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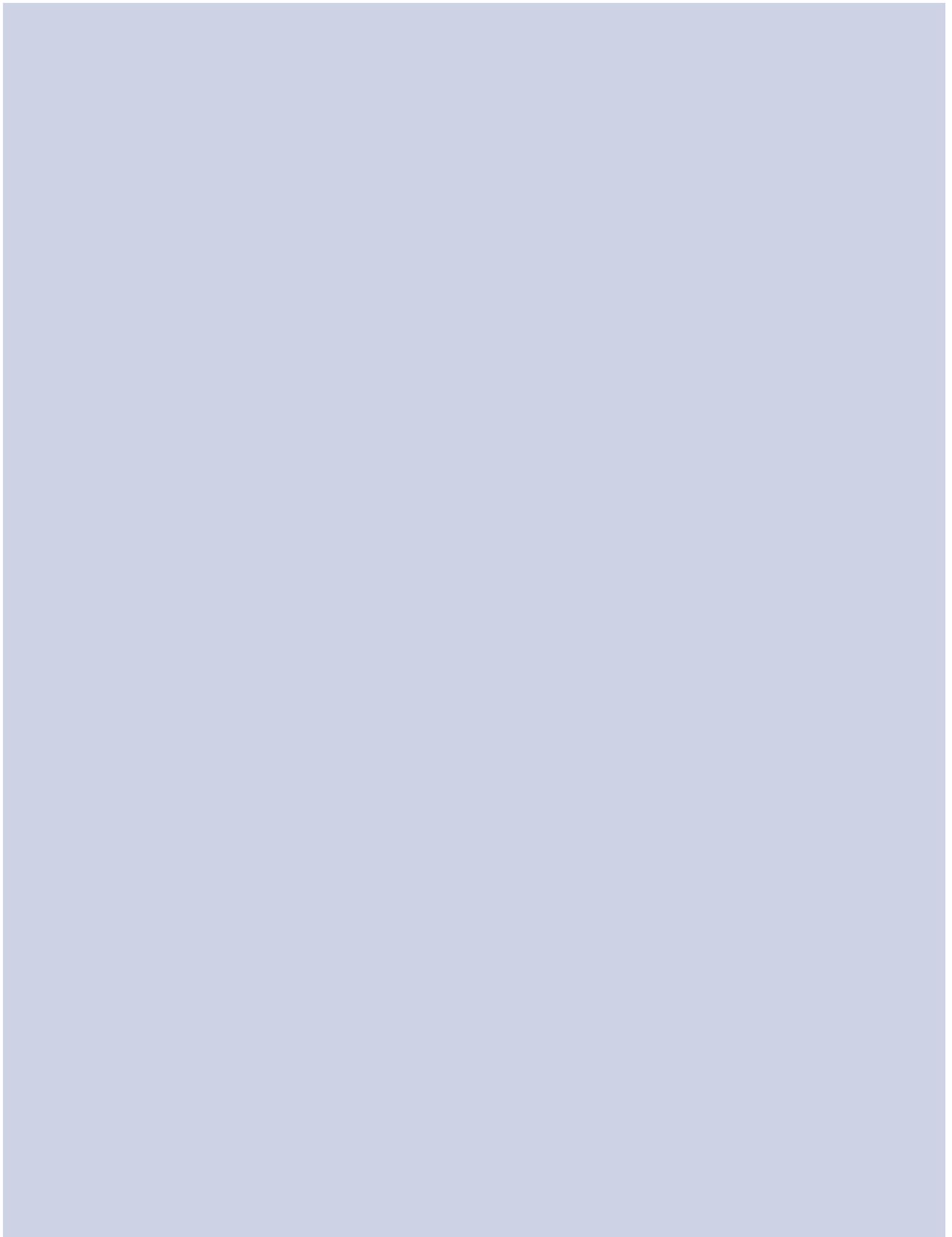
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**COMPREHENSIVE ANNUAL  
FINANCIAL REPORT**  
for the fiscal year ended 12.31.2014

**A FOCUS ON  
RETIREMENT READINESS**

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**COMPREHENSIVE ANNUAL  
FINANCIAL REPORT**  
for the fiscal year ended 12.31.2014

**A FOCUS ON  
RETIREMENT READINESS**

Chris DeRose — Chief Executive Officer  
Leon E. Hank — Chief Financial Officer

1134 Municipal Way • Lansing, MI 48917  
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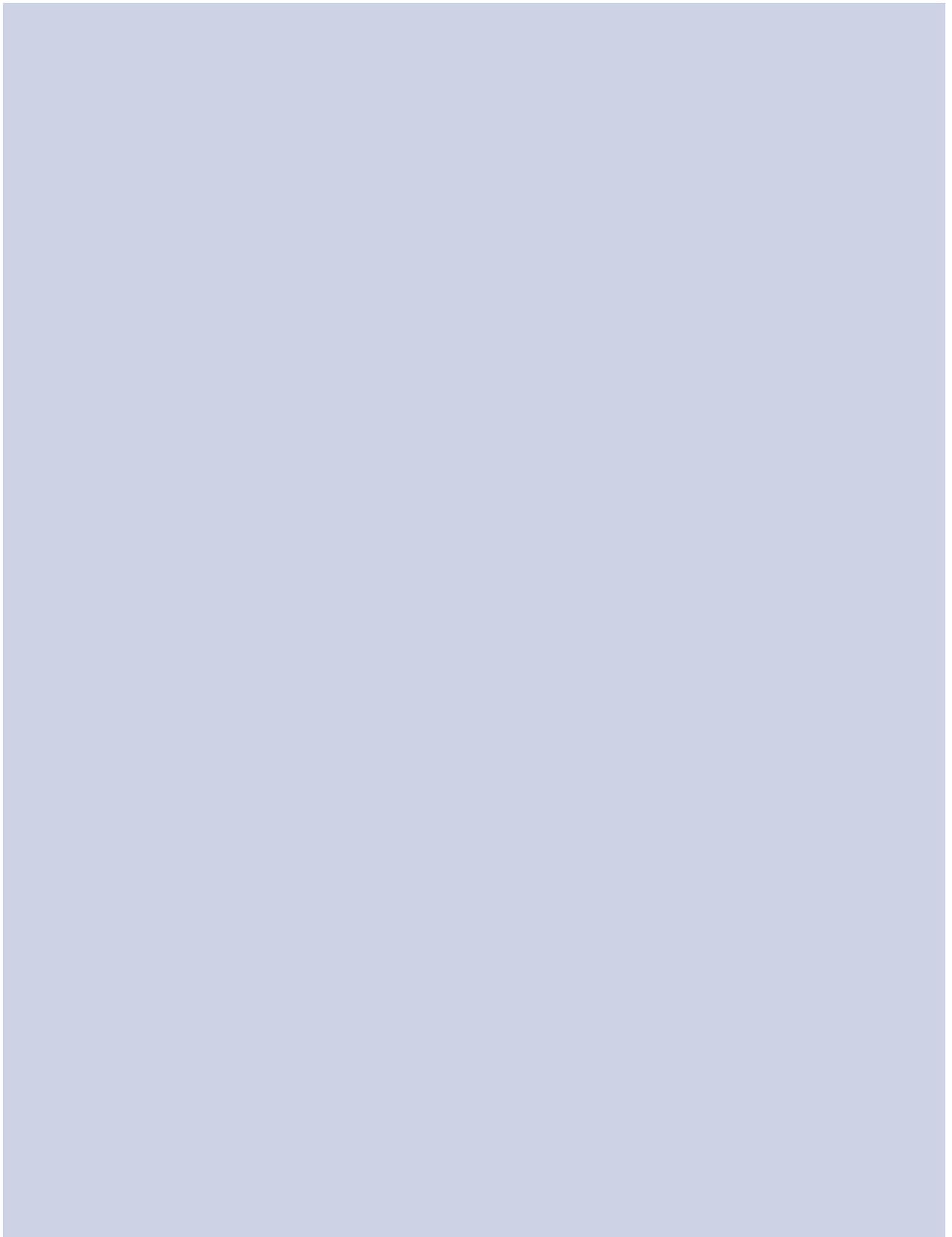
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SECTION 1  
**INTRODUCTION**



## 2014 ACHIEVEMENTS



### Certificate of Achievement for Excellence in Financial Reporting

MERS received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the December 31, 2013, Comprehensive Annual Financial Report. This marks the 26th consecutive year MERS has received this honor.



### Public Pension Standards Award

MERS also received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award in 2014, in recognition of meeting the professional standards for plan design and administration as set forth in the Public Pension Standards. This award is presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).



## Letter of Transmittal, May 6, 2015

### Dear Board Members:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) for the Municipal Employees' Retirement System (MERS) of Michigan for the fiscal year ending December 31, 2014.

We are happy to report that we have completed the first year under our three-year Strategic Plan, which has "A Focus on Retirement Readiness" – our theme for 2014. This focus is one important part of the overall MERS Vision; by 2016, we will deliver superior value to employers and participants by clearly identifying and prioritizing employer and participant needs and creating products, services, tools, and processes that meet those needs.

MERS intends to focus on retirement readiness using a comprehensive education strategy that can better inform and empower our customers. Guided by data, evidence and customer feedback, MERS is launching a robust and wide-ranging strategy. At our 2014 Annual Meeting, we held a candid discussion on the state of retirement readiness for public sector employees, and provided an overview on why MERS is implementing this initiative to provide employees with information they need to meet their retirement income goals.

As a measure of our financial strength and evidence that more members are preparing for retirement, this year we celebrate another new record. We now manage over 2,000 retirement and employee benefit plans for nearly 800 municipal members — from Gogebic County to Monroe County — with a combined value of nearly \$9.4 billion, the highest amount in our history. MERS proudly serves more than

100,000 participants, including local firefighters, nurses and the men and women who plow our roads and keep our bridges safe.

The following sections include brief overviews of our activities in 2014.

### MERS Profile

MERS is an independent nonprofit, professional retirement services company that serves members across the state of Michigan. We are one of the largest, most established, and successful shared services stories in Michigan, providing administration, investment expertise, fiduciary responsibility, and oversight for benefit plans. This allows local governments to focus on core services, leaving day-to-day administration to us. Services include: plan governance, on-staff auditor, legal counsel, actuarial services, legislative advocacy, administration of benefits, and investments.

MERS offers a full range of customizable plans and services. We work in partnership with our members to develop the plan that best meets their unique needs. We listen to our members and regularly add new, updated products and tools, such as our 457 Supplemental Retirement Program and an updated website that helps members navigate their liability. The MERS Retirement Board (Board) serves as the fiduciary of the funds and has oversight responsibilities.

### Report Structure and Contents

Section 38.1536 of the Michigan Compiled Laws requires the Board to prepare this annual report in accordance with U.S. Generally Accepted Accounting Principles (GAAP). The financial information shown throughout this report meets that requirement. The MERS

management team, under the oversight of the Board, is responsible for the preparation, integrity, and fairness of the financial statements and other information presented in this report. As a part of our financial statement process, we have identified necessary internal controls and have them in place to ensure that transactions are authorized, assets safeguarded, and all supporting records are properly retained and managed. We have an internal auditor on staff to help ensure we meet high standards for internal control.

Section 38.1536 also requires the Board to arrange for an annual audit of the MERS financial statements. Plante Moran, MERS external auditor, conducted an independent audit of the financial statements in accordance with Generally Accepted Auditing Standards. This audit is described in the Independent Auditor's Report in the Financial Section following this letter. MERS' management provides the external auditors with unrestricted access to records and staff. This external audit is conducted annually to ensure the sufficiency of the internal controls and that our financial statements are fairly stated.

This CAFR is divided into five sections: Introduction, Financial, Investment, Actuarial, and Statistical. The Introductory Section outlines the System's achievements and structure; the Financial Section contains the Management's Discussion and Analysis (MD&A), which is the MERS management team's narrative and overview of the financial statements. This Transmittal Letter is designed to supplement and complement the MD&A. The two documents should be read together to get a thorough overview of MERS' financial condition. The Investment Section reports investment activities and performance information; the Actuarial Section contains the actuarial assumptions and methods, as well as the actuary's certification letter. The Statistical Section provides various schedules on member data and 10-year trends.

### Financial Summary

The world financial markets provided moderate, positive returns during the year ending December 31, 2014. The MERS Defined Benefit Portfolio earned a net return of 6.49% (after investment expenses). This placed MERS in the top half for performance of investment returns for the last ten-year period, according to the State Street Universe of Public Funds. This solid performance in the financial markets, plus a significant inflow of new money, increased the size of the MERS trust funds from \$8.8 billion to \$9.4 billion, an increase of 7% over last year. More information regarding our investment management performance is found in the Investments Section.

One measure of a defined benefit retirement system's financial health is the percentage of its actuarial liabilities owed that is covered by its available actuarial assets. Using this ratio, most MERS' municipalities are well funded and many are very well funded. During the most recent MERS' actuarial valuation, as of December 31, 2013, 470 municipal governments in MERS were funded at 70% or higher (equaling 66% of all municipal governments in MERS). Included in that statistic are 101 municipal governments (14% of all municipal governments in MERS) that were fully funded at a ratio of 100% or higher. There were 106 municipalities (15% of all MERS municipalities) with funding ratios below 60%. MERS is working closely with these municipalities to improve and strengthen the financial condition of their plans.

We continue to partner with all municipalities in helping them set fiscal goals and discussing options, to find the programs and provisions that best fit the municipality's unique needs. In 2014, 143 divisions increased cost sharing to employees, 43 divisions adopted a lower defined benefit for new hires, and 23 divisions adopted Bridged Benefits prospectively. These efforts helped strengthen the financial condition of all these plans. The Defined Benefit Plan

received additional employer contributions of \$153 million to help increase funding levels, and new municipalities joining the plan brought in an extra \$51 million.

Our participant directed accounts include the MERS Defined Contribution Plan (including the DC portion of the Hybrid Plan), 457 Supplemental Retirement Program, and Health Care Savings Program. These plans are designed to provide or supplement other pension-related benefits and help individuals achieve their retirement readiness goals. In 2014, the number of municipalities offering these products increased by 95 and total assets grew to nearly \$600 million. During the year, MERS lowered the recordkeeping costs for these programs by five basis points and also offered another five basis points reduction for those using MERS-managed funds.

The MERS Retiree Health Funding Vehicle and Investment Services Program experienced excellent growth in 2014. These institutional investment programs were created specifically for municipalities interested in gaining access to MERS' professional investment services, while maintaining administration of their plan. Through these programs, municipalities receive a team of experts that invest and manage the assets, are responsible for manager selection, and monitor the strategic and tactical asset allocation. Ten new municipalities with over \$139 million joined this year, bringing total participation to 150 municipalities with assets over \$680 million. During the year, MERS expanded the investment menu choices for employers and was able to lower the costs for a majority of customers.

With all our programs we strive to keep our operating costs low so we maximize the invested funds for our members, while also providing high levels of customer service. Through the growth of our pool, stronger cost-control measures, tighter budgeting techniques, and reengineering our business processes, we reduced our administrative

costs by \$2.5 million in 2014, which is an 11.3% reduction over 2013. Our administrative costs are now running at the level of spending we had in 2009. On top of these savings, our investments team also realized investment manager fee savings of about \$2.3 million from actively managing our external investment managers and bringing more investment work in-house. To our members, this continued growth and cost reductions allow us to put more of their retirement assets to work for them while providing more efficient customer service.

#### **Key 2014 Initiatives and Highlights**

One key initiative in the Strategic Plan was to conduct process improvement reviews of all MERS' core and supporting processes. In 2014, we met a goal we set for ourselves to complete process reviews of 75% of our key processes. This work increases our capacity and helps ensure we are focusing on value-added activities. Our goal is to have retirement benefits that are easy for our employers to administer and meets their workforce needs. Making the defined benefit retirement process easier for employees was one example of process improvement that was implemented. Based on feedback from our customers, we found that the multiple forms that were required made the process cumbersome and confusing. Now retiring from MERS requires only one form, which is available online.

Work continues on our retirement readiness initiative, which when fully implemented in 2015-16, will provide participants with resources to understand the full scope of their MERS' benefits and how they will work in tandem with other retirement programs such as Social Security in retirement. Through education, information and general awareness, participants will learn more about retirement preparedness and get information on actions they can take to ensure they are on the path to meeting their post-employment financial goals. Additionally, employers will become informed on the advantages of having retirement-ready employees and how MERS' benefits can play a role in ensuring that happens.

Governmental Accounting Standards Board Statement No. 68 (GASB 68) is a new rule that changes the way government entities who offer defined benefit plans report their pension liabilities. This change affects the annual reporting for those entities whose fiscal year begins after June 15, 2014. The team at MERS is working closely with our members to provide all of the information required to comply with new reporting rules. We have updated our information technology systems to calculate many of the financial numbers for our members. In addition, we are actively working with our members to provide them education and outreach support on this change. We formed a LinkedIn Group to help our members collaborate with other municipalities. We have collaborated with municipal finance experts, actuaries and auditors to develop an easy to understand Implementation Guide that gives members step-by-step instructions, including journal entries, for complying with the rules. We also arranged with our outside audit firm to conduct a Service Operating Controls (SOC-1) review so that key data is ready for members to use with little to no additional audit work.

#### **Best Practices**

We continually strive to sustain our standards at the highest level to ensure stability as a leader among our peers. We are honored that for the 26th consecutive year, the Government Finance Officers Association (GFOA) awarded MERS its Certificate of Achievement for Excellence in Financial Reporting award for our 2013 CAFR.

The MERS Summary Annual Financial Report (a reader-friendly, condensed version of the CAFR) is an easy-to-understand financial summary of our operations. We also received the GFOA award for this report.

A complete copy of the CAFR is provided to the Governor, the members of both the State House and Senate, and the Office of the State Treasurer, as required by law. The CAFR and Summary Report are available on our website, [www.mersofmich.com](http://www.mersofmich.com).

#### **Acknowledgements**

We are very grateful to our Board members for your time and dedication, which makes it possible for MERS to be successful at planning “*A Focus on Retirement Readiness*” for our employers, members and retirees. Your conscientious oversight and diligence of our well-run system is greatly appreciated.

On behalf of all MERS’ members, thank you for your dedication to public service.

We also express our deep gratitude to the entire MERS’ staff for their hard work and dedication to ensure the successful operation of MERS. Our staff uses innovation, skill and a commitment to service every day to ensure the security of a retirement plan for all our members.

Keeping MERS running as a strong organization also requires outstanding organizations and advisors who work in partnership with MERS to ensure our continued success. We also thank these talented firms and individuals for their work on our members’ behalf.

Respectfully submitted,

*Chris DeRose*  
Chief Executive Officer

*Leon E. Hank, CPA*  
Chief Financial Officer

## Letter from the Chairperson, May 6, 2015

### Dear MERS Members:

On behalf of the MERS Retirement Board, it is my pleasure to present the Comprehensive Annual Financial Report (CAFR) of the Municipal Employees' Retirement System of Michigan. This is the 69th year MERS has provided professional retirement services to municipal members across the state of Michigan. Included in this year's report is all of the required financial information regarding the System for the fiscal year ending December 31, 2014.

MERS is a nonprofit organization governed by an elected board that operates without compensation and is committed to accountability and transparency. This governance ensures MERS continues to grow in financial strength as well as providing superior value to members. We have implemented the first year of our three-year Strategic Plan, which has "A Focus on Retirement Readiness" – our theme for 2014. I am pleased to highlight the accomplishments MERS made during the second year of leadership of Chris DeRose, our Chief Executive Officer.

Our total assets grew from \$8.8 billion to \$9.4 billion. Each municipality's retirement plan is maintained in a separate trust, while maintaining the integrity and individuality of each plan. Pooling municipal assets for investments provides benefit to members, such as lower administrative costs. In addition there has been a focus on process improvement, which has helped MERS become more efficient

and effective in providing quality customer service. In fact, our operating costs are similar to our costs five years ago in 2009; strong evidence that we are doing more to reduce customer costs.

We are actively partnering with our membership to listen to their unique needs, and have planned and prioritized our actions based on their feedback. We continue to focus on providing more information and resources to assist our members with managing their unfunded liabilities, enhancing online account access, and providing educational resources to assist employees in preparing for retirement.

Readying Michigan for retirement will be no small feat. However, I know our staff will continue to work diligently with our members to find the appropriate solutions. All of this speaks to the competency of our staff and their passion for excellence in all we do for you, our members.

In closing, I would like to take this opportunity to thank the members of the Board and the staff for their unwavering commitment to expertise and professionalism. It is my pleasure to serve as your MERS Chairperson, and like all of you, I am proud to have played a role in "A Focus on Retirement Readiness" for MERS and our members.

