        | 33                       | 6            | 1            |
| 1,201 - 1,600                           | 37                    | 12                          | 19         | 6         |          |          | 30                       | 6            | 1            |
| 1,601 - 2,000                           | 70                    | 21                          | 40         | 6         | 1        | 2        | 62                       | 8            |              |
| 2,001 - 2,400                           | 41                    | 17                          | 20         | 2         | 1        | 1        | 27                       | 14           |              |
| 2,401 - 2,800                           | 35                    | 19                          | 15         |           |          | 1        | 28                       | 7            |              |
| 2,801 - 3,200                           | 22                    | 15                          | 5          |           |          | 2        | 12                       | 10           |              |
| 3,201 - 3,600                           | 32                    | 25                          | 6          | 1         |          |          | 19                       | 13           |              |
| 3,601 - 4,000                           | 55                    | 45                          | 6          | 3         |          | 1        | 41                       | 13           | 1            |
| Over 4,000                              | 174                   | 166                         | 2          | 3         | 2        | 1        | 149                      | 23           | 2            |
| Totals                                  | <u>541</u>            | <u>352</u>                  | <u>146</u> | <u>28</u> | <u>6</u> | <u>9</u> | <u>431</u>               | <u>105</u>   | <u>5</u>     |

\* Type of Retirement

- 1 - Normal retirement for age & service
- 2 - Survivor payment - normal retirement or early retirement
- 3 - Survivor payment - death in service
- 4 - Non-duty disability retirement (incl. survivors)
- 5 - Survivor payment - disability retirement

\*\*Selected Option

- Opt 1 - Straight life allowance
- Opt 2 - 100% Survivor option
- Opt 3 - 50% Survivor option

Source: Gabriel Roeder Smith & Co.

# STATISTICAL SECTION

## Schedule of Retired Members by Type of Other Postemployment Benefit September 30, 2012

| Amount of<br>Monthly<br>Pension Benefit | Number of<br>Retirees | Type of Other Postemployment Benefits |            |            |
|---|-----------------------|---------------------------------------|------------|------------|
|   |                       | Health                                | Dental     | Vision     |
| \$ 1 – 400                              | 3                     | 1                                     |            | 1          |
| 401 – 800                               | 32                    | 4                                     | 6          | 5          |
| 801 – 1,200                             | 40                    | 6                                     | 11         | 6          |
| 1,201 – 1,600                           | 37                    | 2                                     | 5          | 3          |
| 1,601 – 2,000                           | 70                    | 10                                    | 10         | 7          |
| 2,001 - 2,400                           | 41                    | 7                                     | 12         | 12         |
| 2,401 - 2,800                           | 35                    | 3                                     | 12         | 8          |
| 2,801 - 3,200                           | 22                    | 3                                     | 3          | 2          |
| 3,201 - 3,600                           | 32                    | 3                                     | 8          | 6          |
| 3,601 - 4,000                           | 55                    | 10                                    | 20         | 18         |
| Over 4,000                              | 174                   | 28                                    | 48         | 45         |
| <b>Totals</b>                           | <b>541</b>            | <b>77</b>                             | <b>135</b> | <b>113</b> |

Source: Gabriel Roeder Smith & Co.



# STATISTICAL SECTION

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

|   | <u>2012</u>       | <u>2011</u>       |
|---|-------------------|-------------------|
| <b>Claims</b>                           |                   |                   |
| Health insurance                        | \$ 398,876        | \$ 255,119        |
| Vision insurance                        | 517               | (878)             |
| Dental insurance                        | 115,129           | 132,601           |
| <b>Total Claims</b>                     | <u>514,522</u>    | <u>386,842</u>    |
| <b>Estimated Claims Liability</b>       |                   |                   |
| Health insurance                        | 26,771            | 10,083            |
| Vision insurance                        |                   | 362               |
| Dental insurance                        | 3,056             | 3,740             |
| <b>Total Estimated Claims Liability</b> | <u>29,827</u>     | <u>14,185</u>     |
| <b>Administrative Fees</b>              |                   |                   |
| Health insurance                        | 30,594            | 29,702            |
| Vision insurance                        | 1,028             | 1,005             |
| Dental insurance                        | 3,337             | 4,832             |
| <b>Total Administrative Fees</b>        | <u>34,959</u>     | <u>35,539</u>     |
| Refunds                                 | 90                |                   |
| <b>Grand Total</b>                      | <u>\$ 579,398</u> | <u>\$ 436,566</u> |