Sincerely,

**Michael Brown, Chairperson**  
**MERS Board of Trustees**

## RETIREMENT BOARD AND CHIEF EXECUTIVE OFFICER



Back row from left to right: Philip LaJoy, Amy Deford, James R. Wiersma, Chris DeRose, John Ogden, Randy Girard  
Front row from left to right: Michael Brown, Lori Newberg, Sally Dreves, Michael Gilmore

**Officer Members:** Michael Brown – Chairperson, Barry County; Randy Girard, Charter Township of Marquette; Philip LaJoy, Canton Township

**Employee Members:** Sally Dreves, Grand Traverse County; Lori Newberg, Ingham County; Amy Deford, Saginaw County

**Expert Members:** Michael Gilmore, Delta Dental, Okemos; James R. Wiersma, Haworth, Holland

**Retiree Member:** John Ogden, City of Port Huron

## MERS OFFICERS



From left to right:

Debra Peake, Chief Employee and Retiree Services Officer

Carrie Lombardo, Chief Marketing and  
Employer Services Officer

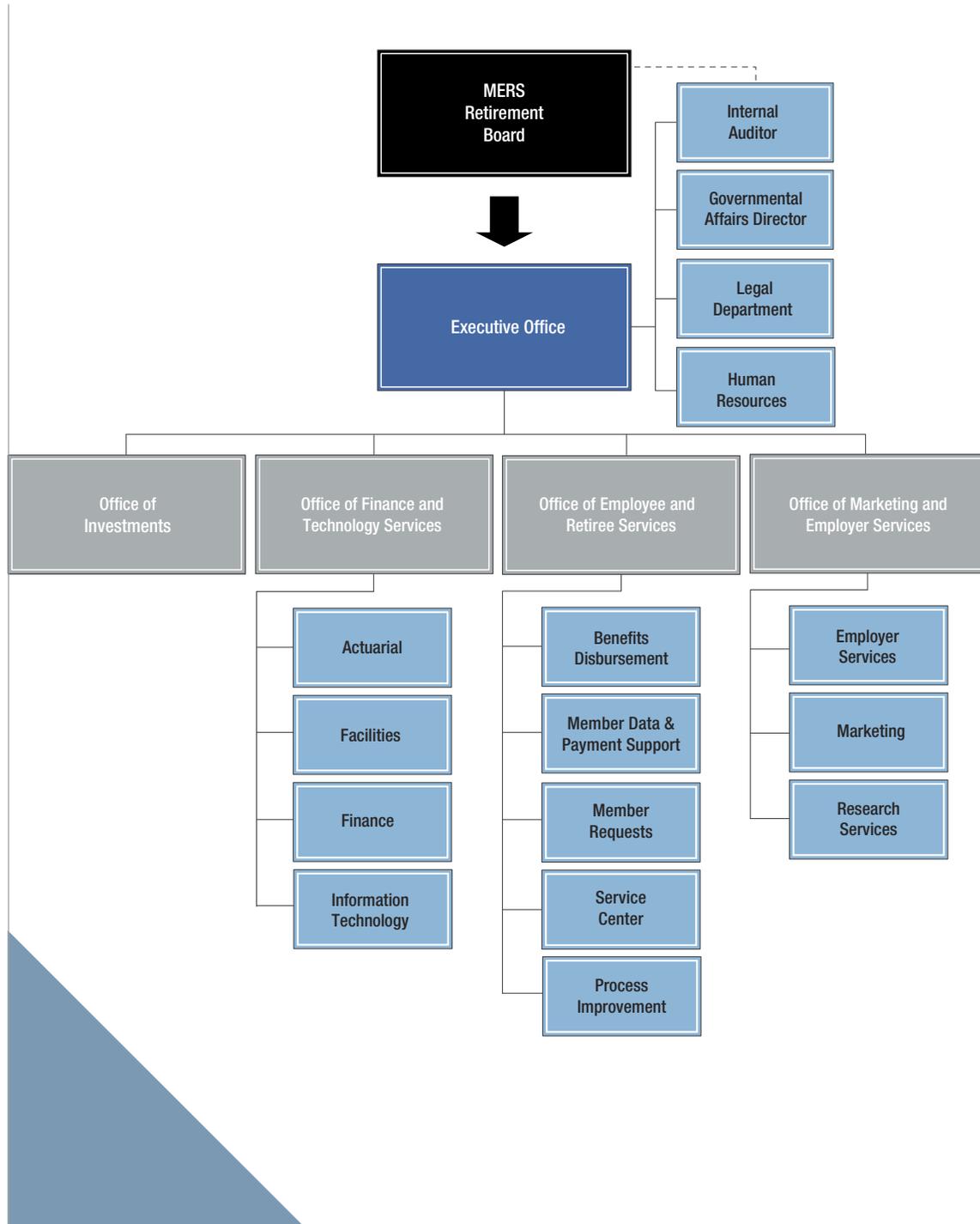
Chris DeRose, Chief Executive Officer

Leon Hank, Chief Financial Officer

Jeb Burns, Chief Investment Officer

# MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

Organizational Structure – 2014



## OUTSIDE PROFESSIONAL SERVICES

### Professional Consultants

#### Actuaries

CBIZ Benefits & Insurance Services, Inc  
Tegrit Actuarial Consulting, LLC

#### Auditors

Plante & Moran PLLC

#### Banking

Commerce Bank  
JP Morgan Chase  
Northern Trust

#### Business Consulting

Analysts International Corporation  
Orion Development Group

#### Human Resource Advisors

Gallagher Benefit Services, Inc.

#### Investment Custodian and Security Lending Agent

State Street Bank and Trust Company

#### Legal Counsel

Elizabeth Schwartz Ice Miller, LLP  
Johnson Rosati Miller, Canfield, Paddock & Stone, PLC

#### Legislative Consultants

Karoub Associates  
Michigan Legislative Consultants

#### Medical Advisor

Consulting Physicians

#### Security and Internal Audit Services

Fishnet Security

#### Systems Implementation and Maintenance

Epicor Software Corporation  
Informaxion Solutions LLC  
Innovative Communications, Inc.  
Maner Costerisan  
OpenText  
Tegrit Software Ventures, Inc.

#### Third-Party Administrator

Alerus Retirement Solutions

### Investment Managers

#### Global Equity

Acadian Asset Management  
BlackRock Investment Management  
Carlyle (Alpine Partners)  
Consilium Capital Management  
Downriver Capital Management  
Driehaus Capital Management  
EAM Investors  
Frontier Market Asset Management  
Grosvenor Private Markets  
Hellman, Jordan Management Company  
Hexam Capital Partners  
Irving Magee Investment Management  
Kennedy Capital Management  
LMCG Investments  
Mellon Capital Management  
Mesirow Financial  
Morgan Dempsey Capital Management  
Mountain Pacific Advisors  
Punch & Associates  
Seizert Capital Partners  
Wellington Management Company

#### Global Fixed Income

C.S. McKee Investment Management  
ElmTree Funds  
First International Advisors  
Janus Capital Management  
Oak Street Real Estate Capital  
Stone Harbor Investment Partners  
TCW Group

#### Overlay

Parametric

#### Real Assets

Australian Pastoral Fund  
Adveq Management AG  
Cargill, Inc  
GCM Grosvenor Private Markets  
Hancock Natural Resource Group  
The Townsend Group  
Wood Creek Capital Management

#### Diversifying Strategies

Comvest Partners  
Connor, Clark, & Lunn Investment Management  
Gerchen Keller Capital  
MC Credit Partners  
Napier Park Global Capital  
Orchard Global Asset Management  
Wood Creek Capital Management

## ACKNOWLEDGEMENTS

The MERS Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2014, was prepared by the Office of Finance and Technology Services. Special thanks to the individuals who contributed significant amounts of time and energy to help complete this report.

### Office of Finance and Technology Services

Betsy Waldofsky, Finance Director  
Carrie Barton, Office Administrator  
Courtney Allen, Accountant  
Danielle Williams, Accountant  
Luke Huelskamp, Senior Finance Manager  
Robin Towsley, Accounts Payable and Benefits Coordinator  
Ryan Ruby, Actuarial Analyst

### Office of Investments

Claudia Konieczny, Investment Compliance and Operations Analyst  
Ed Mikolay, Senior Investment Officer and Portfolio Manager  
Julian Ramirez, Investment Analyst  
Karen Strickland, Office Administrator  
Mike Schrauben, Investment Officer and Portfolio Manager  
Mike Charette, Senior Investment Officer and Portfolio Manager  
Peter Wujkowski, Investment Officer and Portfolio Manager  
Paul VanGilder, Investment Analyst  
Tyler Stoner, Investment Intern

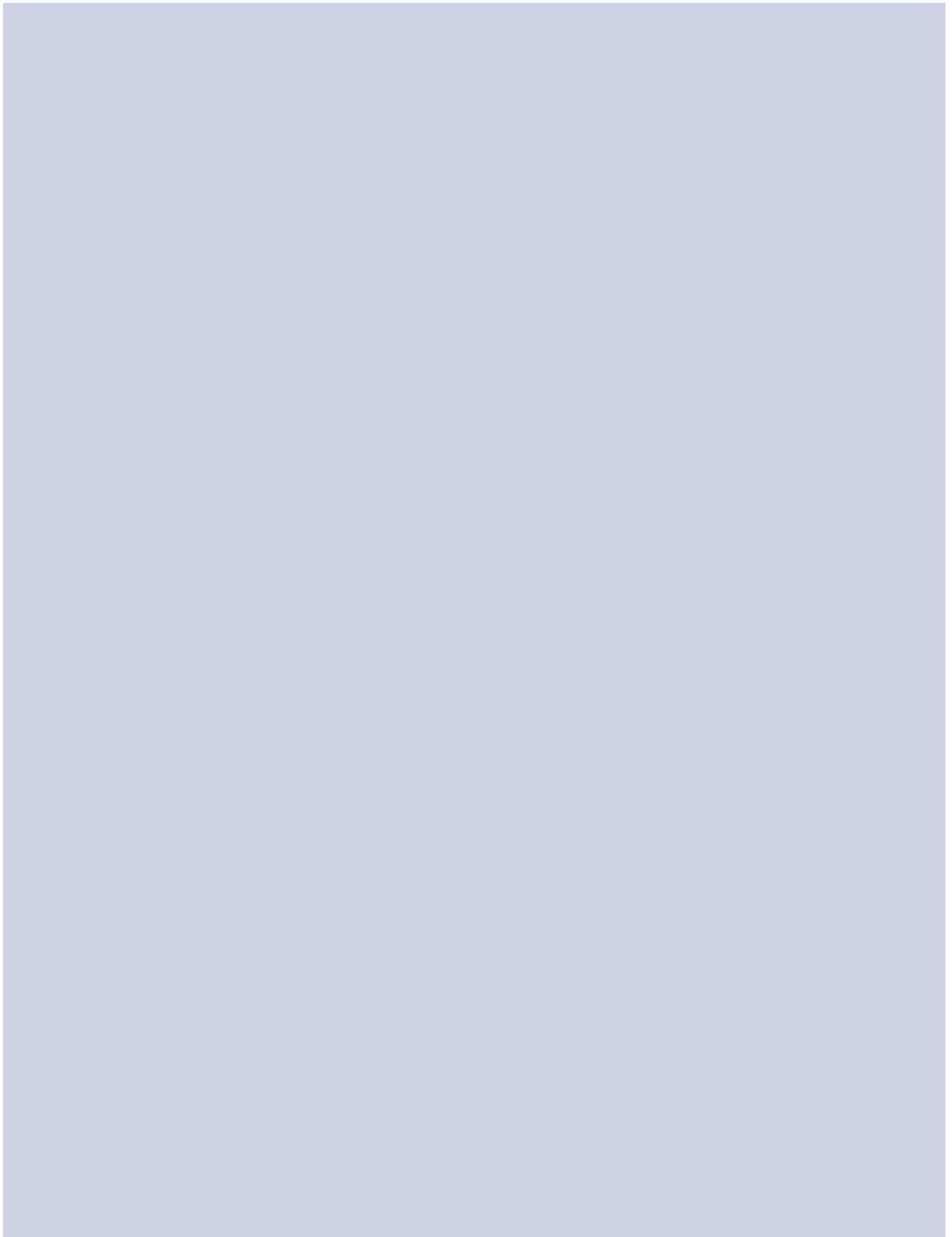
### Office of Marketing and Employer Services

Betsy Schaeffer, Digital Print and Mail Services Supervisor  
James Scofield, Design Coordinator  
Janie Olivarez, Office Administrator  
Jennifer Mausolf, Marketing Director  
Kathy Waligorski, Administrative Assistant  
Richard Taylor, Print Production Specialist

Special thanks are also extended to Plante & Moran PLLC, Alerus Retirement Solutions, State Street Bank and Trust Company, and Tegrit Software Ventures.



SECTION 2  
**FINANCIAL**



## INDEPENDENT AUDITOR'S REPORT



**Plante & Moran, PLLC**  
27400 Northwestern Highway,  
P.O. Box 307  
Southfield, MI 48037-0307  
Tel: 248.352.2500  
Fax: 248.352.001E  
plantemoran.com

To the Retirement Board  
Municipal Employees' Retirement System of Michigan

### Report on the Financial Statements

We have audited the accompanying financial statements of Municipal Employees' Retirement System of Michigan (MERS) as of and for the year ended December 31, 2014 and the related notes to the financial statements, which collectively comprise MERS' basic financial statements, as listed in the table of contents.

### Management's Responsibility for the Financial Statements

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

### Auditor's Responsibility

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

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

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

### Opinion

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the plan net position of Municipal Employees' Retirement System of Michigan as of December 31, 2014 and the changes

## To the Retirement Board

### Municipal Employees' Retirement System of Michigan

in plan net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

#### Emphasis of Matter

As explained in Note 4, the financial statements include investments valued at \$3.9 billion (42 percent of net position) at December 31, 2014, whose fair values have been estimated by management in the absence of readily determinable market values. Management's estimates are based on information primarily provided by fund managers, general partners, etc. Our opinion is not modified with respect to this matter.

#### Other Matters

##### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedule of investment returns 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, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Municipal Employees' Retirement System of Michigan's basic financial statements. The schedule of administrative expenses, schedule of investment expenses, and schedule of payments for consultants and services and Introductory, Investments, Actuarial and Statistical sections are presented for the purpose of additional analysis and are not a required part of the basic financial statements.

The schedule of administrative expenses, schedule of investment expenses, and schedule of payments for consultants and services are 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. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of administrative expenses, schedule of investment expenses, and schedule of payments for consultants and services are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investments, actuarial, and statistical sections has 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 it.

To the Retirement Board  
Municipal Employees' Retirement System of Michigan

**Report on Summarized Comparative Information**

We have previously audited Municipal Employees' Retirement System of Michigan's December 31, 2013 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated April 28, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2013 is consistent, in all material respects, with the audited financial statements from which it has been derived.

**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated May 5, 2015 on our consideration of Municipal Employees' Retirement System of Michigan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, 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* in considering Municipal Employees' Retirement System of Michigan's internal control over financial reporting and compliance.

*Plante & Moran, PLLC*

**May 5, 2015**

## MANAGEMENT'S DISCUSSION AND ANALYSIS

This narrative overview and analysis of MERS' financial condition for year ended December 31, 2014, is presented in conjunction with the Chief Executive Officer and Chief Financial Officer's Letter of Transmittal. The Financial Section is comprised of the Independent Auditor's Report, Management's Discussion and Analysis, two basic financial statements with explanatory notes, one required supplementary schedule with explanatory notes and three supplementary expense schedules.

### FINANCIAL HIGHLIGHTS

The following financial highlights occurred during the year ended December 31, 2014:

- Total fiduciary net position for the Defined Benefit Plan, Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle, 457 Program, and Investment Services Program increased by 7% during 2014. MERS finished the year with \$9.4 billion in net fiduciary position which is the highest asset level in MERS' history.
- Contribution revenue increased by 30% from \$636 million in 2013 to \$829 million in 2014. A majority of this increase was from a new Investment Services Program municipality bringing in new assets and Defined Benefit municipalities contributing extra voluntary contributions.
- Total annual retirement benefits and distributions paid to retirees and beneficiaries increased \$78 million to a total of \$785 million.
- Administrative expenses decreased by 11% in 2014 to \$19 million, while MERS grew significantly and brought in 130 new municipal programs. MERS has continued to decrease administrative expenses due to the growth of our pool and stronger ongoing cost-control measures.
- Investment expenses totaled \$18 million. This is an 11% decrease from 2013, primarily due to investment manager fees being renegotiated, bringing more investment work in-house and assets shifting to a pooling of investment vehicles.
- Defined Benefit investment returns saw a gain of 6.49% net of investment expenses for the year. The 30-year return of 9.17%, however, is above the target of MERS' expected investment rate of return of 8%.
- MERS' most recent actuarial valuation dated December 31, 2013, showed 470 of MERS' 712 Defined Benefit municipalities are funded 70% or better, with 101 municipalities over 100% funded.
- The difference between MERS' actuarial and market value assets remained unchanged in 2014, as the actuarial calculation is 106% of the market value of assets, the same as 106% in 2013. Total Defined Benefit Plan actuarial assets and market value of assets were valued at \$8.6 billion and \$8.1 billion respectively at December 31, 2014.

## Basic Financial Statements

This Management's Discussion and Analysis is an introduction to MERS basic financial reporting statements:

1. Statement of Fiduciary Net Position.
2. Statement of Changes in Fiduciary Net Position.
3. Notes to Basic Financial Statements.

The "Statement of Fiduciary Net Position" and "Statement of Changes in Fiduciary Net Position" provide the current financial condition of each of the MERS products.

The "Comparison Statement of Fiduciary Net Position" and "Comparison Statement of Changes in Fiduciary Net Position" provide a comparative summary of the financial condition of the plan as a whole with the prior year results.

## Required Supplemental Information

1. Schedule of Investment Returns.

The "Schedule of Investment Returns" shows the annual money weighted rate of return on pension plan investments, net of investment expenses. The schedule is intended to show the internal rate of return on pension investments on a monthly basis over a ten-year period.

## Supplementary Expense Schedules

1. Schedule of Administrative Expenses.
2. Schedule of Investment Expenses.
3. Schedule of Payments to Consultants.

The expense schedules summarize all expenses associated with administering all MERS' programs.

**Comparison Statement of Fiduciary Net Position**

(Dollars in Thousands)

	Year ended Dec. 31, 2014	Year ended Dec. 31, 2013	Increase (Decrease) Amount	Increase (Decrease) Percent
<b>Assets</b>				
Cash and Short-Term Investments	\$ 8,889	\$ 44,752	\$ (35,863)	(80%)
Receivables	930,399	949,153	(18,754)	(2)
Interfund Receivables	905	1,480	(575)	(39)
Loans	4,396	4,791	(395)	(8)
Investments, at fair value	9,255,942	8,648,688	607,254	7
Invested Securities Lending Collateral	931,640	1,033,070	(101,430)	(10)
Other Assets/Prepays	579	515	64	12
Net Capital Assets	13,732	14,403	(671)	(5)
<b>Total Assets</b>	<b>11,146,482</b>	<b>10,696,852</b>	<b>449,630</b>	<b>4</b>
<b>Liabilities</b>				
Purchase of Investments	846,492	878,653	(32,161)	(4)
Securities Lending Collateral	932,575	1,034,384	(101,809)	(10)
Administrative/Investment Costs/Reserves	10,737	17,574	(6,837)	(39)
Interfund Payables	905	1,480	(575)	(39)
<b>Total Liabilities</b>	<b>1,790,709</b>	<b>1,932,091</b>	<b>(141,382)</b>	<b>(7)</b>
<b>Net Position-Restricted for Pension and Health Benefits and Investment Accounts Held for Others</b>	<b>\$ 9,355,773</b>	<b>\$ 8,764,761</b>	<b>\$ 591,012</b>	<b>7%</b>

**Comparison Statement of Changes in Fiduciary Net Position**

(Dollars in Thousands)

	Year ended Dec. 31, 2014	Year ended Dec. 31, 2013	Increase (Decrease) Amount	Increase (Decrease) Percent
<b>Additions</b>				
Contributions	\$ 829,125	\$ 635,983	\$ 193,142	30%
Investment Net Income Investing Activities	558,337	1,117,469	(559,132)	(50)
Investment Net Income-Securities Lending	6,318	5,074	1,244	25
Miscellaneous Income	1,801	121	1,680	1,388
<b>Total Additions</b>	<b>1,395,581</b>	<b>1,758,647</b>	<b>(363,066)</b>	<b>(21)</b>
<b>Deductions</b>				
Benefits & Withdrawals	784,649	706,270	78,379	11
Miscellaneous Expenses	18	71	(53)	(75)
Transfers and Forfeitures	469	626	(157)	(25)
Administrative Expense	19,433	21,912	(2,479)	(11)
<b>Total Deductions</b>	<b>804,569</b>	<b>728,879</b>	<b>75,690</b>	<b>10</b>
<b>Net Increase/Decrease</b>	<b>591,012</b>	<b>1,029,768</b>	<b>(438,756)</b>	<b>(43)</b>
<b>Net Position-Restricted for Pension and Health Benefits and Investment Accounts Held for Others</b>				
Balance Beginning of Year	8,764,761	7,734,993	1,029,768	13
<b>Balance End of Year</b>	<b>\$ 9,355,773</b>	<b>\$ 8,764,761</b>	<b>\$ 591,012</b>	<b>7%</b>

### Analysis of Fiduciary Net Position

The fiduciary net position increased by more than \$591 million over the previous fiscal year primarily due to contributions (including ongoing and new municipalities' contributions) and investment returns.

Employer and employee contributions increased \$193 million in 2014 because (1) Retiree Health Funding Vehicle and Investment Services Program had new municipalities join MERS, bringing in \$75 million in new assets, (2) Defined Benefit municipalities contributed \$110 million in extra voluntary contributions in excess of the prior year, and (3) employee and employer regular required contributions increased due to changes in their actuarial calculated rates.

MERS had capital assets, net of accumulated depreciation, of \$13.7 million. Of the total, \$6.6 million is comprised of software and computer servers needed to run the System's pension administration and financial programs, and \$6.6 million is comprised of buildings and land.

MERS has no long-term liabilities. The bulk of MERS' liabilities at year-end are related to investment purchases that did not settle until early in 2015, accrued administrative and investment expenses, and securities' lending collateral.

### Investment Activities

The performance of the Defined Benefit Portfolio was favorable when compared to the investment benchmark over the past 30 years. The 2014 net return of 6.49% was below the 8% actuarial return assumption target for the year. By comparison for three, five, ten, and

thirty-year periods, the net returns were 10.73%, 9.59%, 6.12%, and 9.17% respectively. Net investment income (net appreciation in fair value, less investment expenses, plus securities lending income) was \$565 million for the year. A further detailed analysis of investment returns is in the Investments Section.

MERS' investments are managed to control downside risk while maximizing long-term gain potential. This positions the System to limit the impact of adverse market conditions. Portfolio diversification by asset class and style is an important element of investment risk control.

Investment activity is governed by the "prudent person rule." The "prudent person rule" establishes a standard for all fiduciaries that includes anyone who has authority with respect to the System. The "prudent person rule" states that fiduciaries shall discharge their duties solely in the interest of the System's participants and beneficiaries with a degree of diligence, care, and skill that a prudent person would ordinarily exercise under similar circumstances.

The "prudent person rule" permits the Board to establish an investment policy based on certain investment criteria, and allows for the delegation of investment authority to professional investment managers. Investment constraints are outlined, including the appropriate degree of risk. Investment managers are hired to execute the investment policy. They have full discretion for investment decisions within statutory authority, Board policy, and their respective guidelines. A list of investment managers under contract with MERS as of December 31, 2014, is in the Investments Section. A summary of the total System's assets is on page 66.

## Funding Status

A pension plan is well funded when it has sufficient assets invested to meet all expected future obligations to participants. The greater the level of funding — the larger the ratio of assets to actuarial accrued liability. While some municipalities are not fully funded, annual contributions are made at an actuarially determined rate to reach full funding. There is no single all-encompassing test for measuring a retirement system's funding progress and current funded status. However, some common indicators that a retirement system has achieved progress in funding its obligations include: observing the changes over time of the ratio of valuation assets to actuarial accrued liabilities, and the pattern of the unfunded actuarial accrued liability as a percentage of active payroll.

The MERS Retirement Board (Board) has adopted a funding methodology for the System to achieve the following major objectives:

- Develop level required contribution rates as a percentage of payrolls.
- Finance benefits earned by present employees on a current basis along with paying the current portion of the unfunded accrued liability.
- Accumulate assets to enhance benefit security.
- Produce investment earnings and interest on accumulated assets to help meet future benefit costs.
- Estimate the long-term actuarial cost of proposed amendments for the System's provisions.
- Assist in maintaining the System's long-term financial viability.

The actuarial method for calculating the accrued liability for all plans is entry age normal with the objective of maintaining employer contributions approximately level as a percentage of member payroll. A detailed discussion of the funding method is in the Actuarial Section.

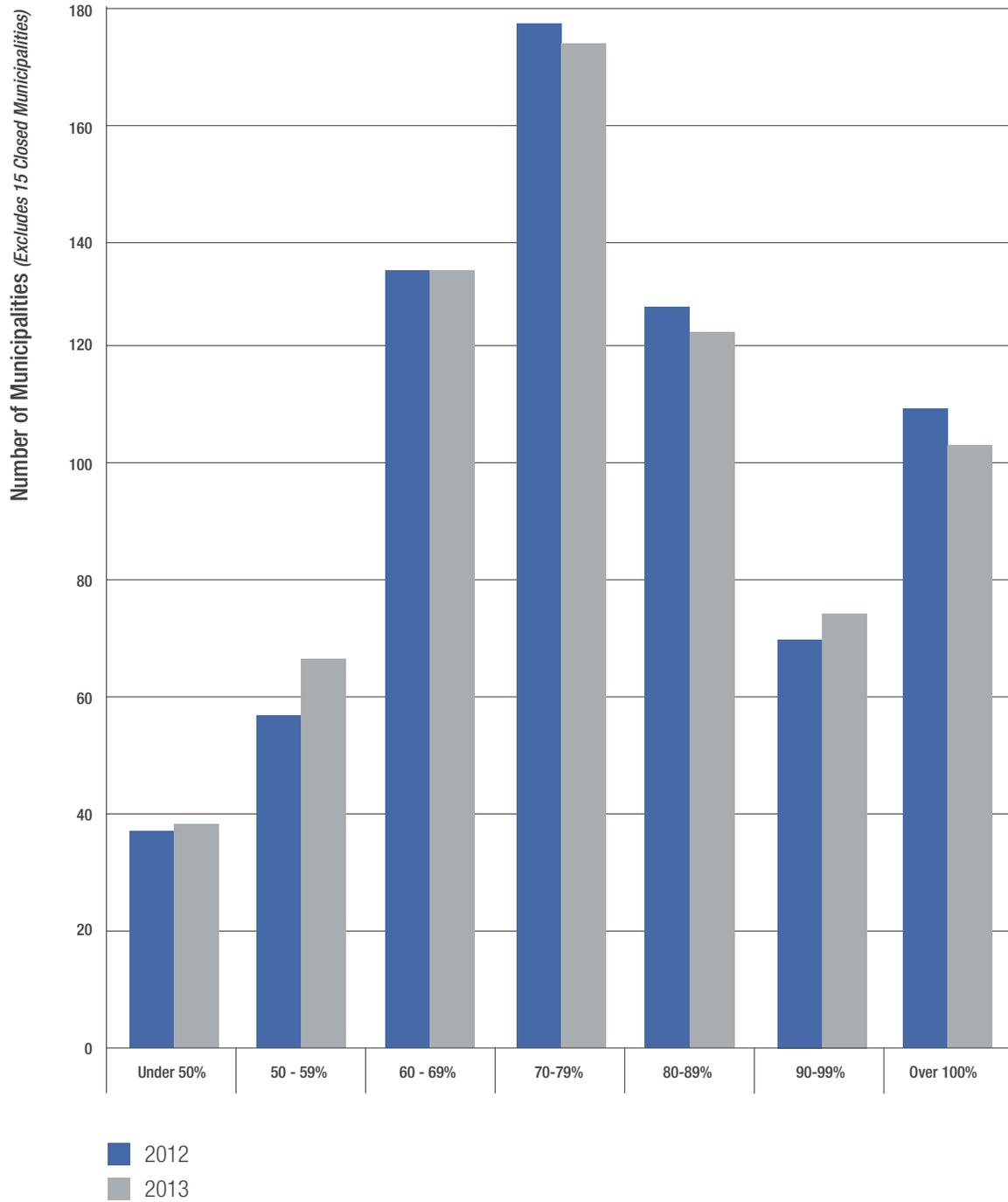
MERS is an agent multiple-employer retirement system that pools assets of the participating employers for investment purposes, but maintains separate trusts for each individual employer. For this reason, MERS does not have a "funded status"; rather, each municipality has its own funded level. Each municipality is responsible for its own plan liabilities; a municipality cannot borrow from another municipality's account to pay for pension expenses. A measure of a municipality's funding progress is the ratio of its actuarial assets to actuarial accrued liabilities.

The most recent MERS actuarial valuation is as of December 31, 2013. On that date, of all 712 individual MERS municipalities, 101 municipalities (14% of all Defined Benefit Plan and Hybrid Plan municipalities in MERS) were funded at 100% or higher and the majority, 470 municipalities, were funded at 70% or higher (66% of all municipalities).

MERS partners with our local governments to determine the best retirement fit for each municipality, to offer cost-reducing strategies, and to provide fiscal best practices.

The difference between MERS' actuarial and market value of assets stayed the same in 2014. The end of the year actuarial calculation of assets is 106% of the market value of assets. This compares favorably with 2013 and 2012, when the actuarial value of assets were 106% and 114% respectively. Ideally, the differences between actuarial value and market value of assets should be small. The actuarial value of assets reflects smoothing of the 2008 downturn; and if investment returns are higher in the next few years than the MERS expected rate of return, the difference will continue to narrow between the actuarial and market values.

Distribution of Funded Percentage of Actuarial Accrued Liability among the 712 participating municipalities as of December 31, 2013, and the 711 participating municipalities as of December 31, 2012



**Statement of Fiduciary Net Position as of December 31, 2014**

(Dollars in Thousands)

	Defined Benefit	Defined Contribution	Health Care Savings Program
<b>Assets</b>			
Cash and Short-Term Investments	\$ 8,439	\$ 50	\$ 350
Receivables			
Employer and Member Contributions	37,007	58	3
Sale of Investments	785,269	16,837	9,141
Investment Income	12,797	274	149
Loans		4,337	
Interfund Receivables	905		
Other	299	10	
Total Receivables	836,277	21,516	9,293
Investments, at fair value			
Global Fixed Income	1,552,962	33,296	18,077
Global Equities	4,427,193	94,921	51,534
Real Assets	908,531	19,479	10,576
Diversifying Strategies	578,728	12,408	6,737
Cash Equivalents	515,036	11,043	5,995
Mutual Funds		304,640	3,951
Total Investments	7,982,450	475,787	96,870
Invested Securities Lending Collateral	832,293	17,845	9,688
Prepaid Expenses	270		
Capital Assets, at cost, net of accumulated depreciation	13,732		
<b>Total Assets</b>	<b>9,673,461</b>	<b>515,198</b>	<b>116,201</b>
<b>Liabilities</b>			
Purchase of Investments	756,224	16,214	8,803
Securities Lending Collateral	833,129	17,863	9,698
Reserves and Forfeitures			
Administrative and Investment Costs	6,110		
Interfund Payables		202	445
<b>Total Liabilities</b>	<b>1,595,463</b>	<b>34,279</b>	<b>18,946</b>
<b>Net Position—Restricted for Pension and Health Benefits and Investment Accounts Held for Others</b>	<b>\$ 8,077,998</b>	<b>\$ 480,919</b>	<b>\$ 97,255</b>

The accompanying notes are an integral part of these Financial Statements.

Retiree Health Funding Vehicle	Investment Services Program	457 Program	Total Year Ended Dec. 31, 2014	Total Year Ended Dec. 31, 2013
		\$ 50	\$ 8,889	\$ 44,752
		4	37,072	36,627
\$ 58,167	\$ 8,433	1,156	879,003	896,156
948	137	19	14,324	16,370
		59	4,396	4,791
			905	1,480
			309	64
59,115	8,570	1,238	936,009	955,488
115,032	16,677	2,287	1,738,331	2,371,594
327,935	47,545	6,520	4,955,648	4,592,182
67,298	9,756	1,338	1,016,978	708,473
42,868	6,215	852	647,808	158,758
38,150	5,531	758	576,513	484,838
		12,073	320,664	332,843
591,283	85,724	23,828	9,255,942	8,648,688
61,650	8,938	1,226	931,640	1,033,070
			270	451
			13,732	14,403
712,048	103,232	26,342	11,146,482	10,696,852
56,015	8,122	1,114	846,492	878,653
61,712	8,947	1,226	932,575	1,034,384
		4,627	4,627	4,419
			6,110	13,155
165	29	64	905	1,480
117,892	17,098	7,031	1,790,709	1,932,091
<b>\$ 594,156</b>	<b>\$ 86,134</b>	<b>\$ 19,311</b>	<b>\$ 9,355,773</b>	<b>\$ 8,764,761</b>

### Statement of Changes in Fiduciary Net Position for the Year Ended December 31, 2014

(Dollars in Thousands)

	Defined Benefit	Defined Contribution	Health Care Savings Program
<b>Additions</b>			
Contributions and Transfers In			
Employer Contributions and Other	\$ 523,372	\$ 26,112	\$ 11,649
Plan Member Contributions	102,446	20,805	
<b>Total Contributions and Transfers In</b>	<b>625,818</b>	<b>46,917</b>	<b>11,649</b>
Investment Income			
Net Appreciation/Depreciation in Fair Value	415,623	23,310	2,465
Interest and Dividend Income	94,415	2,024	1,099
Subtotal of Investment Income	510,038	25,334	3,564
Less Investment Expense	16,229	248	150
Net Investment Income Before Securities			
Lending Activities	493,809	25,086	3,414
Security Lending Activities			
Security Lending Income	7,770	167	90
Security Lending Expenses			
Borrower Rebates	715	15	8
Management Fees	1,411	30	16
Total Securities Lending Expenses	2,126	45	24
Net Income from Security Lending Activities	5,644	122	66
<b>Total Net Investment Income</b>	<b>499,453</b>	<b>25,208</b>	<b>3,480</b>
Miscellaneous Income	1,801		
<b>Total Additions</b>	<b>1,127,072</b>	<b>72,125</b>	<b>15,129</b>
<b>Deductions</b>			
Benefits and Withdrawals	707,268	63,304	3,011
Miscellaneous Expenses	18		
Transfers and Forfeitures			469
Administrative Expenses	17,804	623	163
<b>Total Deductions</b>	<b>725,090</b>	<b>63,927</b>	<b>3,643</b>
Net Increase (Decrease)	401,982	8,198	11,486
<b>Net Position-Restricted for Pension and Health Benefits and Investment Accounts Held for Others</b>			
Balance Beginning of Fiscal Period	7,676,016	472,721	85,769
Balance End of Fiscal Period	\$ 8,077,998	\$ 480,919	\$ 97,255

The accompanying notes are an integral part of these Financial Statements.

Retiree Health Funding Vehicle	Investment Services Program	457 Program	Total Year Ended Dec. 31, 2014	Total Year Ended Dec. 31, 2013
\$ 64,161	\$ 74,660	\$ 132	\$ 700,086	\$ 522,621
		5,788	129,039	113,362
<b>64,161</b>	<b>74,660</b>	<b>5,920</b>	<b>829,125</b>	<b>635,983</b>
26,486	1,865	657	470,406	1,031,268
6,993	1,014	139	105,684	106,195
33,479	2,879	796	576,090	1,137,463
950	158	18	17,753	19,994
32,529	2,721	778	558,337	1,117,469
576	83	11	8,697	7,445
53	8	1	800	1,104
105	15	2	1,579	1,267
158	23	3	2,379	2,371
418	60	8	6,318	5,074
32,947	2,781	786	564,655	1,122,543
			1,801	121
<b>97,108</b>	<b>77,441</b>	<b>6,706</b>	<b>1,395,581</b>	<b>1,758,647</b>
9,556	280	1,230	784,649	706,270
			18	71
			469	626
692	81	70	19,433	21,912
<b>10,248</b>	<b>361</b>	<b>1,300</b>	<b>804,569</b>	<b>728,879</b>
86,860	77,080	5,406	591,012	1,029,768
507,296	9,054	13,905	8,764,761	7,734,993
<b>\$ 594,156</b>	<b>\$ 86,134</b>	<b>\$ 19,311</b>	<b>\$ 9,355,773</b>	<b>\$ 8,764,761</b>

## NOTES TO BASIC FINANCIAL STATEMENTS

Year ended December 31, 2014

### 1. REPORTING ENTITY AND PLAN DESCRIPTION

The Municipal Employees' Retirement System (MERS) of Michigan is a nonprofit organization, independent from the State that has helped provide retirement plans for municipal employees for more than 65 years. MERS was established by the Michigan Legislature under Public Act 135 of 1945 to provide pooled retirement plans specifically for Michigan municipalities on a voluntary basis. This Act was repealed and replaced by successor Municipal Employees' Retirement Act of 1984 (PA 427), as last amended by 2004 PA 490, embodied in the MERS Plan Document (as revised). MERS was established to provide a pooled program for retirement, survivor and disability benefits on a voluntary basis to the State of Michigan's local government employees.

On August 15, 1996, pursuant to 1996 PA 220, MERS became independent from the State of Michigan. Prior to that time, MERS was a component unit of the State and operated within the Department of Management and Budget. Since 1996, MERS is solely administered by a nine-member Retirement Board. The MERS Retirement Board (Board) consists of the following members, each of whom, except for the retiree member and the Board appointees, shall be from a different county at the time of election:

- Two members, appointed by the Board, who have knowledge or experience in retirement systems, administration of retirement systems, investment management or advisory services.
- One member, a retiree of the System, is appointed by the Board.
- Three members of the System, officers of a participating municipality or of a participating court, who are elected as Officer Board members by the delegates at the MERS Annual Meeting.
- Three employee members of the System, who are not officers of a participating municipality or of a participating court, who are elected as Employee Board members by the delegates at the MERS Annual Meeting.

The regular term of office for members of the Board is three years. Members of the Board serve without compensation with respect to their duties, but are reimbursed by the System for their actual and necessary expenses incurred in the performance of their duties.

The Board establishes the benefit plans and provisions that are available for adoption. The local municipality's governing body adopts all benefits of the plan. The various plans are discussed in the Actuarial Section. Pursuant to Article 9, Section 24 of the Constitution of the State of Michigan: "The accrued financial benefits of each pension plan and retirement system of the state and its political subdivisions shall be a contractual obligation thereof which shall not be diminished or impaired thereby. Financial benefits arising on account of service rendered in each fiscal year shall be funded during that year and such funding shall not be used for financing unfunded accrued liabilities."

MERS is an agent multiple-employer retirement system that pools assets of the participating employers for investment purposes, but maintains separate trusts for each individual employer.

Employee contribution rates vary depending on the benefit plan adopted by the local government. If an employee leaves employment or dies before becoming eligible for retirement benefits, accumulated employee contributions (plus interest) are refunded to the employee or designated beneficiary upon application.

The MERS programs have been determined to be a governmental plan that is a tax-qualified trust under Internal Revenue Code (the Code) Section 401(a), and tax exempt under Section 501(a). The Internal Revenue Service issued the most recent Letter of Favorable Determination for MERS on April 26, 2012. This updated approval is part of the Internal Revenue Service's Cycle C Program for governmental plan Letters of Favorable Determination. The benefits of

tax-qualified status include the preferential deferred taxability of contributions, accumulated earnings, pensions, rollovers, annual compensation limits, and benefit limitations.

Under the Code, the major portion of a retiree's pension becomes taxable upon periodic distribution. Pursuant to IRC Section 72(d), any "after tax contributions" are recovered tax-free over the life expectancy of the retiree (or beneficiary, if applicable).

The IRC Section 401(a) (17) limits the amount of compensation an active employee can receive for pension benefit calculation purposes and, correspondingly, limits the amount of employer and employee contributions. Compensation in excess of the 401(a) (17) limit (\$260,000 for 2014 and \$265,000 for 2015) will not be credited by MERS. Contributions in excess of the Internal Revenue Service limit will not be collected or accepted, nor figure into final average compensation for benefit purposes.

In addition, IRC Section 415 (b) (1) (A) imposes certain limitations on pension benefit payments from the MERS qualified trust. Any amounts that exceed the limitations shall be paid from a Qualified Excess Benefit Arrangement (QEBA), as authorized by IRC Section 415(m) and Michigan Compiled Law 38.1686. The QEBA shall be a separate plan, and is annually cash funded by the affected participating municipality or court. The Board established the MERS QEBA in 2003 solely for the purpose of providing retirees and beneficiaries, that portion of the retirement allowance exceeding the Section 415 limits, and otherwise not payable by the trust under the terms of the MERS qualified plan. The Internal Revenue Service approval of the QEBA was pursuant to Private Letter Ruling issued December 15, 2003. Retirees and beneficiaries do not have an election, directly or indirectly, to defer compensation to the QEBA.

The MERS Defined Contribution Plan became operative July 8, 1997, under Section 401(a) of the Internal Revenue Code. On this date, the MERS Plan Document of 1996 was first determined by the Internal Revenue Service Letter of Favorable Determination to meet qualifications as a "governmental plan" trust under Code Section 401(a), and tax exempt

under Section 501(a). MERS has contracted with a third party administrator for recordkeeping and administrative functions. The plan is available to all MERS participating municipalities and may be adopted on a division-by-division basis. Plan provisions and requirements are specified in the MERS Plan Document. MERS Defined Contribution Plan provides employees with an account they manage. At retirement, benefits are based solely on the amount contributed by the employee and employer, and the performance of investments. The plan has several strategic investment categories designed to help employees meet their retirement goals. All participants have access to the MERS streamlined investment menu that allows for simple and strategic investing.

The MERS Hybrid Plan is an option for members that includes both a defined benefit and a defined contribution component. The defined benefit component (Part I) is employer funded, with benefit multipliers of 1.0, 1.25, and 1.5%. The defined contribution component (Part II) is a combination of employer and employee contributions that are invested in mutual funds selected by the individual participant.

MERS received a Private Letter Ruling dated January 13, 2004, allowing the establishment of an Internal Revenue Code Section 115 Integral Governmental Trust, giving MERS the ability to create two programs — the Health Care Savings Program and the Retiree Health Funding Vehicle.

The MERS Health Care Savings Program became operational in June 2004 and was made available to all municipalities in Michigan. The employer-sponsored program provides medical reimbursement accounts to participating employees. Medical expenses are reimbursed, as defined in Code Section 213, once employees terminate employment, are on medical leave for six months or longer, or are on disability from any public pension plan. There are four types of contributions that may be used in the program: 1) Basic Employer (tax-favored), 2) Mandatory Salary Reductions (tax-favored), 3) Mandatory Leave Conversions (tax-favored), and 4) Voluntary Employee Contributions (post-tax).