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Pension Last Ten Years

| Payment Periods              | Credited Service (Years) as of September 30 |          |          |          |          |          |          | Total    |
|------------------------------|---|----------|----------|----------|----------|----------|----------|----------|
|                              | 0 - 5                                       | 5 - 10   | 10 - 15  | 15 - 20  | 20 - 25  | 25 - 30  | 30 +     |          |
| Period 10/1/02 to 9/30/03:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 1,026                                    | \$ 1,251 | \$ 1,978 | \$ 2,771 | \$ 3,217 | \$ 2,722 | \$ 4,197 | \$ 2,593 |
| Average Final Average Salary | 813   | 49,406   | 48,531   | 56,406   | 61,051   | 58,177   | 59,739   | 53,211   |
| Number of Active Retirants   | 24  | 31       | 118      | 188      | 121      | 46       | 23       | 551      |
| Period 10/1/03 to 9/30/04:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 1,026                                    | \$ 1,247 | \$ 2,016 | \$ 2,917 | \$ 3,317 | \$ 2,940 | \$ 3,871 | \$ 2,667 |
| Average Final Average Salary | 813   | 49,810   | 48,982   | 55,299   | 61,840   | 59,355   | 59,739   | 53,149   |
| Number of Active Retirants   | 24  | 33       | 118      | 188      | 117      | 46       | 23       | 549      |
| Period 10/1/04 to 9/30/05:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 1,057                                    | \$ 1,263 | \$ 2,074 | \$ 2,984 | \$ 3,382 | \$ 2,986 | \$ 3,850 | \$ 2,718 |
| Average Final Average Salary | 780   | 51,605   | 48,782   | 53,902   | 62,131   | 58,827   | 59,739   | 52,634   |
| Number of Active Retirants   | 25  | 34       | 117      | 193      | 116      | 44       | 23       | 552      |
| Period 10/1/05 to 9/30/06:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 1,023                                    | \$ 1,411 | \$ 2,098 | \$ 3,013 | \$ 3,364 | \$ 2,953 | \$ 3,569 | \$ 2,807 |
| Average Final Average Salary | 3,250                                       | 71,249   | 61,140   | 69,683   | 76,983   | 75,353   | 92,016   | 70,441   |
| Number of Active Retirants   | 6   | 30       | 112      | 193      | 117      | 49       | 26       | 533      |
| Period 10/1/06 to 9/30/07:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 888                                      | \$ 1,467 | \$ 2,126 | \$ 3,228 | \$ 3,440 | \$ 3,064 | \$ 3,569 | \$ 2,935 |
| Average Final Average Salary | 3,900                                       | 70,222   | 63,067   | 72,137   | 80,455   | 81,286   | 93,887   | 73,280   |
| Number of Active Retirants   | 5   | 31       | 109      | 202      | 124      | 45       | 26       | 542      |
| Period 10/1/07 to 9/30/08:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 888                                      | \$ 1,467 | \$ 2,164 | \$ 3,265 | \$ 3,323 | \$ 3,074 | \$ 3,704 | \$ 2,939 |
| Average Final Average Salary | 3,900                                       | 70,222   | 64,589   | 72,403   | 81,027   | 80,861   | 97,424   | 73,861   |
| Number of Active Retirants   | 5   | 31       | 107      | 206      | 123      | 44       | 24       | 540      |
| Period 10/1/08 to 9/30/09:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 888                                      | \$ 1,421 | \$ 2,303 | \$ 3,377 | \$ 3,401 | \$ 3,211 | \$ 3,793 | \$ 3,031 |
| Average Final Average Salary | 37,149                                      | 74,389   | 67,177   | 78,416   | 83,236   | 81,197   | 90,472   | 77,308   |
| Number of Active Retirants   | 5   | 32       | 109      | 210      | 126      | 40       | 20       | 542      |
| Period 10/1/09 to 9/30/10:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 888                                      | \$ 1,421 | \$ 2,389 | \$ 3,459 | \$ 3,429 | \$ 3,257 | \$ 4,004 | \$ 3,096 |
| Average Final Average Salary | 37,149                                      | 74,389   | 69,084   | 79,411   | 84,463   | 82,687   | 94,002   | 78,630   |
| Number of Active Retirants   | 5   | 32       | 110      | 204      | 127      | 42       | 21       | 541      |
| Period 10/1/10 to 9/30/11:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 888                                      | \$ 1,398 | \$ 2,423 | \$ 3,597 | \$ 3,449 | \$ 3,539 | \$ 3,879 | \$ 3,183 |
| Average Final Average Salary | 37,149                                      | 74,389   | 70,443   | 81,961   | 84,631   | 86,761   | 94,002   | 80,306   |
| Number of Active Retirants   | 5   | 32       | 106      | 207      | 124      | 44       | 21       | 539      |
| Period 10/1/11 to 9/30/12:   |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 1,094                                    | \$ 1,356 | \$ 2,454 | \$ 3,617 | \$ 3,420 | \$ 3,520 | \$ 3,914 | \$ 3,182 |
| Average Final Average Salary | 30,958                                      | 74,718   | 71,197   | 81,578   | 85,701   | 88,202   | 93,952   | 80,555   |
| Number of Active Retirants   | 6   | 34       | 103      | 208      | 126      | 45       | 19       | 541      |

Source: Gabriel Roeder Smith & Co.

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Health Last Six Years

| Payment Periods              | Credited Service (Years) as of September 30 |          |          |          |          |          |          | Total    |
|------------------------------|---|----------|----------|----------|----------|----------|----------|----------|
|                              | 0 - 5                                       | 5 - 10   | 10 - 15  | 15 - 20  | 20 - 25  | 25 - 30  | 30 +     |          |
| Period 10/1/06 to 9/30/07    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,235 | \$ 3,544 | \$ 3,791 | \$ 4,426 | \$ 5,859 | \$ 3,351 |
| Average Final Average Salary | 19,500                                      | 84,638   | 63,913   | 79,862   | 88,876   | 105,084  | 131,721  | 81,436   |
| Number of Active Retirants   | 1   | 3        | 20       | 33       | 19       | 9        | 2        | 87       |
| Period 10/1/07 to 9/30/08    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,264 | \$ 3,456 | \$ 3,488 | \$ 4,648 | \$ 5,859 | \$ 3,287 |
| Average Final Average Salary | 19,500                                      | 84,638   | 66,144   | 78,843   | 88,876   | 105,720  | 131,721  | 81,745   |
| Number of Active Retirants   | 1   | 3        | 18       | 32       | 19       | 8        | 2        | 83       |
| Period 10/1/08 to 9/30/09    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,264 | \$ 3,699 | \$ 3,337 | \$ 5,392 | \$ 5,859 | \$ 3,361 |
| Average Final Average Salary | 19,500                                      | 84,638   | 66,144   | 85,685   | 89,254   | 125,557  | 131,721  | 85,455   |
| Number of Active Retirants   | 1   | 3        | 18       | 30       | 20       | 6        | 2        | 80       |
| Period 10/1/09 to 9/30/10    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,264 | \$ 3,804 | \$ 3,367 | \$ 5,392 | \$ 5,859 | \$ 3,378 |
| Average Final Average Salary | 19,500                                      | 84,638   | 65,338   | 79,121   | 90,360   | 125,557  | 131,721  | 82,664   |
| Number of Active Retirants   | 1   | 3        | 20       | 32       | 21       | 6        | 2        | 85       |
| Period 10/1/10 to 9/30/11    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,146 | \$ 3,864 | \$ 3,418 | \$ 5,798 | \$ 5,859 | \$ 3,465 |
| Average Final Average Salary | 19,500                                      | 84,638   | 63,592   | 84,583   | 92,892   | 131,136  | 131,721  | 85,891   |
| Number of Active Retirants   | 1   | 3        | 19       | 31       | 18       | 7        | 2        | 81       |
| Period 10/1/11 to 9/30/12    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,102 | \$ 2,139 | \$ 3,796 | \$ 3,418 | \$ 5,781 | \$ 5,859 | \$ 3,482 |
| Average Final Average Salary | 19,500                                      | 84,638   | 66,599   | 83,460   | 92,892   | 131,136  | 131,721  | 86,964   |
| Number of Active Retirants   | 1   | 3        | 16       | 30       | 18       | 7        | 2        | 77       |

Source: Gabriel Røeder Smith & Co.