As a result of the Private Letter Ruling, Code Section 213, reimbursements are tax-exempt for the employee, their spouse, and/or Code Section 152 dependent(s). The Health Care Savings Program accounts are invested in the MERS Investment Menu, and earnings are tax exempt as a result of the MERS Private Letter Ruling. Plan provisions and requirements are specified in the MERS Health Care Savings Program and Retiree Health Funding Vehicle Plan Document and Trust.

The MERS Retiree Health Funding Vehicle became operational in the fall of 2004, and was made available to all municipalities in Michigan. Participating municipalities can contribute monies to the Trust as desired and no contribution method is imposed. These funds constitute a health care fund, which enable municipalities to accumulate monies to provide or subsidize health benefits for retirees and beneficiaries as defined by Code Section 213. The Retiree Health Funding Vehicle accounts are invested in the MERS portfolio choices and earnings are tax exempt as a result of the MERS Private Letter Ruling. Plan provisions and requirements are specified in the MERS Health Care Savings Program and Retiree Health Funding Vehicle Plan Document and Trust.

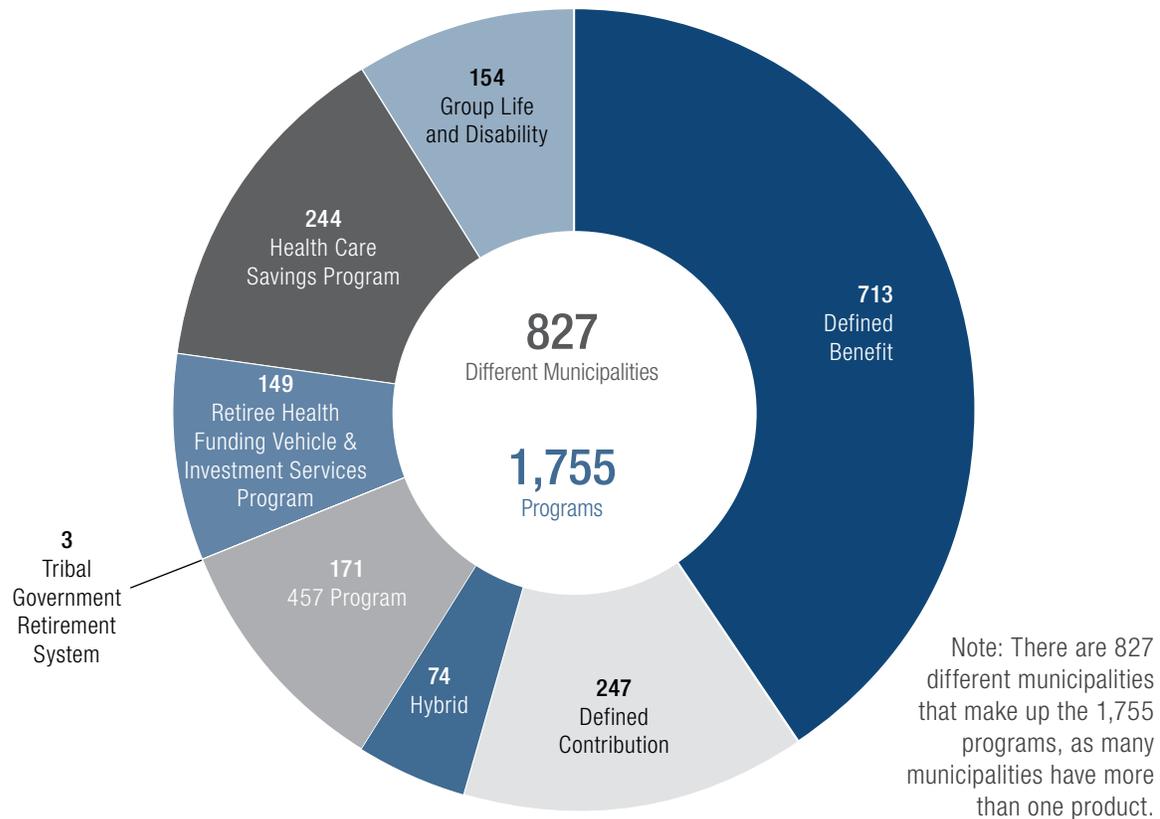
The MERS 457 Supplemental Retirement Program was established as a deferred compensation plan and trust and became operational November 8, 2011. Its purpose is to provide benefits under the Plan to participants and beneficiaries upon retirement, termination, disability, or death, upon the terms and conditions, and subject to the limitations contained in the Plan. The Plan was created for the exclusive benefit of eligible participants and their beneficiaries of any employer electing to participate in the Plan. The Plan is intended to qualify under Code Section 457(b) and the Plan is intended to be tax-exempt under

Code Section 501(a). All assets held in connection with the Plan, including all contributions and amounts of compensation deferred pursuant to the Plan, all property and rights acquired or purchased with such amounts and all income attributable to such amounts, property or rights shall be held in trust for the exclusive benefit of participants and their beneficiaries under the Plan. No part of the assets and income of the Plan shall be used for, or diverted to, purposes other than for the exclusive benefit of participants and their beneficiaries and for defraying reasonable expenses of the Plan.

The Investment Services Program is an investment trust fund that is available to all municipalities in Michigan to invest funds through the MERS portfolio while maintaining administrative functions at the municipal level. The program was established by the Board in March 2006, and began operations in June 2006. The Investment Services Program trust fund complies with all the requirements imposed by the Public Employee Retirement System Investment Act, 1965 Public Act 314. Like the other non-retirement plans, participation in the Investment Services Program does not qualify as membership in MERS, and the participating employer does not have a vote at the MERS Annual Meeting.

Any "municipality" (a term defined by Section 2b (2) of the Retirement Act, Michigan Compiled Law 38.1502b (2)) within the state may elect to become a participating member of MERS by a majority vote of the municipality's governing body, or by an affirmative vote of the qualified electors. Changes in retirement plan coverage are available to bargaining units after approval by a majority vote of the municipality's governing body.

MERS Participating Municipalities as of December 31, 2014



MERS Participants as of December 31, 2014

	Defined Benefit	Defined Contribution	Hybrid	Health Care Savings Program	457
Active	34,232	9,091	1,343	8,383	1,093
Deferred	8,617		101		
Retired	35,391		20		
Contributions not Vested	9,421		224		
Terminated		3,148		2,454	106
<b>Product Totals</b>	<b>87,661</b>	<b>12,239</b>	<b>1,688</b>	<b>10,837</b>	<b>1,199</b>
Total MERS Employment*					113,624
Total MERS Participants**					107,134

\* Total Employment represents the total number of accounts within MERS; individuals may be represented multiple times across categories.

\*\* Total participants represents the number of unique individuals that have a liability in a program. At least one of the individual's employments fell into the following categories: Active Status, Retired Status, Terminated Status Defined Benefit vested, Terminated Status Defined Benefit not vested but has a contribution balance, Terminated Status Hybrid vested, Terminated Status Hybrid not vested but has a contribution balance, Terminated Status Defined Contribution with a contribution balance, or Terminated Status Health Care Savings Program with a contribution balance.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### Reporting Entity

The Board is responsible for the administration of the Retirement System, has fiduciary responsibility for the investment of assets, and oversees all funds included in these financial statements. The Board appoints the Chief Executive Officer who manages and administers the System under the supervision and direction of the Board.

MERS is an independent nonprofit public organization. MERS' financial statements are not included in the financial statements of any other organization; it is the only entity included in this financial report.

### Cost Allocation

The costs of administering the MERS Defined Benefit Plan are allocated to the municipalities along with investment gains and losses on a quarterly basis. The funding and accounting for each municipality is separate. The liabilities of each member municipality remain with that municipality, and the assets of one municipality cannot be used to pay the liabilities of another municipality. Additionally, the assets are combined for investment and administrative purposes, but maintained separately for accounting purposes.

The costs of administering the MERS Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle, and Investment Services Program are allocated out to the municipalities and members based on an administrative expense percentage for each municipality and member.

### Basis of Accounting

The financial statements for MERS are prepared on the accrual basis in accordance with Generally Accepted Accounting Principles (GAAP) as applicable to government organizations. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported

amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

MERS' Defined Benefit Plan employer and employee contributions are recognized when due pursuant to legal, statutory, and contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Expenses and the associated liabilities for those expenses are also recorded using the accrual method when the liability is incurred.

The Defined Contribution Plan, 457 Program, Health Care Savings Program, Retiree Health Funding Vehicle and Investment Services Program financial statements are prepared using the accrual accounting method for revenues which are recorded when either payroll reports and/or funds are received. Expenses and the associated liabilities for those expenses are also recorded using the accrual method when the liability is incurred.

Plan investments are presented at fair value using the accrual method for those investments which are invested in the MERS portfolio. Investment purchases and sales and the associated investment payables and investment receivables are recorded on their trade date. Investments invested outside of the MERS portfolio (primarily mutual funds) are recorded at fair value.

### GASB 27

The Governmental Accounting Standards Board (GASB) Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers," requires certain disclosures for employers who provide pensions. MERS' employees participate in the MERS Defined Benefit Plan. The following section is required and pertains to MERS' staff only:

Prior to separation from the State of Michigan on August 15, 1996, the pension liability for MERS' staff remained the obligation of its official employer, the State of Michigan. Therefore, MERS has no pension liability for staff prior to August 15, 1996,

when it began independent payroll processing separate and apart from the State of Michigan.

After separation from the State in 1996, the Board (as an employer) elected to become a participating municipality in the MERS Defined Benefit Plan, and to provide pension benefits for MERS staff. Vesting occurs after six years of credited service; normal retirement age is 60, although an employee may retire at age 55 with 30 years of credited service. The annual pension benefit is calculated by multiplying the employee's years of credited

service by 2.25%, and then multiplying by the final average compensation based on the highest consecutive three years of compensation.

In 2014, MERS contributed 10.16% of compensation and employees contributed 4% of compensation to the plan as required. MERS used budgeted savings from 2014 to contribute an additional \$1 million to increase our funding level.

**Schedule of Funding Progress for MERS' Employees**

Actuarial Valuation December 31	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded (Over) AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2011	\$13,500,888	\$14,947,095	\$1,446,207	90.30%	\$10,195,504	14.18%
2012	15,655,156	16,677,292	1,022,136	93.87	9,400,436	10.87
2013	19,510,230	19,217,169	(293,061)	101.50	9,741,710	(3.01)

**Actuarial Accrued Liability from December 31, 2013, and December 31, 2012, Actuarial Valuations**

	2013	2012
Active Members	\$12,322,380	\$10,787,751
Retirees and beneficiaries currently receiving benefits	5,140,134	4,171,177
Vested former members not yet receiving benefits	1,698,283	1,647,617
Nonvested terminated employees (pending refunds of accumulated member contributions)	56,372	70,747
<b>Total Actuarial Accrued Liability</b>	<b>19,217,169</b>	<b>16,677,292</b>
Net assets available for benefits at actuarial value (\$18,373,983 and \$13,689,806 at market value for December 31, 2013, and 2012, respectively)	19,510,230	15,655,156
<b>Unfunded Actuarial Accrued Liability</b>	<b>\$ (293,061)</b>	<b>\$ 1,022,136</b>

**Three-Year Trend Information Schedule of Employer Contributions**

Fiscal Year Ended (December 31)	Annual Required Cost (ARC) Contribution	Percentage of ARC Contributed	Net Pension Obligation
2012	\$1,032,600	100%	
2013	1,233,660	203	
2014	1,124,292	186	

### Post-Employment Benefits

The Government Accounting Standards Board (GASB) Statement No. 45 – Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pension – establishes standards for the measurement, recognition, and display of OPEB expense/expenditures and related liabilities (assets), note disclosures, and, if applicable, required supplementary information (RSI) in the financial reports of state and local governmental employers. This is for benefits other than pensions. MERS does not provide post-employment benefits to its employees and accordingly does not have any expense or liabilities for these benefits.

MERS offers as a solution to our employers, the Retiree Health Funding Vehicle, which helps employers set aside assets for funding their OPEB liability.

### Fair Value of Investments

In accordance with GASB 67, plan investments are presented at fair value. Short-term investments are valued at cost plus accrued interest, which approximates 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 upon equivalent values of comparable securities with similar yield and

risk. Independent appraisals are the basis for valuing the fair value of real estate. Other investments that do not have established markets are recorded at an estimated fair value. Real estate and private equity investments typically have a quarter lag in reporting, which is an industry standard.

### Investment Act Disclosures

Section 38.1133-1140 of the Michigan Compiled Laws (Public Employee Retirement System Investment Act – PERSIA) requires MERS to follow certain financial management practices and provide related disclosures. Compliance with these requirements is shown throughout the CAFR in our Summary Report and Annual Actuarial Valuations found at [www.mersofmich.com](http://www.mersofmich.com). Section 38.1133 (6) requires limits on board member professional training, education and travel expenses. MERS compliance with the statute is shown in the Schedule of Administrative Expenses.

### Capital Assets

Capital assets represent land, buildings, office furniture, equipment and software with a value of \$5,000 or more. Assets are carried at cost, less accumulative depreciation. Depreciation expense is calculated by allocating the net cost of assets over their estimated useful lives using the straight-line method. Useful lives of the related assets vary from 3 to 30 years.

### Capital Assets

Capital Assets	Buildings	Land	Office Furniture and Equipment	Software	Total Capital Assets
Balances December 31, 2013	\$5,495,361	\$1,266,516	\$2,154,847	\$19,941,600	\$28,858,324
Additions			273,026	1,240,993	1,514,019
Deletions and Transfers			(21,715)		(21,715)
<b>Balances December 31, 2014</b>	<b>\$5,495,361</b>	<b>\$1,266,516</b>	<b>\$2,406,158</b>	<b>\$21,182,593</b>	<b>\$ 30,350,628</b>
Accumulated Depreciation					
<b>Balances December 31, 2013</b>			<b>\$1,620,372</b>	<b>\$12,834,946</b>	<b>\$14,455,318</b>
Depreciation Expense	183,179		278,577	1,720,115	\$ 2,181,871
Deletions and Transfers			(18,204)		\$ (18,204)
<b>Balances December 31, 2014</b>	<b>\$183,179</b>		<b>\$1,880,745</b>	<b>\$14,555,061</b>	<b>\$16,618,985</b>
<b>Net Capital Assets December 31, 2014</b>	<b>\$5,312,182</b>	<b>\$1,266,516</b>	<b>\$ 525,413</b>	<b>\$6,627,532</b>	<b>\$13,731,643</b>

### Total Columns on Statements

The “Total” columns on the “Statement of Plan Net Position” and “Statement of Changes in Plan Net Position” are presented to facilitate financial analysis. Amounts in these columns do not present the plan net position and changes in plan net position in conformity with GAAP, nor is such data comparable to a consolidation. Transactions between the Defined Benefit Plan, Defined Contribution Plan, Health Care Savings Program, 457 Supplemental Retirement Program, Retiree Health Funding Vehicle, and Investment Services Program have not been eliminated from the “Total” columns.

The basic financial statements include certain prior-year summarized comparative information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the government’s financial statements for the year ended December 31, 2013, from which the summarized information was derived.

Certain prior year amounts have been reclassified to conform to the current year presentation.

### New Accounting Pronouncements

The Governmental Accounting Standards Board (GASB) Statement No. 63, “Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position,” provides financial reporting guidance for deferred outflows and inflows of resources. It also amends the net asset reporting requirements of GASB Statement No. 34 and other pronouncement by incorporating deferred outflows and inflows of resources into the definitions of the required components of the residual measure and by renaming that measure as net position, rather than net assets. The requirements of this statement were effective for the periods beginning after December 15,

2011. MERS implemented GASB Statement No. 63 for the fiscal year ended December 31, 2012. There will be no impact of this Standard until MERS implements GASB Statement No. 68 in 2015.

In June 2012, the Government Accounting Standards Board (GASB) issued Statement No. 67, Financial Reporting on Pension Plans – an Amendment of GASB Statement No. 25, which replaces the requirements of GASB No. 25 as it relates to pension plans that are administered through trusts. The Statement requires two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the Statement requires certain new note disclosures, as well as required supplementary information. MERS implemented GASB statement No. 67 for the year ended December 31, 2013.

In June 2012, the GASB issued Statement No. 68, Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27, which establishes standards for measuring and reporting pension liabilities, deferred outflow and inflows of resources, and expenses. This Statement is effective for both defined benefit and defined contribution plans. For defined benefit plans, the Statement identifies the methods and assumptions that should be used to project benefit payments, and discount those payments to their actuarial present value, taking into account the market value of assets to pay the benefits and then calculating a net pension liability that will be recorded on the government’s financial statements. The new Statement also requires certain new notes disclosures, as well as required supplementary information. Statement No. 68 will be effective for financial statements beginning after June 15, 2014. MERS will also be providing information and assistance on the new standard to our employers. MERS will also implement GASB 68 and the related disclosures for MERS employees in 2015.

The GASB has added Statement No. 70 on nonexchange financial guarantees. MERS has determined that GASB Statement No. 70 will not apply as MERS does not provide credit enhancements.

In February 2015, the GASB Issued Statement No. 72 on the Fair Value Measurement, primarily as they relate to investments. This will require disclosures according to their relative reliability and to describe positions held in many alternative investments. MERS will work with its custodial banker and investment managers to disclose the new requirements in the financial statements and notes. The effective date of the Statement on financial statements is for periods beginning after June 15, 2015.

In November 2014, the GASB issued two preliminary views on Lease Accounting and Fiduciary Responsibilities, neither of which will likely have a major impact on MERS.

In June 2014, the GASB issued two Exposure Drafts on Other Post-Employment Benefits (OPEB) that will pertain to MERS. The first Exposure Draft will apply to MERS as a plan administrator, and is quite similar in manner to GASB Statement No. 67, which covers pensions. The second Exposure Draft will apply to local governments and how they record and measure their net OPEB liability in a manner also similar to GASB Statement No. 68. These two Exposure Drafts will affect municipalities who are enrolled in the Retiree Health Funding Vehicle as MERS will need to supply statements of the fair market values of their accounts. MERS will also need to supply information for employers in regard to the Health Care Savings Program, which is similar to a defined contribution-type program for post-employment health care costs.

### 3. CONTRIBUTIONS AND RESERVES

#### Contributions

The Defined Benefit Plan contribution funding requirements are actuarially determined using the entry age normal actuarial cost method, and are based upon the benefit plan adopted by the municipality. Some municipalities fund their entire pension obligations solely from employer contributions. Most municipalities jointly fund pension obligations from employee and employer contributions. Monthly employee contributions are based upon a percentage of actual compensation as determined by the employer. Employer contributions are based upon projected or accrued compensation as determined by an annual actuarial valuation. For details about normal cost and total employer contributions by employer, please see the MERS Summary Actuarial Report found on our website at [www.mersofmich.com](http://www.mersofmich.com). Employee contributions are held in individual member accounts that are credited with interest annually. Pursuant to Board resolution adopted November 9, 2005, the interest rate for each year beginning in 2005 is the one-year T-bill rate as of December 31 each year for the ensuing December 31 employee interest calculation. It is also used for interest calculations the subsequent year for those employees requesting a refund of their contributions.

Contributions to the Defined Contribution Plan are reported directly to MERS third party administrator by

the participating municipalities, and are separate from contributions made to the MERS Defined Benefit Plan. Both employer contributions and employee voluntary and mandatory contributions are governed by the contribution limits under the Internal Revenue Code. Municipalities may elect to have mandatory employee contributions where the member pays a fixed dollar or percentage. If the municipality has a match contribution type, the member will elect the amount of contribution at the time of enrollment, and will not be allowed to make any changes. Municipalities may also choose to allow additional after-tax contributions through payroll deduction.

Participating municipalities may, upon adoption of a Defined Contribution resolution for new hires, offer current Defined Benefit employees an opportunity to opt into Defined Contribution. MERS transfers the actuarial present value of the employee's accrued benefit in the Defined Benefit Plan into the employee's Defined Contribution account (at a stipulated funded ratio that shall not exceed 100%). Employees direct their contributions to various investment options offered by the MERS Office of Investments, and may transfer their account balances between investment categories or make changes to the percentage allocation on a daily basis.



## Defined Benefit Plan Reserves

Three reserves have been established pursuant to the MERS Plan Document. See "Schedule of Changes in Reserves" in the Statistical Section.

- **Reserve for Employee Contributions**

All additions to and deductions from this reserve are for the Defined Benefit Plan and Defined Benefit portion of the Hybrid Plan. Employee contributions and interest are credited to this reserve. Also credited are monies received from the purchase of service credit and monies received in repayment of previously refunded contributions. The reserve is reduced by amounts paid to employees who terminate employment and request refunds, and by amounts transferred into the "Reserve for Employer Contributions and Benefit Payments" upon an employee's retirement. Interest is credited to each employee's account, as provided in the Board's November 9, 2005, Resolution. The December 31, 2014, balance was \$764 million.

- **Reserve for Employer Contributions and Benefit Payments**

All additions to and deductions from this reserve are for the Defined Benefit Plan and Defined Benefit portion of the Hybrid Plan. All employer contributions are credited to this reserve. Net income is allocated to this reserve from the "Reserve for Expenses and Undistributed Investment Income." At retirement, the employee's accumulated contributions (if any and including interest) are transferred into this reserve from the "Reserve for Employee Contributions." Monthly

benefits paid to retirees reduce this reserve. The December 31, 2014, balance was \$7.3 billion.

- **Reserve for Expenses and Undistributed Investment Income**

All additions to and deductions from this reserve are for the Defined Benefit Plan and Defined Benefit portion of the Hybrid Plan. All investment earnings and other monies received that are not dedicated to other areas are credited to this reserve. All administrative and investment expenses are paid from this reserve. Transfers from this reserve to the "Reserve for Employer Contributions and Benefit Payments" are at allocation rates determined by the Board.

## Other Reserves

Each of the products outside of the Defined Benefit Plan has its own reserve for additions and deductions to be recorded. MERS maintains separate employer account records for each municipality within the products. The December 31, 2014, reserve balances were as follows: Defined Contribution \$481 million; Health Care Savings Program \$97 million; Retiree Health Funding Vehicle \$593 million; Investment Services Program \$86 million; and 457 Program \$19 million.

A more detailed analysis of the reserves can be found in the Statistical Section.

## 4. INVESTMENTS AND DEPOSITS

The Board has the fiduciary responsibility and authority to oversee the investment portfolio. Various professional investment managers are contracted to manage the System's assets. All investment decisions are subject to statutory regulations imposed under the Michigan Public Employee Retirement System Investment Act, 1965 PA 314, as amended, and the investment policy guidelines established by the Retirement Board. Michigan law allows diverse investment in stocks, corporate and government bonds, mortgages, real estate, and other investments. The Act sets forth prudent standards and requires the assets of the Retirement System be invested solely in the interest of the participants and beneficiaries. Under Plan Document Section 55(6), 1965 PA 314, and Section 401(a)(2) of the Internal Revenue Code, the investments shall be made for the exclusive purpose of providing benefits to the participants and their beneficiaries, and defraying reasonable expenses to the System.

The Board's investment policy requires independent performance measurement of investment managers, and establishes total return objectives for the total portfolio and major categories of investments. As of December 31, 2014, all securities held met the required statutory provisions and Board policy. As of the same dates, no investments were in default or subject to bankruptcy proceedings that had not been previously recorded.

MERS asset allocation policy is an important determinant of achieving the investment goals of the Plan. An asset allocation study is conducted every three years to assess portfolio construction and design. The study is presented to the MERS Board for adoption. Factors influencing the allocation policy include projecting actuarial liabilities, historical and expected long-term market returns and risk, future economic conditions, inflation and interest rate risks and liquidity requirements.

Other investment policies include periodic rebalancing of the portfolio to reflect asset reallocation and that the investments remain within the Board approved parameters, to increase portfolio returns and to reduce volatility.

Investment manager selection is an important decision involving complex due diligence. Managers are selected after a lengthy and time consuming process involving a review of quantitative and qualitative components. Policy objectives include focusing on stable, long-term, financially secure, experienced and disciplined investment managers in the selection decision. Once selected, managers are monitored and reviewed for investment returns, asset class and market related factors.

Other investment processes and procedures include daily capital calls, cash flow reconciliations, trade settlements, weekly portfolio review, monthly account reconciliation, performance reporting and review, quarterly conference calls and asset reallocation and reviews.

The annual money weighted rate of return on pension plan investments is calculated as the internal rate of return on pension plan investments, net of investment expenses. This expresses investment performance adjusted for the changing amounts actually invested throughout the year, measured on monthly inputs with expenses measured on an accrual basis. For the year 2014, the annual money weighted rate of return net of investment expenses measured on monthly inputs was 7.32%. (See Required Supplemental Information)

MERS' Investment Policies are directed by the Board with the Chief Executive Officer (CEO) responsible for all activities and duties of the fund. The CEO has delegated to the Office of Investments authority to manage MERS pension funds, other trust funds, and

direct all investment management activities. The Board appoints public members with investment expertise to serve on the Investment Committee (IC), which then reports directly to the Board concerning investment guidelines, principles and procedures. The Board also acts as a sole fiduciary and sets general investment policy, including the Plan's asset allocation, Investment Guidelines and Investment Policy Statements. The Board also acts as the "investment fiduciary" following state law and prudent person standards of due diligence. The Board is granted authority and fiduciary responsibility for investment policies under 1945 PA 135 and 1965 PA 314 under Michigan statute.

The IC serves as the Board's investment policy development arm and monitors investment management activity and policy development recommendations developed by MERS Office of Investments. The IC is composed of three voting Board members, including two public members with investment experience. The Chief Executive Officer and Chief Investment Officer also serve on the committee but with non-voting responsibilities. The IC approves recommendations to hire and terminate managers with the exception of the Emerging Manager Program. The IC also appoints one additional Board member to observe meetings; this observer does not have voting privileges.

There is also a Portfolio Review Committee (PRC) that reports to the IC made up of staff from the Office of Investments. The voting members of the committee are assigned by the Chief Investment Officer (CIO). The PRC determines tactical shifts within the portfolio and is chaired by the CIO. The committee has the final say for the Emerging Manager Program, and reports decisions to the IC.

The Office of Investments carries out all investment activity on behalf of the fund, providing a monthly report on the fund's activities and performance, monitors external investment managers, and reports any material changes to the IC and Board of Directors.

Amending the Board's investment policy decisions is delegated to the Investment Committee, Portfolio Review Committee and then on to the Office of Investments for further analysis and action. Generally, this concerns asset allocation and investment manager changes. The Investment Committee makes recommendations to the Board for deliberation and approval. The Board then reviews and decides by voting on amending investment policy decisions.

During the year 2014, the Board made decisions in regard to approving new investment managers to be added to the portfolio. The Board also made decisions in regard to an asset allocation study undertaken by the IC in 2013 and a shift in assets. The allocation is as follows:

Global Equity:	57.5%
Global Fixed Income	20.0
Real Assets	12.5
Diversifying Strategies	10.0

There are two investment funds where the portfolio of the fund exceeds 5% of the pension plan's net position. The two managers are Mellon Tangent and Janus; these funds however, have many individual diversified investments under each fund's control, so that no one specific position exceeds the investment guideline limits.

MERS offers a variety of investment choices to participants and municipalities:

The Defined Benefit plan invests in the whole portfolio of MERS including global equities, global bonds, diversified strategies and real assets.

The Defined Contribution, Health Care Savings Program and 457 plans have several investment options. One is a Retirement Strategies option whereby a participant can choose a target date fund that adjusts the member's Investment allocation automatically over time as the member approaches retirement. Another choice is the

Premium Select Option whereby a member can select from various pre-built select funds. A third option for Defined Contribution and 457 participants only is the Self Directed Brokerage account for those knowledgeable investors who are responsible and understand the risks of selecting their own investment choices.

The Retirement Health Funding Vehicle and Investment Services Program have several investment options available under the Premium Select Options of various pre-built select funds to choose from.

### Cash Deposits

Custodial credit risk for cash deposits is the risk that, in the event of a failure of a depository financial institution, the system may not be able to recover its deposits. Balances on deposits are insured by the Federal Deposit Insurance Corporation (FDIC) up to specified limits. Balances in excess of FDIC limits are uninsured. MERS has not experienced any losses in its accounts and believes it is not exposed to a significant credit risk on its cash.

### Credit Risk

Credit risk is the financial risk that an issuer, or other counterparty, will not fulfill its obligations to MERS. Credit risk exposure is dictated by each investment manager's agreement. Other criteria based on the Board's investment policy, includes that if a security is downgraded below investment grade after purchase, a review with a written explanation shall be forwarded to the Investments staff. Board policy also allows that when calculating the average rating of the portfolio, the manager may use the highest rating of the major

rating agencies to calculate the average. Board policy, with regard to global fixed income securities, is that no more than 10% of the portfolio may be invested in corporate bonds or sovereign bonds rated below investment grade, as defined by Moody's and Standard & Poor's. Board policy for global fixed income securities is that the average weighted credit of the portfolio will be a minimum of A-. When calculating the average rating of the global portfolio, the manager may use the highest rating of the major agencies to calculate the average. Board policy with regard to global, non-investment grade fixed income securities includes criteria that credit quality must maintain a minimum of 10% of the portfolio in investment grade fixed income with at least two ratings of BBB-/Baa3 or higher at the time of purchase (as assigned by Standard & Poor's or Moody's). Each portfolio is managed in accordance with investment guidelines that are specific as to permissible credit quality ranges, exposure levels within individual security quality rating tiers, and/or the average credit quality of the overall portfolio.

As of December 31, 2014, the domestic fixed income portfolio consisted of fixed income investments with respective quality ratings, excluding those obligations of the U.S. government. Investments issued by or explicitly guaranteed by the U.S. government are not considered to have credit risk. The Plan's exposure to credit risk as of December 31, 2014, is presented on the following pages, by investment category as rated by Standard & Poor's, Moody's, and Fitch credit ratings.

## Credit Ratings Summary - December 31, 2014

Quality Rating	Agencies	Asset Backed	Bank Loan	Corporate Bonds	Credit Default Swap	Foreign Currency	LMTD Part Units
AAA/Aaa		\$ 10,096,821		\$ 3,616,271		\$57,538,626	
AA+/Aa1	\$35,413,670			6,172,283		54,476,445	
AA/Aa2				15,211,333			
AA-/Aa3		1,211,630		20,222,626		16,870,480	
A+/A1				33,886,564		3,004,594	
A/A2				63,907,687		33,815,258	
A-/A3				61,368,265		14,268,110	
BBB+/Baa1		1,484,324		27,958,498		16,292,997	
BBB/Baa2		4,849,389		59,227,654		38,750,013	
BBB-/Baa3		1,729,997		118,934,767		12,953,453	
BB+/Ba1				36,540,162		2,242,704	
BB/Ba2		48,983		32,923,005		1,946,511	
BB-/Ba3				22,322,371		1,608,447	
B+/B1				17,373,504		632,251	
B/B2				4,576,055		5,564,184	
B-/B3		522,320		2,939,768		2,806,573	
CCC+/Caa1				7,296,504			
CCC/Caa2		1,646,076					
CCC-/Caa3				2,925,902			
CC/Ca		793,284		2,038,424			
C							
D/C		851,683					
NA							
Cash with no ratings				6,115,273	\$(50,763)	255,136	
NR*		115,307	\$212,188	487,751			\$165,900,805
<b>Totals</b>	<b>\$35,413,670</b>	<b>\$23,349,814</b>	<b>\$212,188</b>	<b>\$546,044,667</b>	<b>\$(50,763)</b>	<b>\$263,025,782</b>	<b>\$165,900,805</b>

\* The Not Rated classification includes \$166 million in commingled funds and limited partnerships without credit ratings. Removing that classification leaves the overall portfolio at 1% Not Rated.

## Reconciliation of Investments

Fixed income from page 66	<u>\$1,727,068,246</u>
Difference from Investments	(34,528,489)
Payables settling in 2015	(245,928,885)
Margin Variation settling in 2015	1,975,662
Receivables settling in 2015	278,480,810
Unreconciled difference	902
Total	<u>\$ 34,528,489</u>

Mortgage Backed Securities	Municipals	Preferred Stock	Quasi Sovereign	Short-Term Cash	Sovereign	U.S. Treasuries	Total	% of Portfolio
\$ 45,575,473					\$ 1,861,040		\$ 118,688,231	7.01%
86,451,617						\$269,852,916	452,366,931	26.73
	\$2,753,077				6,738,116		24,702,526	1.46
1,047,542	1,080,805		\$ 1,426,519		5,549,028		47,408,629	2.80
			392,569		17,634,568		54,918,295	3.24
967,943			304,103		11,145,581		110,140,572	6.51
			2,797,746		8,778,916		87,213,037	5.15
		\$1,538,877	1,470,752		7,845,276		56,590,724	3.34
322		1,660,640	9,388,483		20,779,244		134,655,744	7.96
4,513,604			14,585,876	\$ 319,164	31,436,666		184,473,527	10.90
		3,435,893	6,878,252		12,736,993		61,834,004	3.65
7,270,642		1,986,656	4,102,623		7,705,515		55,983,935	3.31
1,978,234			1,470,752		3,610,138		30,989,942	1.83
1,913,199			2,526,818		4,385,547		26,831,319	1.59
173,532		2,028,176	1,824,617		3,414,806		17,581,369	1.04
256,649			1,172,178		2,034,433		9,731,921	0.57
730,291			2,499,172		4,337,565		14,863,532	0.88
							1,646,076	0.10
			1,166,649		2,024,837		6,117,387	0.36
570,001			812,784		1,410,668		5,625,161	0.33
117,293							117,293	0.01
							851,683	0.05
								0.00
			2,438,351	(483,504)	4,232,004		12,506,498	0.74
462,750			33,175		9,489,444		176,701,420	10.44
<b>\$152,029,092</b>	<b>\$3,833,882</b>	<b>\$10,650,242</b>	<b>\$10,650,242</b>	<b>\$ (164,340)</b>	<b>\$167,150,385</b>	<b>\$269,852,916</b>	<b>\$1,692,539,757</b>	<b>100.00%</b>

## Interest Rate Risk

Interest rate risk is the risk that an investment's value will change due to a change in the absolute level of interest rates. Interest rate risk is controlled through diversification of portfolio management styles. Duration is a measure of interest rate risk. The greater the duration of a bond or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates and vice-versa. Sensitivity to changing interest rates may derive from prepayment options embedded in an investment. The Board policy, in regard to interest rate risk, is that the effective duration of the domestic portfolio shall be (+/-) 20% of the Barclays Capital Aggregate Index or the Barclays Universal Bond Index. Board policy in regard to global non-investment grade fixed income securities is that the portfolio's duration is (+/-) 2

years of the benchmark duration. The benchmark for global non-investment grade fixed income securities is 1/3 Barclays Capital U.S. Treasury Inflation Protected Securities Index, 1/3 Citigroup High Yield Market Index, and 1/3 JP Morgan Emerging Markets Global Bond Index. As of December 31, 2014, the Plan's exposure to interest rate risk (as measured by the effective duration method summary) is listed below by investment type.

The term duration has a special meaning in the context of bonds. It is a measurement of how long, in years, it takes for the price of a bond to be repaid by its internal cash flows. It is an important measure for investors to consider, as bonds with higher durations carry more risk and have higher price volatility than bonds with lower durations.

## Effective Duration – December 31, 2014

Investment Type	Market Value	Weighted Effective Duration
Agency	\$35,413,670	3.97
Asset Backed	23,349,819	1.82
Cash Equivalent	12,785,630	6.17
CMBS	15,929,512	2.53
CMO	17,839,393	3.54
Corporate	571,729,381	5.16
Foreign	262,770,647	6.35
Loans	212,188	
Mortgage Pass-Through	118,260,187	2.64
Preferred Stock	10,650,241	10.69
Quasi Sovereign	91,731,822	6.17
Sovereign	52,853,069	6.17
Swaps	-50,763	32.53
US Treasury	359,975,196	4.19
Yankee (Intl bonds in U.S. dollars)	48,002,732	6.76
	<b>\$1,621,452,724</b>	

## Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The MERS investment policy states securities representing debt and equity of any one company shall not exceed 5% of the fair value

of the Plan's portfolio. MERS did not hold a single organization's securities that exceeded 5% of the Plan's investment portfolio other than those issued or explicitly guaranteed by the U.S. government at December 31, 2014.

## Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. MERS' currency risk exposure, or exchange rate risk, is primarily derived from its holdings in foreign currency denominated equities, and fixed income investments. The MERS Retirement Board investment policy for the global non-investment grade fixed income portfolio, allows currency hedging to mitigate currency exposure.

Hedging the non-U.S. dollar currency exposure of the portfolio is permitted. The portfolio will be limited to the maximum net currency exposure of 25% at any given time.

MERS' exposure to foreign currency risk in U.S. dollars as of December 31, 2014, is summarized below.

## Custodial Credit Risk

Custodial credit risk is the risk that deposits may not be recovered in the event of failure of a depository financial institution. As of December 31, 2014, the \$585.4 million carrying amount of the Plan's cash and cash equivalents was comprised of \$576.5 million of short-term investments, and \$8.9 million in deposits, which was subject to custodial credit risk because it was uninsured and uncollateralized.

## Foreign Currency Risk in U.S. Dollar Denominations – December 31, 2014

Currency	Equities	Fixed Income	Currency	Real Estate	Total
Australian dollar	\$ 50,500,283	\$ 43,984,166	\$ 460,923		\$ 94,945,372
Brazilian real	602,943	14,761,274	70,218	\$ 108,353	15,542,788
British pound sterling*	33,747,084	43,849,674	(2,161,692)	169,512	75,604,578
Canadian dollar	14,283,215		27,374	347,512	14,658,101
Danish krone	601,573		1,609		603,182
Euro*	45,019,505	48,239,525	(1,397,533)		91,861,497
Hong Kong dollar	3,417,721		114,587	189,621	3,721,929
Hungarian forint			33		33
Indonesian rupiah	611,515		18,414		629,929
Israeli shekel	914,128		1,463		915,591
Japanese yen	69,731,154		586	229,217	69,960,957
Malaysian ringgit	540,181		88,833		629,014
Mexican peso	1,199,073	14,973,137	625,440		16,797,650
New Zealand dollar	178,088	17,043,871	106,741		17,328,700
Norwegian krone	3,913,709	11,690,029	116,800		15,720,538
Philippine peso	169,349		17,829		187,178
Polish zloty	458,724	16,232,072			16,690,796
Singapore dollar	2,512,701		56,123	471,987	3,040,811
South African rand	947,643	9,108,201			10,055,844
South Korean won	2,115,102	16,870,480	111,274		19,096,856
Swedish krona	3,995,614	6,488,736			10,484,350
Swiss franc	5,842,260		2,575		5,844,835
Taiwan dollar	4,451,102		251,702		4,702,804
Thailand baht	5,114,153	10,173,763	3,624		15,291,540
Turkish lira	62,008	9,355,718	91,358	93,773	9,602,857
<b>Investment Securities</b>	<b>\$250,928,828</b>	<b>\$262,770,646</b>	<b>\$(1,391,719)</b>	<b>\$1,609,975</b>	<b>\$513,917,730</b>

\*Negative currency amounts reflect investments that did not settle until 2015.

## Securities Lending

MERS' policy authorizes participation in a securities lending program administered by its global custodian, State Street Bank and Trust Company. MERS receives income as the owner of securities, as well as income from the lending of those securities. There are no dividends or coupon payments owing on the securities on loan. Securities lending earnings are credited to MERS and other participating clients on approximately the 15th day of the following month. The securities are open contracts and, therefore, could be terminated at any time by either party.

The borrower collateralizes the loan with cash at 102% of market value plus accrued interest on domestic securities, and 105% of market value plus accrued interest on international securities loaned. Due to the nature of the program's collateralization of U.S. fixed income securities on loans at 102% plus accrued interest, MERS' management believes that there is no credit risk per GASB 40 because the lender owes the borrower more than the borrower owes the lender. Cash collateral is invested for MERS

in a dedicated short-term investment fund consisting of investment grade fixed income securities. The custodian provides for full indemnification to MERS for any losses that might occur in the event of borrower default resulting from negligence or intentional misconduct. Securities on loan are marked to market daily to ensure the adequacy of the collateral. There are no restrictions on the amount of securities that can be loaned at one time.

MERS has never experienced a loss on securities lending transactions resulting from the default of a borrower or lending agent since it commenced lending securities in March 1995. As of December 31, 2014, the fair market value of fixed income securities invested in the cash collateral pool was below the original cost, resulting in a cumulative unrealized loss of \$1 million that is reflected in the financial statements. Security lending produced a net income of \$6 million in 2014, excluding unrealized gains and losses.

## Collateral Held and Fair Value of Securities on Loan

Fair Value of Securities on Loan	Nature of Collateral	Collateral Held
\$908,720,630	Cash	\$932,575,437
	Calculated Mark	(4,656,356)
	Non-Cash	2,722,916
<b>\$908,720,630</b>		<b>\$930,641,997</b>

## Securities Lending Collateral

	S & P Rating	Percentage	Amount
Short-Term Credit Ratings	A-1+/P-1 *	8.46%	\$ 78,878,536
	A-1/P-1 *	48.56	452,871,595
Long-Term Credit Ratings	AAA	0.33	3,033,295
	AA	8.61	80,339,882
	A	24.76	230,950,535
	BBB+	0.00	
	BBB	0.05	456,290
	BBB-	0.00	
	BB+	0.00	
	BB	0.00	
	BB-	0.00	
	Other	9.23	86,045,304
	100.00%		932,575,437
Net accumulated depreciation in fair value			(935,630)
Invested Securities Lending Collateral			<b>\$931,639,807</b>

\* A short term obligation rated A-1/P-1 is rated in the highest category by both Standard & Poor's (S&P) and Moody's Investor Services. These Issuers have a superior ability to repay short-term obligations. S&P will designate certain issues with a plus sign (+) to indicate that the obligor's capacity to meet its financial commitment is extremely strong.

## Derivatives

Derivative instruments are financial contracts whose value depends on the values of underlying assets, reference rates, or financial indices. They include futures contracts, swap contracts, credit-linked notes (CLN) and forward foreign currency exchange. While the Board has no formal policy specific to derivatives, MERS holds investments in futures contracts, swap contracts, credit linked notes, and forward foreign currency exchange. MERS enters into these derivative contracts primarily to obtain exposure to different markets to enhance the performance, and reduce the volatility of the portfolio. It enters swaps and futures contracts to gain or hedge exposure to certain markets, and to manage interest rate risk and forward

foreign exchange contracts primarily to hedge foreign currency exposure.