## Schedule of Average Benefit Payments - Dental Last Six Years

| Payment Periods              | Credited Service (Years) as of September 30 |          |          |          |          |          |          | Total    |
|------------------------------|---|----------|----------|----------|----------|----------|----------|----------|
|                              | 0 - 5                                       | 5 - 10   | 10 - 15  | 15 - 20  | 20 - 25  | 25 - 30  | 30 +     |          |
| Period 10/1/06 to 9/30/07    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ -  | \$ 1,923 | \$ 2,408 | \$ 3,471 | \$ 3,599 | \$ 4,088 | \$ 4,017 | \$ 3,349 |
| Average Final Average Salary | -   | 84,070   | 65,954   | 76,790   | 79,234   | 95,142   | 88,821   | 78,270   |
| Number of Active Retirants   | -   | 5        | 28       | 55       | 38       | 17       | 7        | 150      |
| Period 10/1/07 to 9/30/08    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | -   | \$ 1,923 | \$ 2,510 | \$ 3,447 | \$ 3,513 | \$ 4,178 | \$ 3,990 | \$ 3,354 |
| Average Final Average Salary | -   | 84,070   | 68,761   | 77,730   | 81,887   | 94,839   | 88,958   | 79,829   |
| Number of Active Retirants   | -   | 5        | 25       | 56       | 38       | 16       | 6        | 146      |
| Period 10/1/08 to 9/30/09    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | -   | \$ 1,923 | \$ 2,616 | \$ 3,510 | \$ 3,505 | \$ 4,429 | \$ 4,054 | \$ 3,394 |
| Average Final Average Salary | -   | 84,070   | 70,379   | 81,063   | 83,005   | 101,786  | 99,613   | 82,293   |
| Number of Active Retirants   | -   | 5        | 26       | 55       | 37       | 14       | 4        | 141      |
| Period 10/1/09 to 9/30/10    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | -   | \$ 1,923 | \$ 2,631 | \$ 3,639 | \$ 3,503 | \$ 4,447 | \$ 4,054 | \$ 3,456 |
| Average Final Average Salary | -   | 84,070   | 72,415   | 78,988   | 84,063   | 102,499  | 99,613   | 82,374   |
| Number of Active Retirants   | -   | 5        | 26       | 55       | 39       | 15       | 4        | 144      |
| Period 10/1/10 to 9/30/11    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | -   | \$ 1,923 | \$ 2,658 | \$ 3,769 | \$ 3,526 | \$ 4,250 | \$ 4,054 | \$ 3,541 |
| Average Final Average Salary | -   | 84,070   | 73,097   | 83,097   | 83,661   | 106,381  | 99,613   | 84,703   |
| Number of Active Retirants   | -   | 5        | 24       | 53       | 38       | 16       | 4        | 140      |
| Period 10/1/11 to 9/30/12    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | -   | \$ 1,923 | \$ 2,647 | \$ 3,731 | \$ 3,447 | \$ 4,309 | \$ 4,054 | \$ 3,481 |
| Average Final Average Salary | -   | 84,070   | 75,085   | 82,627   | 84,757   | 103,377  | 99,613   | 84,860   |
| Number of Active Retirants   | -   | 5        | 22       | 51       | 38       | 15       | 4        | 135      |

Source: Gabriel Røeder Smith & Co.