The following tables summarize the various contracts in the portfolio as of December 31, 2014. The notional value associated with these derivative instruments are generally not recorded on the financial statements; however, the amounts for the exposure (unrealized gains/losses) on these instruments are recorded. Interest rate risks associated with these investments are included in the table. MERS does not anticipate additional significant market risk from the swap arrangements.

### Swap Contracts and Structured Notes - December 31, 2014

Name	Maturity Date	Position	Cost	Market Value	Unrealized Gain	Counterparty
Dow Jones UBS Commodity Index	5/29/15	Long	\$246,923,671	\$246,923,671	\$0	Cargil Risk Management

Swap contracts are governed by International Swaps and Derivatives Association Master Agreements, MERS and counterparties. These agreements require collateral to be posted by either party when exposure exceeds the amount specified in the agreement (usually \$250,000 to \$5,000,000).

### Foreign Currency Forward Contracts

Pending Receivable	\$ 6,595,957
Pending Payable	(1,952,604)
<b>Foreign Currency Forward Contract Asset (Liability)</b>	<b>\$ 4,643,353</b>

### Futures and Options Contracts - December 31, 2014

Futures Contract	Expiration Date	Long/Short	Cost	Market Value	Unrealized Gain/(Loss)
Brent Crude Mar 15	2/12/15	Long	\$ 1,755,600	\$ 1,222,410	\$(533,190)
Gold 100 oz Futures June 15	6/26/15	Long	3,590,890	3,556,200	(34,690)
Mini MSCI Emg Mkt Mar 15	3/20/15	Long	117,653,365	117,749,215	95,850
Mini MSCI EAFE Mar 15	3/20/15	Long	143,206,260	140,632,000	(2,574,260)

MERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. MERS and its investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. MERS anticipates that counterparties will be able to satisfy their obligations under the contracts. Investments in limited partnerships and combined funds may include derivatives that are not shown in the derivative totals.

### Private Equity and Capital Calls

The MERS Board has approved \$1,061,537,742 for investment in private equity securities. As of December 31, 2014, \$807,701,234 was invested in private equity leaving \$253,836,508 available for future investments. Investments in private equity market values reflect capital returns, income and gains or losses.

MERS has various investments that can be difficult to value in that there are not readily accessible comparable market values. MERS has level 2 investment values of approximately \$321 million, (chiefly in participant directed mutual funds). Level 2 investments typically have quoted prices for similar type assets and have pricing models that can be derived principally from observable market data. MERS also has level 3 investments of approximately 3.6 billion (chiefly in real estate, private equity, timber, commingled funds and limited partnerships). These

investments tend to be illiquid and do not trade frequently, and as a result there may not be readily marketable prices for them. Management's estimates of these values are based on information provided by investment managers, general partners, real estate advisors and other means. Because alternative investments are not readily marketable, their estimated value is subject to uncertainty and therefore may differ from the values that would have been used had a ready market for these securities existed. The differences could be material.

## 5. RISK MANAGEMENT AND INSURANCE

MERS maintains insurance for workers' compensation, owned and leased vehicles, blanket property, fiduciary, fidelity, and faithful performance to cover other risk of loss such as personal injury to employees or others, property damage, or other liability.

## 6. COMMITMENTS AND CONTINGENCIES

In the normal course of business, MERS is involved in a number of disputes over benefits or other claims. MERS does not anticipate any material loss as a result of these claims. Furthermore, the cost of a successful benefit claim is ultimately the responsibility of the affected municipality — it becomes a funding obligation.

In 1998, MERS entered into a contractual agreement with a municipality and its bargaining units to pay for certain costs to settle a legal dispute. MERS determined and funded the estimated present value of its liability under this agreement using actuarial principles to be \$4.0 million as of December 31, 2012. This amount is contingent upon the completion of MERS fulfilling its remaining obligations under the settlement agreement which is expected to be completed December 31, 2015. Any additional amounts, if required to be funded, aren't expected to be significant.

## 7. RELATED PARTIES

Tegrit Group was a collection of companies that provide public and private sector sponsors with solutions to retirement planning needs including actuarial consulting, retirement plan services, and technology. MERS was the majority stockholder of Tegrit Group holding the investment in the MERS Strategic Opportunity Fund. MERS signed three-year contracts with two divisions of Tegrit Group effective for 2014-2016. Tegrit Technology was used for building and maintaining pension software; Tegrit Actuarial performed actuarial work. In 2014, the Actuarial and Technology divisions were sold to CBIZ and Tegrit Software Ventures respectively, with the contracts for 2014-2016 continuing without modification. MERS expects to wind down the Tegrit Group in 2015. MERS paid Tegrit Group \$1,686,200 in 2014 for actuarial and software services.

Cobalt Community Research is a 501(c) (3) nonprofit, non-partisan coalition that helps local governments, schools and membership organizations measure, benchmark, and manage their efforts through shared data, high-quality affordable surveys, focus groups and meetings that use instant audience feedback technology. MERS facilitated the creation of Cobalt and MERS employees perform the regular work required to run Cobalt. Cobalt maintains separate financial reporting and is responsible for repaying MERS for all administrative costs including staff time. In 2014, Cobalt paid MERS \$55,194 to cover the year's expenses.

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## 8. FUNDED STATUS AND FUNDING PROGRESS

MERS funded status is summarized in the Management's Discussion and Analysis.

Actuarial valuations are prepared annually as of December 31 for each participating municipality. To facilitate budgetary planning needs, employer contribution requirements are provided for each municipality's unique fiscal year that commences after the following calendar year end. For example, the contribution requirements for fiscal years that began in 2014 were determined by actuarial valuations as of December 31, 2012. Approximately 78% of the participating municipalities have fiscal years that begin January 1 or July 1.

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## 9. INTERFUND BALANCES

The general purpose of the interfund receivables and payables in the financial statements relates to transactions that occurred between the various product positions within MERS that did not settle until 2015.

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## 10. SUMMARY INFORMATION – ACTUARIAL FUNDING METHODS AND ASSUMPTIONS

<b>Valuation Date</b>	December 31, 2013
<b>Actuarial Cost Method</b>	Entry Age Normal
<b>Amortization Method</b>	Level Percent of Payroll, Open
<b>Remaining Amortization Period</b>	<p>There are 25 years for positive unfunded liabilities, and 10 years for negative unfunded liabilities. The 25-year period will decline by one year in each of the following five annual valuations, reaching 20 years in the 2018 valuation. Beginning with the 2019 valuation, the 20-year period will be reestablished with each annual valuation.</p> <p>For divisions that are closed to new hires, and the new hires that are not covered by the MERS Defined Benefit Plan or Hybrid Plan provisions (in a linked division), the amortization period is shortened in order to ensure adequate funding of the closed division. The employer has two amortization options. Under Amortization Option A, the amortization period for positive unfunded liabilities is decreased annually by 2 years until the period reaches 5 years. Under Amortization Option B, the amortization period for positive unfunded liabilities is decreased annually by 2 years until the period reaches 15 years and thereafter, the period is decreased annually by 1 year until the period reaches 5 years. Once the period reaches 5 years, under both Option A and B, the 5-year period is reestablished in subsequent annual valuations. In addition, in the December 31, 2013, actuarial valuation, the minimum contribution requirement for a closed division is equal to the excess of two years of annual retiree benefit payments over the current market value of assets.</p>
<b>Asset Valuation Method</b>	A 10-year smoothed market asset valuation method was adopted December 31, 2005, with a prospective application. Prior to 2006, a 5-year smoothing method was used.
<b>Actuarial Assumptions</b>	Investment Rate of Return – 8%.
<b>Projected Salary Increases</b>	A 4.5% for base inflation, plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases. For calendar years 2014, 2015, and 2016, the wage inflation assumption is 1%, 2% and 3%, respectively, instead of 4.5%.
<b>Post-Retirement Benefit</b>	A 2.5% annual post-retirement benefit adjustment – if adopted by individual municipalities.
<b>Deferred Retirement Option Program (DROP+) Partial Lump Sum</b>	<p>Any participant who is eligible to retire with full, immediate retirement benefits, has the option to retire and receive a monthly benefit payable immediately, or delay the retirement date and continue to work if the participating employer has adopted the DROP+ benefit.</p>

If a participant is covered by the Benefit Program DROP+ and retires at least 12 months after first becoming eligible for unreduced benefits, they have the

option to receive a partial lump sum and a reduced monthly benefit:

- The participant can elect a lump sum equal to 12, 24, 36, 48, or 60 times their monthly straight life accrued benefit.
- For each 12 months included in the lump sum, the participant's lifetime benefit is reduced by the DROP+ percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: 4, 5, 6, 7, or 8%.

Benefit Program DROP+ may not be adopted after June 30, 2013.

As of December 31, 2014 the balance of the amounts held by the pension plan pursuant to the DROP+ Program was \$0.00.

## REQUIRED SUPPLEMENTARY INFORMATION

The annual money weighted rate of return on pension plan investments is calculated as the internal rate of return on pension plan investments, net of investment expenses. This expresses investment performance adjusted for the changing amounts actually invested throughout the year, measured on monthly inputs with expenses measured on an accrual basis.

### Schedule of Investment Returns

	2013	2014
Annual money-weighted rate of return, net of investment expenses	14.97%	7.32%

*This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years where information is available.*

## OTHER SUPPLEMENTARY INFORMATION

## Schedule of Administrative Expenses for the Year Ended December 31, 2014

Administrative Expenses	
<b>Personnel Services</b>	
Salaries	\$ 9,002,907
Social Security	634,890
Retirement	1,960,961
Insurance	1,816,800
<b>Total Personnel Services</b>	<b>13,415,558</b>
<b>Professional Services</b>	
Third Party Administrator	1,629,426
Actuarial Services	1,246,866
Audit Services	223,947
Commercial Banking	88,295
IT Services / Business Continuity	61,556
Business Consultants	197,999
Legal Services	104,554
Medical Services	71,350
<b>Total Professional Services</b>	<b>3,623,993</b>
<b>Communication</b>	
Advertising / Promotional Supplies	5,220
Annual Meeting	137,246
Board Travel & Meetings <sup>1</sup>	25,068
Records Storage	7,526
Outreach	91,312
Postage / Shipping	244,906
Printing & Copying Services	101,953
Telephone / Communications	196,165
Travel and Meetings	251,828
<b>Total Communication</b>	<b>1,061,224</b>
<b>Miscellaneous</b>	
Depreciation	2,185,381
Equipment Purchases & Rental	46,693
Insurance	271,807
Building / Maintenance / Utilities	402,518
Office Supplies	45,663
Operating Expenses	59,705
Payroll Processing	15,273
Personnel Support	59,193
Professional Development	87,961
Software Support	1,654,505
Miscellaneous Expenses	7,703
Service Fees <sup>2</sup>	(3,504,029)
<b>Total Miscellaneous</b>	<b>\$ 1,332,373</b>
<b>Total Administrative Expenses</b>	<b>\$ 19,433,148</b>

## Schedule of Investment Expenses for the Year Ended December 31, 2014

Investment Expenses	
<b>Personnel Services</b>	
Salaries	\$ 1,376,974
Social Security	75,493
Retirement	130,061
Insurance	139,086
<b>Total Personnel Services</b>	<b>1,721,614</b>
<b>Professional Services</b>	
Commercial Banking	1,030,636
Investment Managers	14,588,170
Business Consultants	53,874
<b>Total Professional Services</b>	<b>15,672,680</b>
<b>Miscellaneous</b>	
Travel	115,617
Office Supplies	665
Professional Development	9,938
Operating Expenses	3,993
Research & Portfolio Mgt	228,209
<b>Total Miscellaneous</b>	<b>358,422</b>
<b>Total Investment Expenses</b>	<b>\$ 17,752,716</b>

Note: See accompanying Independent Auditor's Report.

<sup>1</sup> Board travel and meeting includes \$7,574 for board member training and education, including related travel expenditures. These expenditures comply with the requirements of Section 38.1133 of the Michigan Compiled Laws.

<sup>2</sup> Service fees primarily come from fees paid on participant directed accounts intended to cover administrative expenses. They are treated as an expenditure credit and not revenue.

### Schedule of Payments to Consultants

Firm	Nature of Services	Amount
Alerus Retirement Solutions	Third Party Administration	\$ 1,629,400
Tegrit Financial Group, LLC	Software Consulting and Configuration Services	1,066,200
Tegrit Software Ventures, Inc.	Software Consulting and Configuration Services	947,600
State Street Corporation	Depository Trust Banking Services	803,000
CBIZ Benefits & Insurance Services, Inc.	Actuarial Consultants	640,400
Tegrit Actuarial Consulting, LLC	Actuarial Consultants	620,000
Plante Moran	Auditing Services	143,900
Informaxion Solutions, LLC.	Software Consulting and Configuration Services	137,800
Bloomberg Finance L.P.	Investment Data Services	125,000
Optima Consulting LLC	Software Consulting and Configuration Services	108,700
Analysts International Corporation	Project Management Services	99,500
Michigan Municipal Risk Management Assoc.	Business Insurance Services	84,500
Consulting Physicians	Medical Advisors	72,700
Ice Miller	Legal Counsel	52,000
Fishnet Security, Inc.	Security and Internal Audit Services	42,800
Michigan Legislative Consultants	Legislative Consultants	42,000
Gavekal Capital	Investment Consultants	40,000
Byrum Fisk Communications LLC	Marketing and Public Relations Services	34,300
Evestment Alliance	Investment Consultants	30,800
ViaWest Inc.	Business Continuity Services	28,900
Ned Davis Research	Investment Consultants	26,300
Karoub Associates	Legislative Consultants	24,200
Orion Development Group	Business Consultants	23,200
Informa Investment Solutions	Investment Consultants	21,000
Epicor Software Corporation	Software Consulting and Configuration Services	20,800

All items are rounded to the nearest \$100.

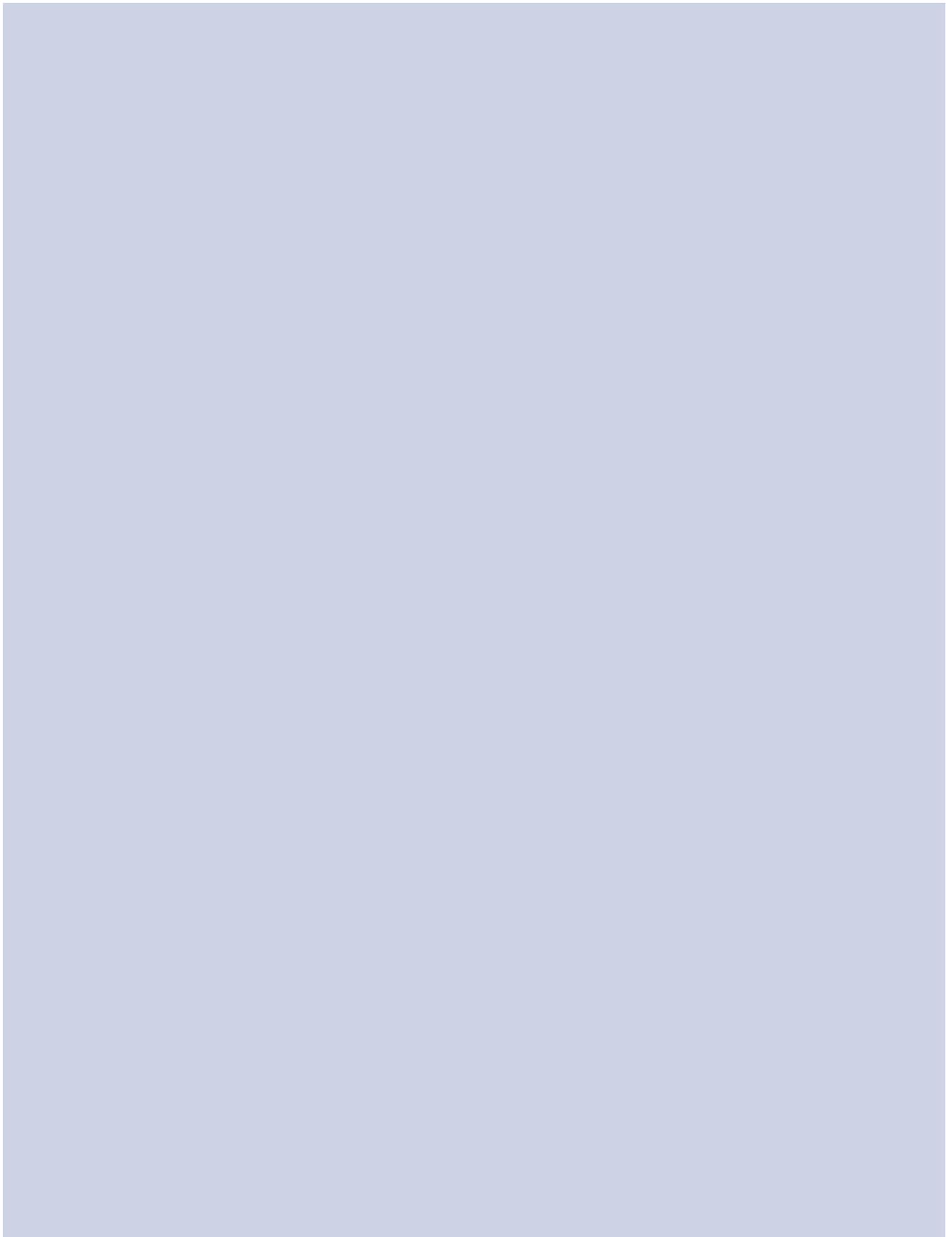
This schedule only includes firms whose annual payment amount was \$20,000 or above.

Fees paid to investment managers are included in the Investment Section. Payments to consultants are already included in the Administrative and Investments Expenses reported in the Statement of Changes in Fiduciary Net Position.

See accompanying Independent Auditor's Report.



SECTION 3  
**INVESTMENTS**



## CHIEF INVESTMENT OFFICER REPORT

### Dear Members and MERS Retirement Board:

I respectfully submit the investment activity report for the Municipal Employees' Retirement System (MERS) of Michigan's Comprehensive Annual Financial Report for the year ending December 31, 2014.

As always, our goal as prudent investors is to provide our member municipalities with effective returns at efficient costs while protecting the pensions and assets of our many members. Our investment returns consistently outperform our benchmarks and market averages, with a prudent, long-term approach designed to provide downside protection and upside market participation.

### Economic Overview

The U.S. stock market saw another great year in 2014. The S&P 500 was up more than 13% while the MSCI All Country World Index Ex-U.S. dramatically underperformed, returning (3.27%) for the year. U.S. Gross Domestic Product rose moderately to finish the year at a 2.4% annual growth rate. One of the contributors to the boost in the U.S. economy, especially for consumer-related sectors, was low energy prices. While the decline of oil prices hurt most commodity investors, it was a welcomed benefit to consumers. In addition, the U.S. is now the number one oil and gas producer in the world and, for the first time in nearly two decades, produced more oil than was imported from abroad. Another major factor contributing to the strength of the U.S. economy was the drop in the unemployment rate and brisk pace of new job creation. In December alone there was an increase of 329,000 jobs, and in manufacturing there was an average increase of 15,000 jobs each month for the whole year. 2014 was seen as the best year of job growth since 1999 with over three million jobs

created. These are a few of the factors that played into the University of Michigan Consumer Confidence Survey reaching a 10 year high of 93.6 at the end of the year.

While the U.S. economy remained strong, other areas of the world did not share in this good fortune. Europe, Asia, and many other economies have stalled in their recovery, causing the international markets and investments to significantly lag the U.S. markets. The global economic weakness continued to put downward pressure on interest rates across the globe, especially in Europe. The European Central Bank President, Mario Draghi, pledged to do "whatever it takes" to resuscitate European growth, however, his actions thus far have not kept up with his intentions. Conversely, Japan increased its asset purchase program and Prime Minister Shinzo Abe deferred a second tax increase in order to stimulate the weak Japanese economy. China's government also introduced measures to stimulate its slowing economy. These reforms were introduced in late 2013 and continued through 2014. Included in the changes was an unexpected cut in interest rates in the fourth quarter. While China has begun to see signs of optimism, Russia's economy has continued to struggle in 2014. Russian markets fell, its currency declined despite Central Bank involvement, and its economy is heading into a recession. As with many oil producing countries, declining oil prices added to Russia's difficulties which negatively affected its regional trade partners in Europe and Asia. One of the only bright spots in ex-U.S. investing was found in select Emerging Market countries. Performance for these markets settled across the spectrum in 2014. Markets such as India and Indonesia significantly outperformed their counterparts in Latin America and Eastern Europe. It is anticipated that this trend will continue through 2015.

### MERS Total Market Fund

The defined investment objective of the MERS Fund is to grow assets at a rate which, when coupled with contributions, satisfies earned benefits to our members. The MERS Office of Investments strives to achieve a real rate of return of at least 3.50% annually over the rate of inflation and/or exceed the actuarial assumption rate of 8.00% annually. On an absolute return basis, MERS' Office of Investments strives for better performance, but feels confident about MERS' performance relative to our benchmarks.