# STATISTICAL SECTION

## Schedule of Average Benefit Payments - Vision

Last Six Years

| Payment Periods              | Credited Service (Years) as of September 30 |          |          |          |          |          |          | Total    |
|------------------------------|---|----------|----------|----------|----------|----------|----------|----------|
|                              | 0 - 5                                       | 5 - 10   | 10 - 15  | 15 - 20  | 20 - 25  | 25 - 30  | 30 +     |          |
| Period 10/1/06 to 9/30/07    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,186 | \$ 2,526 | \$ 3,795 | \$ 4,003 | \$ 4,377 | \$ 4,065 | \$ 3,651 |
| Average Final Average Salary | 19,500                                      | 96,442   | 67,760   | 80,314   | 86,286   | 102,028  | 99,110   | 83,177   |
| Number of Active Retirants   | 1   | 3        | 20       | 42       | 35       | 14       | 5        | 120      |
| Period 10/1/07 to 9/30/08    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,186 | \$ 2,588 | \$ 3,801 | \$ 3,775 | \$ 4,510 | \$ 4,038 | \$ 3,618 |
| Average Final Average Salary | 19,500                                      | 96,442   | 70,418   | 81,753   | 86,286   | 102,184  | 101,887  | 84,189   |
| Number of Active Retirants   | 1   | 3        | 18       | 42       | 35       | 13       | 4        | 116      |
| Period 10/1/08 to 9/30/09    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,186 | \$ 2,728 | \$ 3,916 | \$ 3,719 | \$ 4,624 | \$ 4,317 | \$ 3,667 |
| Average Final Average Salary | 19,500                                      | 96,442   | 72,545   | 85,688   | 87,123   | 106,348  | 111,045  | 86,469   |
| Number of Active Retirants   | 1   | 3        | 19       | 43       | 35       | 12       | 3        | 116      |
| Period 10/1/09 to 9/30/10    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | \$ 17                                       | \$ 2,186 | \$ 2,749 | \$ 3,955 | \$ 3,753 | \$ 4,624 | \$ 5,372 | \$ 3,707 |
| Average Final Average Salary | 19,500                                      | 96,442   | 75,332   | 83,630   | 88,016   | 106,348  | 137,252  | 86,723   |
| Number of Active Retirants   | 1   | 3        | 19       | 42       | 37       | 12       | 2        | 116      |
| Period 10/1/10 to 9/30/11    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | 17  | 2,186    | 2,706    | 4,052    | 3,785    | 4,700    | 5,372    | 3,773    |
| Average Final Average Salary | 19,500                                      | 96,442   | 74,044   | 88,977   | 87,701   | 110,830  | 137,252  | 89,139   |
| Number of Active Retirants   | 1   | 3        | 18       | 43       | 36       | 13       | 2        | 116      |
| Period 10/1/11 to 9/30/12    |   |          |          |          |          |          |          |          |
| Average Monthly Benefit      | 17  | 2,186    | 2,647    | 4,088    | 3,666    | 4,452    | 5,372    | 3,682    |
| Average Final Average Salary | 19,500                                      | 96,442   | 76,442   | 88,175   | 88,146   | 107,446  | 137,252  | 88,147   |
| Number of Active Retirants   | 1   | 3        | 17       | 42       | 36       | 12       | 2        | 113      |

Source: Gabriel Roeder Smith & Co.