The Total Market Fund closed out the year with a return of 6.68% (6.49% after investment expenses), returning 1.45% for the fourth quarter. All four of MERS' main asset classes were positive in 2014. Global Equity returned 7.15% (gross of fees) for the year with private equity and core equity contributing the most to the asset class at 15.27% and 14.31%, respectively. Global Fixed Income remained steady at 4.16% for the year as bond prices rose due to declining global interest rates. The recently restructured Real Assets portfolio produced 8.07%. Within Real Assets, the Agriculture and Farmland sub-asset class generated the highest returns of any sub-asset class at 33.10%. Unfortunately, MERS was not exempt from poor commodity returns in 2014, which returned (14.95%) due to large declines in oil prices. MERS' newest asset class, Diversifying Strategies, showed strong performance with 7.5% for the year.

### MERS 2014 highlights:

- The MERS Total Market Fund return for 2014 was 6.68% gross of investment fees.
- 2014 marked the implementation of a new asset allocation for the portfolio. The broader main asset classes allow MERS to strategically navigate the markets while tactically allocating amongst sub-asset classes.
- At the broad asset class level, absolute returns gross of investment fees for the year were as follows:

Global Equity	7.15%
Global Fixed Income	4.16%
Real Assets	8.07%
Diversifying Strategies	7.50%

In conclusion, I would like to thank the MERS Retirement Board for their continued support of the Office of Investments in their roles as the fiduciaries of the MERS Plan. The clarity of MERS' governance structure and the functional checks and balances has allowed the investment program to be successful for our members. This relationship makes for a more efficient decision-making process, benefiting our membership through stronger, risk-adjusted returns.

Respectfully,

**Jeb Burns**  
Chief Investment Officer

## REPORT ON INVESTMENT ACTIVITY

MERS is organized for the express purpose of utilizing its collective resources to ensure that its member municipalities have sufficient financial resources to meet the pension obligations that each such municipality is individually responsible for under Const 1963, article 9, section 24. MERS is authorized to create subsidiary entities and to provide additional benefits and savings to its members at the discretion of the Board. See 2004 PA 490, section 36(2)(a); MCL 38.1536(2)(a).

The MERS Retirement Board (Board), as “investment fiduciary” under the Public Employee Retirement System Investment Act (PERSIA), PA 314 of 1965, has the fiduciary responsibility and authority to direct the Retirement System’s investment program. Members of the Board must follow the state law and prudent standards of diligence consistent with “discharging their duties for the exclusive benefit of plan participants.” The prudent person standard requires that the Board “exercise the same judgment, care, skill, prudence, and diligence under the circumstances which persons acting in a like capacity and familiar with such matters would use in the conduct of a similar enterprise with similar aims.” MERS has a Defined Benefit Plan, Defined Contribution Plan, Hybrid Plan Health Care Savings Program (HCSP), Retiree Health Funding Vehicle (RHFV), Investment Services Program (ISP), and a 457 Deferred Compensation Program. The Board has approved full discretion to manage all investment management operations and activities to the Chief Executive Officer (CEO), except those specifically reserved for the Board. The CEO is directly responsible for all activities and duties of the fund. The CEO has delegated to the Office of Investments authority to manage MERS pension funds, other trust assets, and direct all investment management activities.

The Investment Policy Statement (IPS) outlines the investment goals, objectives, and policies of the Fund. The purpose of the IPS is to ensure that the investment activities are carried out within the framework established by MERS’ policy and administrative documents. The IPS assists the

Board, Investment Committee, and staff in effectively monitoring the MERS investment program and offers a map to assist in making prudent and informed investment decisions. The IPS addresses the following issues:

- The goals of the MERS Investment Program;
- Investment policies;
- Performance objectives and evaluation;
- Major investment programs; and
- Investment processes and procedures.

The IPS is designed to provide sufficient flexibility in the management and oversight process to reflect the dynamic nature of the capital markets. It will serve as a working document and may be modified as needed or as market conditions change. The IPS will be reviewed annually and approved by the Board.

In accordance with GASB 67, plan investments are presented at fair value. Short-term investments are valued at cost plus accrued interest, which approximates 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 upon equivalent values of comparable securities with similar yield and risk. Independent appraisals are the basis for valuing the fair value of real estate. Other investments that do not have established markets are recorded at an estimated fair value. Real estate, private equity, and certain alternative investments typically have a quarter lag in reporting, which is an industry standard. Periodic and independent appraisals of these assets are carried out to ensure an accurate valuation to assist in properly assessing the value of the total fund.

MERS uses a time-weighted rate of return calculation methodology, based on the market rate of return, for the schedule of investment results in this report.

The annual money weighted rate of return on pension plan investments is calculated as the internal rate of

return on pension plan investments, net of investment expenses. This expresses investment performance adjusted for the changing amounts actually invested throughout the year, measured on monthly inputs with

expenses measured on an accrual basis. For the year 2014, the annual money weighted rate of return net of investment expenses measured on monthly inputs was 7.32%.

## DEFINED BENEFIT PLAN – INVESTMENT OBJECTIVES AND ACTIVITY

In conformity with PERSIA, the primary goal of the MERS investment program is to grow assets at a rate which, when coupled with employer and employee contributions, satisfies promised benefits to MERS' members. This should be done with a high degree of prudence to reduce risk. The following objectives are intended to assist in achieving this goal:

- Exceed the actuarial investment assumption on a long-term basis, which is currently 8% annually. More specifically, earn a minimum real rate of return of at least 3.5% per year above inflation;
- Maintain adequate liquidity to pay promised benefits;
- Adopt a strategic asset allocation plan that reflects current and future liabilities, minimizes volatility, and maximizes the long-term total rate of return;
- Minimize the costs associated with implementation of the asset allocation through the efficient use of internal and external resources;
- Maintain above median peer rankings for the 3, 5, and 10-year time periods; and
- Exceed the return of the Fund's Policy Benchmark. The Policy Benchmark currently consisting of 35% Barclays Global Aggregate Bond Index and 65% MSCI ACWI IMI.

## PORTFOLIO HIGHLIGHTS

### Asset Allocation

The portfolio's asset allocation is the single most important determinant of achieving the stated investment goals. MERS' Office of Investments conducts a full asset allocation study every three years to assess portfolio construction and strategy. MERS adopts and implements an asset allocation policy that is predicated on a number of factors, including:

- A projection of actuarial assets, liabilities and benefit payments, and the cost of contributions;
- Historical and expected long-term capital market risk and returns for each asset class;
- Expected correlations of returns among various asset classes;
- An assessment of future economic conditions, including inflation and interest rate levels;
- Various risk/return scenarios; and
- Liquidity requirements.

### Criteria for Inclusion of Asset Classes

The following criteria will be used in assessing an asset class for inclusion in the portfolio:

- Sufficient size and liquidity to permit an investment by the portfolio;
- Staff, external managers, and consultant expertise to ensure proper due diligence and cost-effective implementation;
- The incorporation of the asset class contributes to the return enhancement and/or further diversification of the portfolio's assets; and
- Ability to readily measure performance and risk against appropriate benchmarks.

### Portfolio Weighting Guidelines

- New investment strategies (asset classes or sub-asset classes) will be given:
  - A minimum weighting of 2% of the total portfolio and a maximum weighting of 5% of the total portfolio;
  - Allocations may be increased above the 5% threshold after successful integration into the portfolio; and
  - Strategies may be allocated among several managers to reduce risk.
- Each manager will have a maximum allocation of 15% of the total portfolio.

The Board adopted the most recent asset allocation study in November 2013. January 2014, the MERS Office of Investments began implementing the new allocation in stages as investing permitted.

- |                       |       |                           |       |
|-----------------------|-------|---------------------------|-------|
| • Global Equity       | 57.5% | • Real Assets             | 12.5% |
| • Global Fixed Income | 20.0% | • Diversifying Strategies | 10.0% |



## INVESTMENT THEMES

As the portfolio continues to evolve, several prevalent themes have emerged as guideposts for the portfolio's structure. These broad-based themes will continue to be strongly considered in the decision-making process as investment opportunities are sought to be exploited. Successful integration of these themes into the portfolio will help exceed the stated portfolio objectives. Naturally, new themes will emerge over time and replace existing themes.

### Global Economic/ Population Growth

Rapid economic growth in emerging markets such as China and India has created tremendous investment opportunities. Furthermore, population growth will continue to put strain on the world's supply of critical resources. Conversely, the aging of the developed world will create other risks and opportunities. MERS has made numerous investments in an effort to diversify the portfolio and take advantage of these trends and will continue to do so.

### Active/Passive Mix

The portfolio will exhibit a more passive approach in more efficient asset classes. Active management will continue to be utilized in less efficient areas of the market (small/micro cap equities, emerging markets, credit, etc.) where it has proven to add value. A more passive approach allows for greater flexibility to invest in unique investment opportunities and reduces management fees without sacrificing returns.

### Opportunistic Investing

In an effort to further diversify the portfolio and capture additional alpha, MERS' Office of Investments will continue to seek out opportunistic investments. This may result in the portfolio maintaining higher cash balances during certain time periods.

### Expanded Mandates

In an effort to give managers a better opportunity to deploy their skill and create alpha, the portfolio will move toward expanded mandates for managers. This will result in the blurring of traditional style boxes for managers.

### Mean Reversion

Mean reversion is one of the few predictable components of investing. Thus, our policies and procedures are designed to exploit mean reversion throughout all levels of the portfolio.

### Private Investments

Private investments will be looked at through an opportunistic lens and will only be considered to the extent that the reward outweighs the drawbacks (illiquidity and expenses). It is recognized that with the institutionalization of alternative investments, returns will likely be compressed. An effort will be made to make more direct investments and select funds internally to reduce expenses and increase returns. Public investments will be favored all things being equal.

## DEFINED BENEFIT PORTFOLIO

MERS' investments generated a gross return of 6.68% for calendar year 2014 using a time-weighted rate of return based on the market rate of return of the portfolio. Performance across all asset classes varied during the year, with agriculture / farmland and real estate generating some of the highest returns, 33.10% and 18.92%, respectively.

### Portfolio Rebalance Policy

MERS adopted a new asset allocation in November 2013; the MERS Investment Guidelines and Investment Policy Statement have been officially amended to reflect this new asset allocation. To ensure that the portfolio remains within the asset allocation parameters established by the Board, the following rebalancing policy has been established. This

policy should minimize unintended drift from MERS' strategic asset allocation, allow tactical shifts to take advantage of market conditions, and ensure that adequate cash levels are maintained to meet ongoing pension fund expenses. Systematic rebalancing should reduce volatility and increase portfolio returns over the long-term.

### Daily Review and Optional Rebalance

In an effort to minimize tracking error at the Total Market Portfolio level, MERS' Office of Investments works with Investment Manager Parametric to monitor allocations and implement a policy overlay utilizing index futures. Asset allocation levels for the following asset classes are monitored daily in relation to the predetermined variation bands, and rebalanced using the appropriate index futures:

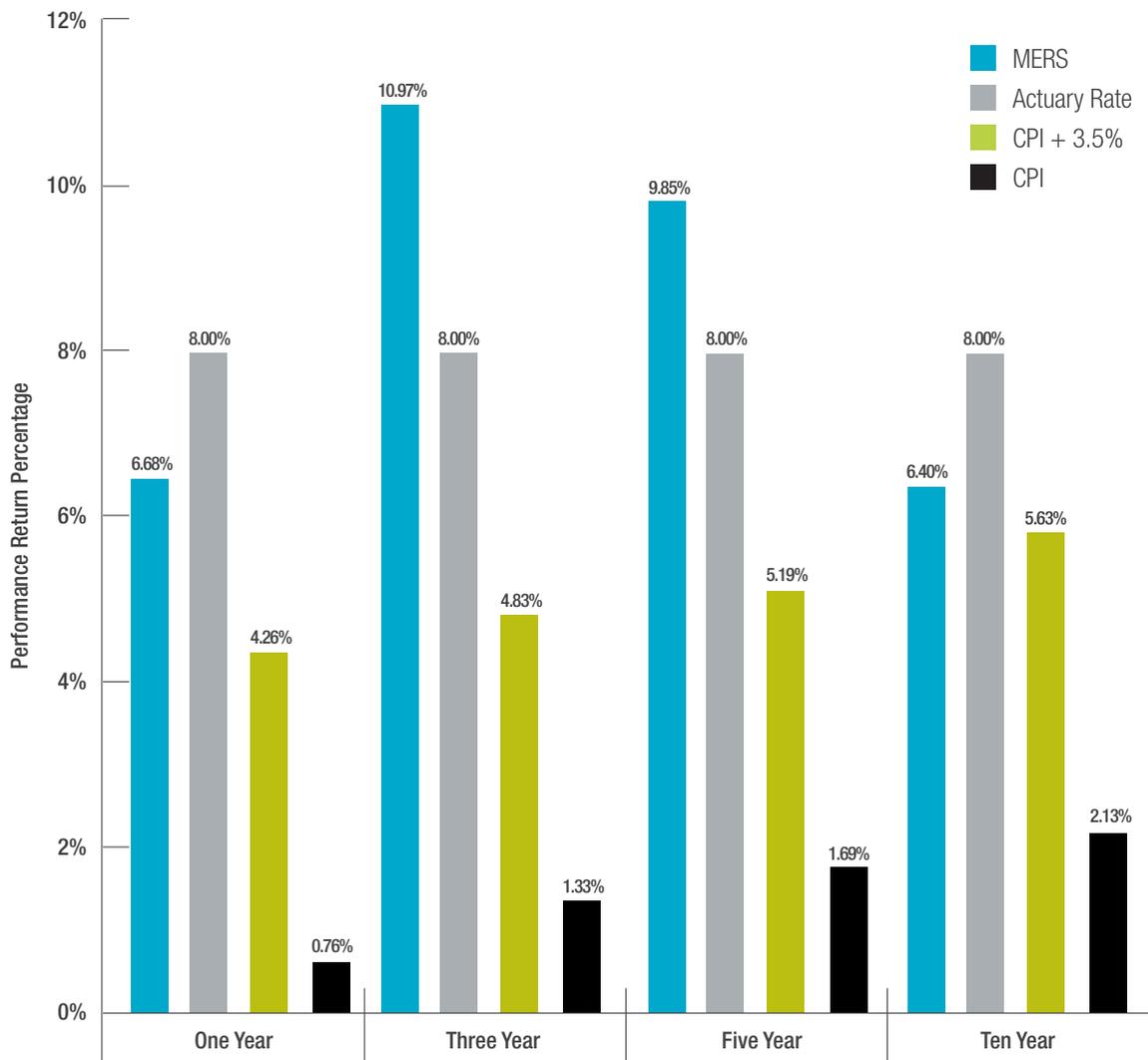
Asset Class	Variation Band %	Index Futures
Global Equity	± 8.7%	S&P 500, S&P 400, Russell 2000, MSCI EAFE, or MSCI EM Index futures
Global Fixed Income	± 25.0%	Treasury futures matching the duration of the Barclays U.S. Aggregate Index

### Annual Portfolio Rebalance

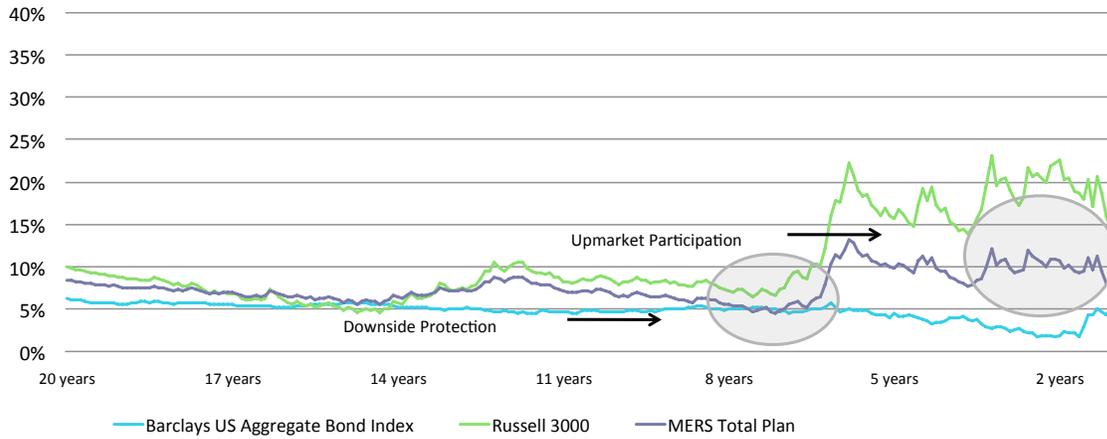
MERS' Office of Investments monitors the portfolio's asset allocation on an ongoing basis, making strategic and tactical adjustments within the guidelines of the plan. MERS feels a more robust portfolio-rebalancing

regimen can add additional value and reduce the overall risk to the portfolio in certain market environments.

### Performance Versus Custom Benchmarks as of December 31, 2014 (gross of fees)

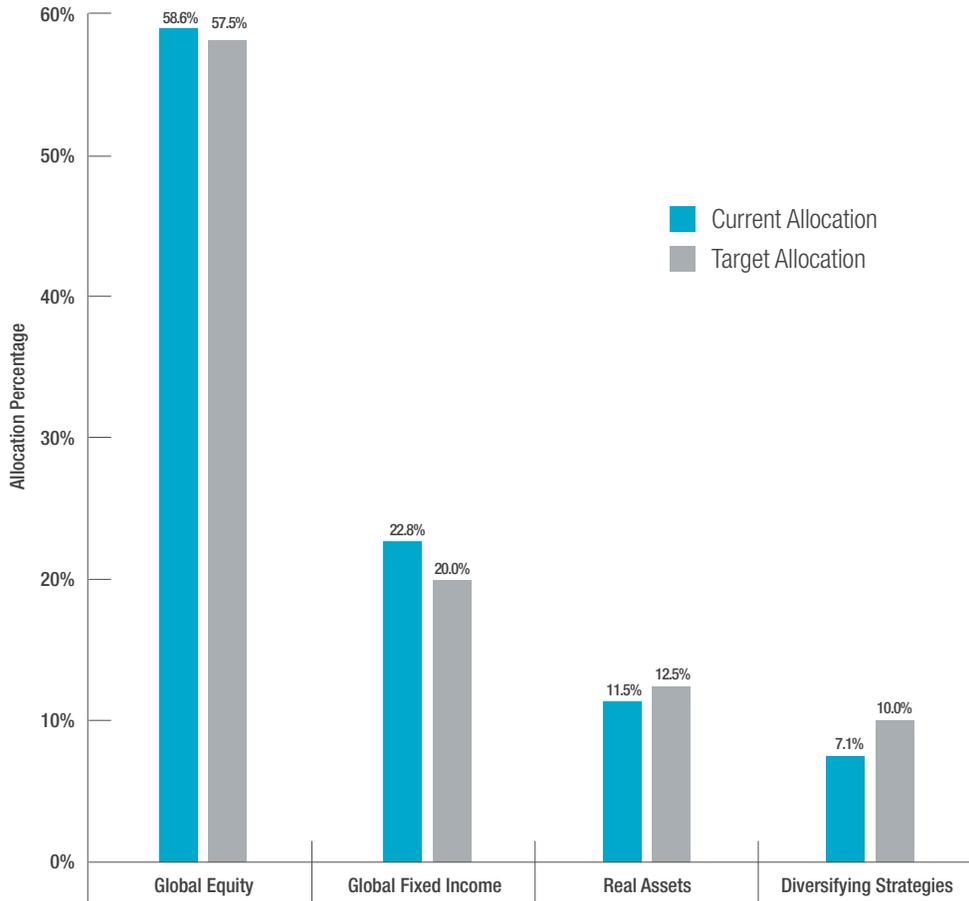


Downside Protection, Upside Participation as of December 31, 2014



Diversification is a portfolio strategy designed to reduce exposure to the volatility of returns by combining a variety of investments (such as stocks, bonds, real estate, and commodities) which are unlikely to all move in the same direction. The goal of diversification is to reduce the risk in a portfolio. While it is impossible to foresee all market risks, the strategic goal of the MERS asset allocation policy and the portfolio is to create a well-diversified portfolio that provides downside market protection with upside market participation.

Current Asset Allocation versus Target Allocation as of December 31, 2014



### Statistical Performance (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized Return (gross of fees)	6.68%	10.97%	9.85%	6.40%
Annualized Standard Deviation	0.87	0.93	0.90	0.88
Sharpe Ratio	1.15	1.85	1.22	0.52
Excess Return	3.93	1.58	1.45	0.46
Beta	0.80	0.89	0.89	0.87
Correlation to Policy Benchmark	0.92	0.96	0.98	0.98

### Commission Recapture

MERS requests that all domestic equity managers direct a target of 25% of commission trades with the State Street Global Markets LLC (SSGM) for the purpose of commission recapture. Notwithstanding these instructions, brokerage transactions in the normal course of business should only be directed to this broker if in so doing the obligation to achieve best execution of the portfolio's transactions is fulfilled. The SSGM program provides a network of brokers with whom trades can be executed. MERS has the

ability to waive commission recapture participation for investment managers via their investment guidelines as certain strategies are more sensitive to trade execution (i.e. micro cap). The recapture commissions are shared based on a contractually-negotiated split of 90% MERS / 10% broker. Recapture dollars are used to offset the administrative, custodial, accounting, and performance measurement costs incurred by the fund. For 2014, \$43,195 was directed by equity managers to SSGM, of which \$23,514 was rebated to MERS.

### Securities Lending

MERS participates in the securities lending program at State Street Bank. Income earned from participation in the program is credited to each portfolio within 15 business days of the previous month's end. The

goal of the securities lending program is to enhance the overall income of the Plan and to help offset investment management related expenses.