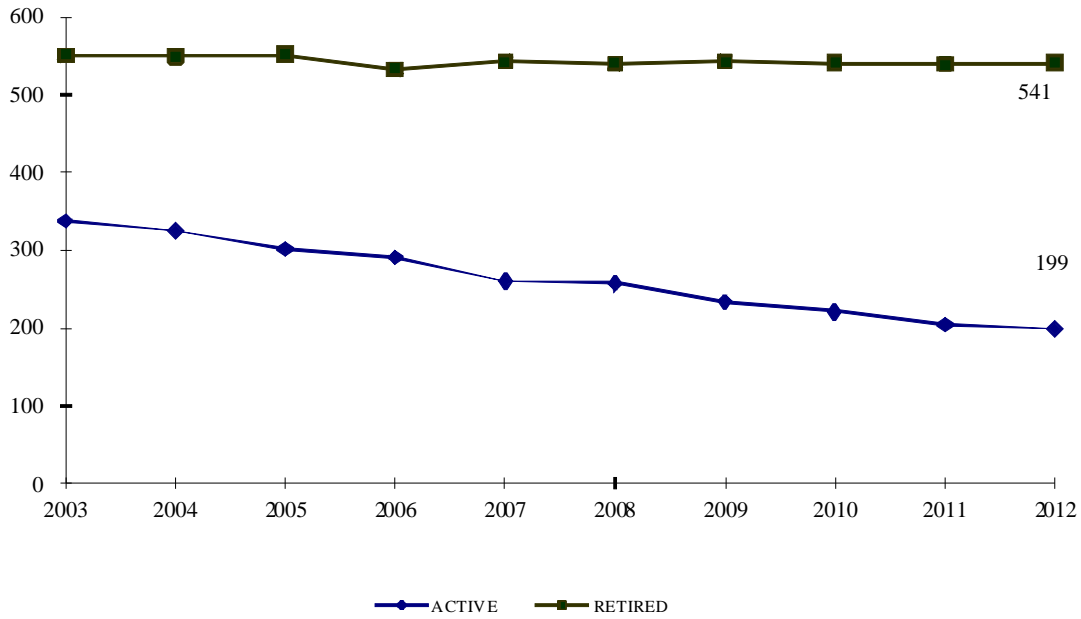
# STATISTICAL SECTION

## Schedule of Principal Participating Employers For Fiscal Years Ending September 30, 2012 and 2003

| <u>Participating Employers</u> | 2012      |                                  | 2003      |                                  |
|--------------------------------|-----------|----------------------------------|-----------|----------------------------------|
|                                | Employees | Percentage<br>of Total<br>System | Employees | Percentage<br>of Total<br>System |
| 03rd Circuit                   | 20        | 10.1 %                           | 27        | 8.4 %                            |
| Court of Appeals               | 15        | 7.5                              | 19        | 5.9                              |
| 36th District                  | 9         | 4.5                              | 17        | 5.3                              |
| 06th Circuit                   | 7         | 3.5                              | 8         | 2.5                              |
| 07th Circuit                   | 4         | 2.0                              | 4         | 1.2                              |
| 08th District                  | 4         | 2.0                              | 5         | 1.6                              |
| 14th Circuit                   | 4         | 2.0                              | 4         | 1.2                              |
| 16th Circuit                   | 4         | 2.0                              | 4         | 1.2                              |
| 22nd Circuit                   | 4         | 2.0                              | 4         | 1.2                              |
| 61st District                  | 4         | 2.0                              | 5         | 1.6                              |
| <br>All other                  | 124       | 62.3                             | 224       | 69.8                             |
| <br>Total                      | 199       | 100.0 %                          | 321       | 100.0 %                          |

# STATISTICAL SECTION

## Ten Year History of Membership Fiscal Year Ended September 30



Source: Gabriel Roeder Smith & Co.

# STATISTICAL SECTION

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

|                    |                     |
|--------------------|---------------------|
| Elected Offices    | 03rd District Court |
| Supreme Court      | 05th District Court |
| Court Of Appeals   | 07th District Court |
| 03rd Circuit Court | 08th District Court |
| 04th Circuit Court | 10th District Court |
| 06th Circuit Court | 14th District Court |
| 07th Circuit Court | 15th District Court |
| 08th Circuit Court | 16th District Court |
| 09th Circuit Court | 17th District Court |
| 10th Circuit Court | 19th District Court |
| 13th Circuit Court | 21st District Court |
| 14th Circuit Court | 22nd District Court |
| 16th Circuit Court | 26th District Court |
| 17th Circuit Court | 28th District Court |
| 18th Circuit Court | 31st District Court |
| 20th Circuit Court | 33rd District Court |
| 21st Circuit Court | 36th District Court |
| 22nd Circuit Court | 39th District Court |
| 23rd Circuit Court | 40A District Court  |
| 24th Circuit Court | 41B District Court  |
| 27th Circuit Court | 44th District Court |
| 30th Circuit Court | 46th District Court |
| 31st Circuit Court | 48th District Court |
| 32nd Circuit Court | 52nd District Court |
| 34th Circuit Court | 54B District Court  |
| 35th Circuit Court | 56A District Court  |
| 36th Circuit Court | 58th District Court |
| 37th Circuit Court | 60th District Court |
| 38th Circuit Court | 61st District Court |
| 39th Circuit Court | 63rd District Court |
| 40th Circuit Court | 64th District Court |
| 41st Circuit Court | 65th District Court |
| 56th Circuit Court | 66th District Court |
| 57th Circuit Court | 67th District Court |

# *STATISTICAL SECTION*

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

68th District Court  
70th District Court  
71st District Court  
76th District Court  
77th District Court  
78th District Court  
81st District Court  
82nd District Court  
84th District Court  
86th District Court  
87th District Court  
88th District Court  
90th District Court  
95th District Court  
98th District Court  
Bay County Probate Court  
Benzie County Probate Court  
Berrien County Probate Court  
Branch County Probate Court  
Cass County Probate Court  
Clare County Probate Court  
Emmet County Probate Court  
Gogebic County Probate Court  
Huron County Probate Court  
Iosco County Probate Court  
Iron County Probate Court  
Isabella County Probate Court  
Kalamazoo County Probate Court  
Kent County Probate Court  
Lake County Probate Court  
Macomb County Probate Court  
Mason County Probate Court  
Monroe County Probate Court  
Montmorency County Probate Court  
Muskegon County Probate Court  
Oscoda County Probate Court  
Ottawa County Probate Court  
Recorders Court  
Schoolcraft County Probate Court  
St Joseph County Probate Court  
Washtenaw County Probate Court  
Wayne County Probate Court  
Wexford County Probate Court



## ACKNOWLEDGMENTS

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