### Securities Lending 2014 Rebates and Fees

	Gross Earnings	Rebates	Agent Manager Fees	Net Earnings
First Quarter	\$ 2,094,867	\$ 155,141	\$ 387,927	\$ 1,551,799
Second Quarter	2,300,894	218,865	416,389	1,665,640
Third Quarter	2,207,613	214,303	398,636	1,594,674
Fourth Quarter	2,094,391	212,348	376,388	1,505,655
<b>Totals</b>	<b>\$ 8,697,765</b>	<b>\$ 800,657</b>	<b>\$1,579,340</b>	<b>\$ 6,317,768</b>

**INVESTMENTS**

2014 comprehensive annual financial report

**Investment Summary for Defined Benefit Plan, Defined Contribution Plan, Hybrid, Health Care Savings Program, Retiree Health Funding Vehicle, 457, and Investment Services Programs as of December 31, 2014**

Type of Investment	Market Value
<b>Global Fixed Income</b>	
Global Fixed Income	\$1,727,068,246
<b>Total Global Fixed Income</b>	<b>1,727,068,246</b>
<b>Global Equities</b>	
Global Stock	4,433,579,621
Private Equity	550,318,300
<b>Total Global Equities</b>	<b>4,983,897,921</b>
<b>Diversifying Strategies</b>	
Diversifying Strategies	631,501,184
<b>Total Diversifying Strategies</b>	<b>631,501,184</b>
<b>Real Assets</b>	
Agriculture & Farmland	197,976,508
Infrastructure	288,819,579
Commodities	252,043,764
Real Estate	287,039,994
<b>Total Real Assets</b>	<b>1,025,879,845</b>
<b>Sub Total Investments</b>	<b>8,368,347,196</b>
<b>Cash Equivalents</b>	
Cash Equivalents	579,800,007
<b>Total Cash Equivalents</b>	<b>579,800,007</b>
<b>Sub Total Investments &amp; Cash</b>	<b>8,948,147,203</b>

**Reconciliation of Investments to Financial Statements**

Total Investments from above	8,948,147,203
Receivables - Sale of investments, interest & dividends	(893,327,214)
Fixed income adjustment not on State Street portfolio	17,966,311
Bonds in default	(9,841,600)
Small adjustment	2
Investments not in MERS State Street portfolio	320,664,175
Investments in transit to State Street	25,841,551
Payables - Purchases of Investments	846,491,555
<b>Investments on Financial Statements</b>	<b>\$9,255,941,983</b>

Note: Includes receivables and payables for sales and purchases of securities with settlement dates after December 31, 2014.

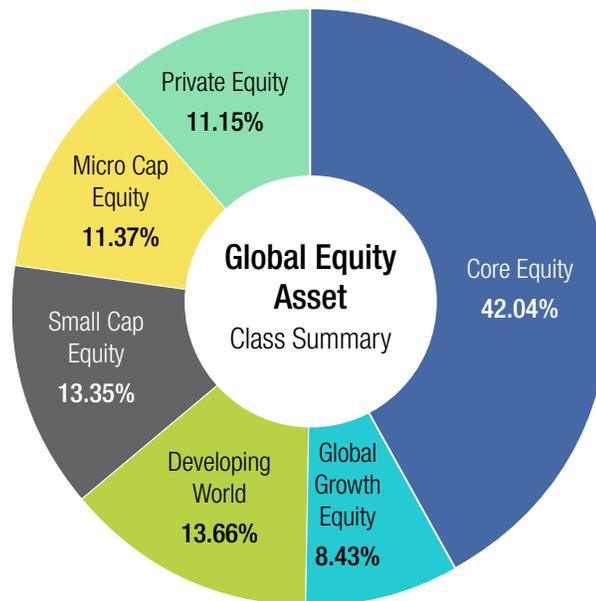
## GLOBAL EQUITY ASSET CLASS SUMMARY

As of December 31, 2014, the global equity portfolio had a market value of \$5.2 billion, representing 58.6% of the Defined Benefit Portfolio. Performance for the total global equity portfolio was 7.15% gross of fees for the year.

The Global Equity allocation represents the largest portion of the MERS Defined Benefit Portfolio and is the largest driver of the portfolio's return and risk. The allocation reflects a structural shift from previous equity allocations toward more non-U.S. investments and unconstrained mandates for managers. The allocation employs a Core-Satellite structure with the Core portfolio focused on lower volatility strategies in more efficient areas of the global equity markets. Satellite strategies are expected to outperform the Core portfolio over time with increased levels of volatility. MERS' Office of Investments has also increased internal, active equity management as a way to reduce overall portfolio costs.

The Global Equity portfolio has a target allocation of 57.5% of the Total Fund. As of December 31, 2014, the portfolio includes core, global growth, developing world, small cap, micro cap, and private equity sub-asset classes. These portfolios are diversified by geographic region, styles, sectors, and market capitalizations. Active management is used to take advantage of less efficient areas of the market while passive management is deployed in more efficient areas and used to reduce fees. Allocations of these classes are monitored in relation to asset class bands on an ongoing basis and rebalances take place when deemed appropriate. This portfolio is expected to perform well in periods of low to falling inflation and rising economic growth. It is also projected to provide ongoing income as well as downside protection in volatile markets.

### Equity Asset Class Summary



## Global Equity Performance as of December 31, 2014 (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Global Equity	7.15%	16.73%	13.10%	7.25%
Global Equity Blend*	9.29	18.28	14.14	8.53
<b>EXCESS</b>	<b>(2.14)</b>	<b>(1.55)</b>	<b>(1.04)</b>	<b>(1.28)</b>
Core Equity	14.31	22.65	17.56	9.89
Core Equity Blend**	13.27	20.87	16.13	8.50
<b>EXCESS</b>	<b>1.04</b>	<b>1.78</b>	<b>1.43</b>	<b>1.39</b>
Small Cap Equity	2.42	16.32	13.94	6.17
Russell 2000	4.89	19.21	15.55	7.77
<b>EXCESS</b>	<b>(2.47)</b>	<b>(2.89)</b>	<b>(1.61)</b>	<b>(1.60)</b>
Microcap Equity	2.68	22.43		
RUSSELL MICROCAP INDEX ( DAILY)	3.65	21.81	16.14	5.96
<b>EXCESS</b>	<b>(0.97)</b>	<b>0.62</b>		
Global Growth Equity	2.08	13.96	8.03	
Global Growth Blend***	8.90	17.55	12.97	7.62
<b>EXCESS</b>	<b>(6.82)</b>	<b>(3.59)</b>	<b>(4.94)</b>	
Developing World	(0.75)	3.99	(0.30)	
Developing Equity Blend****	2.51	8.97	5.13	7.80
<b>EXCESS</b>	<b>(3.26)</b>	<b>(4.98)</b>	<b>(5.43)</b>	
Private Equity	15.27	11.36	13.22	9.47
STATE STREET PE 1 QTR LAG	14.36	13.76	13.79	12.04
<b>EXCESS</b>	<b>0.91</b>	<b>(2.40)</b>	<b>(0.57)</b>	<b>(2.57)</b>

\*Global Equity Blend - 36.97% Core Equity Blend, 13.45% Russell 2000 Index, 10.92% Russell Micro Cap Index, 13.45% Global Growth Blend, 13.45% Developing Equity Blend, 11.76% State Street Private Equity 1Q Lagged Index

\*\*Core Equity Blend - 50% Russell Top 200 Index/50% Russell Mid Cap Index

\*\*\*Global Growth Blend - 50% Russell 3000 Growth, 50% MSCI AC World Growth

\*\*\*\*Developing Equity Blend - 50% MSCI Emerging Markets Index, 50% MSCI Frontier Markets Index

## Top 10 Public Equity Holdings as of December 31, 2014

Note: A complete list of portfolio holdings is available upon request.

Asset Description	Market Value	Percentage of Total Market Value
Apple	\$ 32,424,456	0.36%
Evercore Partners Inc Class A	21,666,988	0.24
Amgen	16,657,592	0.19
Biogen Idec	16,633,050	0.19
Celgene	16,326,414	0.18
Universal Health Services Class B	15,557,486	0.17
Community Health Systems	15,255,100	0.17
Exxon Mobil	13,747,315	0.15
Google	13,383,776	0.15
Microsoft	13,343,227	0.15

Global Equity – Investment Managers

Investment Manager	Style	Portfolio Market Value
<b>External Investment Manager</b>		
Mellon Capital Management	U.S. Tangent Added Tactical Asset Allocation	\$ 647,261,646
Wellington Management Company	U.S. Mid Cap Core	252,013,417
Irving Magee Investment Management	U.S. Small Cap Value	233,800,730
Acadian Asset Management	International Small Cap	201,087,607
Seizert Capital Partners	U.S. SMID Cap Value	44,697,090
Punch & Associates	U.S. Micro Cap Core	110,859,291
Morgan Dempsey Capital Management	U.S. Small/ Micro Cap Value	94,867,257
EAM Investors	U.S. Ultra Micro Cap Growth	102,744,552
Kennedy Capital Management	U.S. Micro Cap Value	107,392,304
Downriver Capital Management	U.S. Micro Cap Value	31,464,470
Hellman, Jordan Management Company	U.S. All Cap Growth	415,991,796
Mountain Pacific Advisors	Emerging Markets Small Cap	210,698,085
BlackRock Investment Management	Frontier Markets Index	91,671,079
Consilium Investment Management	Frontier Markets	87,144,839
Frontier Market Asset Management	Frontier Markets	79,995,225
Polunin Capital Partners	Emerging Markets Small Cap	180,768,388
LMCG Investments	Emerging Markets Small Cap	23,725,000
GCM Grosvenor Private Markets	Global Private Equity	328,520,644
GCM Grosvenor Private Markets	Global Private Equity	53,236,949
Mesirov Financial	Global Private Equity	20,490,211
AlpInvest Partners	Global Private Equity	127,279,507
<b>Internal Investment Manager</b>		
MERS S&P 400	U.S. Mid Cap Index	\$ 532,793,257
MERS S&P 500	U.S. Large Cap Index	642,069,240
MERS S&P 600	U.S. Small Cap Index	179,339,091
MERS Micro Cap	U.S. Micro Cap Core	113,882,134
MERS Internal Private Equity	Separately Managed Private Equity	20,790,989

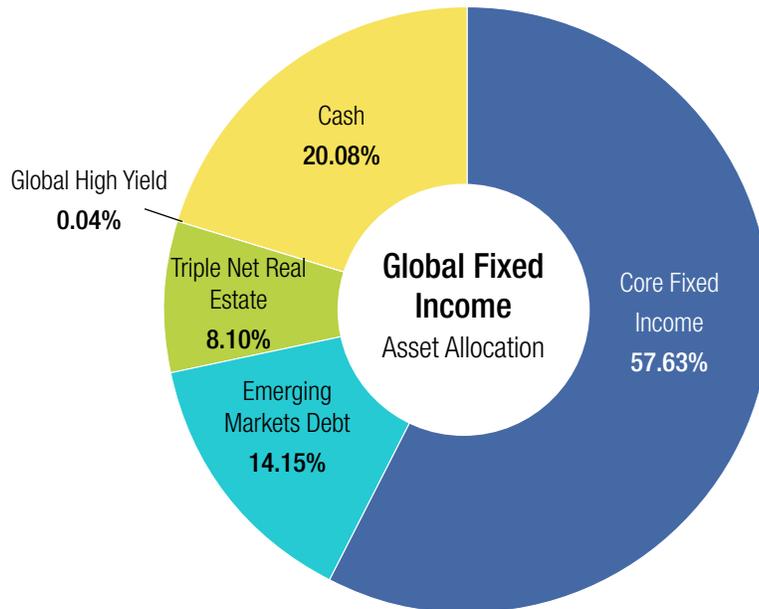
## GLOBAL FIXED INCOME ASSET CLASS SUMMARY

As of December 31, 2014, the Global Fixed Income portfolio had a market value of \$2 billion, representing 22.9% of the total Fund. Performance for fixed income was 4.16% gross of fees for the year.

The Global Fixed Income allocation plays a vital role in the MERS Defined Benefit Portfolio. The Global Fixed Income portfolio has a target allocation of 20% of the total fund. This portfolio is designed to provide significant downside protection, diversification and stable income. As a result of the low interest rate environment and likely upward pressure on interest

rates, the allocation to traditional fixed income has been reduced in favor of other asset classes with a better risk/return profile. The portfolio follows a Core-Satellite structure with U.S. Fixed Income and Global Fixed Income serving as the Core and Global High Yield, Triple-Net Lease Real Estate, and Emerging Markets Debt serving as satellites. The majority of the portfolio is allocated to investment grade credits across all market sectors and diversified by geography. Active management has been deployed for each strategy as significant alpha has been achieved within the asset class.

### Global Fixed Income Asset Allocation



## Global Fixed Income Performance as of December 31, 2014 (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Global Fixed Income	4.16%	3.20%	3.98%	4.41%
Global Fixed Income Blend*	3.68	3.31	5.16	5.21
<b>EXCESS</b>	<b>0.48</b>	<b>(0.11)</b>	<b>(1.18)</b>	<b>(0.80)</b>
Core Fixed Income	5.17	3.34	5.02	
Core Fixed Income Blend**	3.79	1.89	3.74	4.28
<b>EXCESS</b>	<b>1.38</b>	<b>1.45</b>	<b>1.28</b>	
Emerging Markets Debt	1.89	5.47		
JPM EMBI GLOBAL DIVERSIFIED	7.43	6.13	7.57	7.78
<b>EXCESS</b>	<b>(5.54)</b>	<b>(0.66)</b>		
Triple Net Real Estate	7.91			
Barclays CMBS Investment Grade	4.21	4.73	8.12	5.04
<b>EXCESS</b>	<b>3.70</b>			
Global High Yield	12.48	8.68	9.27	
High Yield Custom Benchmark***	3.67	6.62	7.99	7.57
<b>EXCESS</b>	<b>8.81</b>	<b>2.06</b>	<b>1.28</b>	
Cash	0.52	0.63	1.11	4.23
91 DAY TREASURY BILL (DAILY)	0.03	0.07	0.09	1.56
<b>EXCESS</b>	<b>0.49</b>	<b>0.56</b>	<b>1.02</b>	<b>2.67</b>

\*Global Fixed Income Blend – 59.34% Core Fixed Income Blend, 12.44% JP Morgan EMBI Global Diversified Index, 8.09% Barclays Investment Grade CMBS Index, 12.44% High Yield Blend, 7.69% U.S. 90-Day Treasury Bills

\*\*Core Fixed Income Blend – 60% Barclays US Agg, 40% Barclays Global Agg

\*\*\*High Yield Custom Benchmark – 50% Citigroup High Yield, 50% JPMorgan EMBI Global Diversified Index.

## Top 10 Global Fixed Income Holdings as of December 31, 2014

Asset Description	Market Value	Percentage of Total Market Value
Australian Government Bond 3.25% 4/21/2025	\$24,269,579	0.27%
United States Treasury 2.25% 11/15/2024	23,855,780	0.27
United States Treasury 0.5% 11/30/2016	21,671,255	0.24
Spanish Government Bond 2.75% 10/31/2024	17,047,246	0.19
United States Treasury 0.25% 9/15/2015	16,932,864	0.19
United Kingdom Treasury 2.375% 9/07/2024	16,922,317	0.19
Poland Government Bond 4.0% 10/25/2023	16,339,489	0.18
United States Treasury 1.5% 11/30/2019	15,966,615	0.18
United States Treasury 0.375% 1/31/2016	15,795,130	0.18
GNMA Pool 5.0% 9/15/2039	15,165,707	0.17

## Global Fixed Income – Investment Managers

Investment Manager	Style	Portfolio Market Value
External Investment Manager		
<b>Core Fixed Income</b>		<b>\$ 1,180,627,193</b>
C.S. McKee Investment Managers	U.S. Core Fixed Income	328,963,195
Janus Capital Management	U.S. Core Plus Fixed Income	502,482,767
First International Advisors	Global Fixed Income	349,181,231
<b>Emerging Markets Debt</b>		<b>289,923,584</b>
TCW Group	Emerging Markets Debt	289,923,584
<b>Triple Net Real Estate</b>		<b>165,900,805</b>
ElmTree Funds	Triple Net Lease Real Estate	64,019,106
Oak Street Real Estate Capital	Triple Net Lease Real Estate	101,881,699
<b>Global High Yield</b>		<b>724,221</b>
Stone Harbor Investment Partners	Global High Yield	724,221
<b>Cash</b>		<b>411,311,229</b>
MERS of Michigan	Short Duration Fixed Income	321,418,792
Janus Capital Management	Short Duration Fixed Income	89,892,437
<b>Total</b>		<b>\$ 2,048,487,032</b>

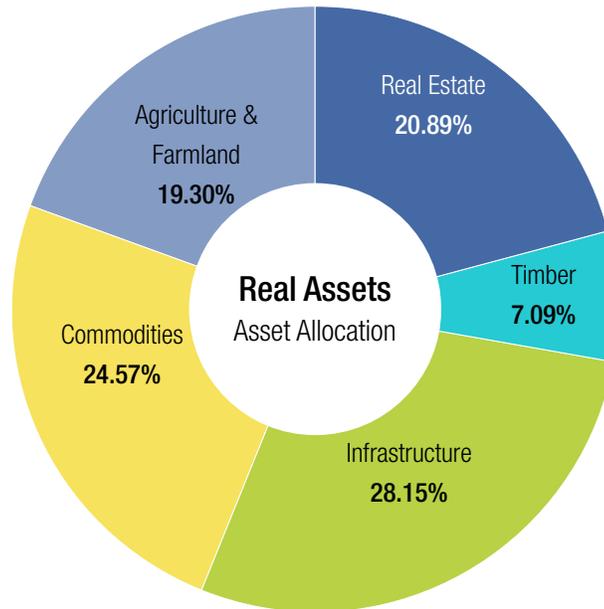
## REAL ASSETS CLASS SUMMARY

As of December 31, 2014, the Real Assets portfolio had a market value of \$1.0 billion, representing 11.5% of the Defined Benefit Portfolio. The targeted allocation of the portfolio is 12.5% of the portfolio. The real assets portfolio consists of real estate, timber, infrastructure, commodities, and agriculture & farmland sub-asset classes. Performance for real assets was 8.07% gross of fees for the year.

The real assets allocation is designed to provide a hedge against unexpected spikes in inflation as well as capitalize on long-term themes such as an emerging middle class in developing markets and

global population growth. An income component is present in each of the sub-asset classes that comprise the portfolio. The majority of the investments within this portfolio will be private investments making the portfolio relative illiquid and longer duration. Private Infrastructure has traditionally been 5% of the overall portfolio but as the investments mature it is anticipated this allocation will be managed down in favor of a combination of public and private infrastructure investments. The underlying allocation to each sub-asset class will fluctuate over time depending on market opportunities but it is anticipated that each will be equally weighted within the portfolio.

Real Assets Allocation



Real Assets Performance as of December 31, 2014 (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Real Assets	8.07%	3.20%	5.22%	
Real Assets Blend*	0.40	3.09	3.97	4.91%
<b>EXCESS</b>	<b>7.67</b>	<b>0.11</b>	<b>1.25</b>	
Real Estate	18.92	15.09	12.81	5.45
NCREIF ODCE Value Weighted	11.46	11.38	12.85	6.11
<b>EXCESS</b>	<b>7.46</b>	<b>3.71</b>	<b>(0.04)</b>	<b>(0.66)</b>
Timber	4.69	4.85	3.35	
NCREIF TIMBERLAND INDEX QTR LAG	10.38	7.37	3.58	8.29
<b>EXCESS</b>	<b>(5.69)</b>	<b>(2.52)</b>	<b>(0.23)</b>	
Infrastructure	11.53	1.22	5.53	
CPI + 3.5%	4.28	4.87	5.24	5.69
<b>EXCESS</b>	<b>7.25</b>	<b>(3.65)</b>	<b>0.29</b>	
Commodities	(14.95)	(6.89)	(1.75)	
Bloomberg Commodity Index Total Return	(17.01)	(9.43)	(5.53)	(1.86)
<b>EXCESS</b>	<b>2.06</b>	<b>2.54</b>	<b>3.78</b>	
Agriculture & Farmland	33.10			
CPI + 3.5%	4.28	4.87	5.24	5.69
<b>EXCESS</b>	<b>28.82</b>			

\*Real Assets Blend – 20.83% NCREIF ODCE, 12.50% NCREIF Timberland 1Q Lagged Index, 25.00% Private Infrastructure, 29.17% Commodities, 12.50% Agriculture/Farmland

## Real Assets – Investment Managers

Investment Manager	Style	Portfolio Market Value
<b>Real Estate</b>		
The Townsend Group	Private Real Estate	\$ 176,400,430
MERS of Michigan	Private Real Estate	37,882,606
<b>Timber</b>		
Hancock Natural Resource Group	Global Timber	72,756,958
<b>Infrastructure</b>		
GCM Grosvenor Private Markets	Global Private Infrastructure	288,819,579
<b>Commodities</b>		
Cargill, Inc.	Passive Commodities	252,043,765
<b>Agriculture &amp; Farmland</b>		
Australian Pastoral Fund	Agriculture/Livestock Production	51,888,213
Adveq Management AG	Diversified Agriculture	62,862,457
Adveq Management AG	Agriculture/Almond Production	44,041,320
Wood Creek Capital Management	Diversified Agriculture	18,877,742
Mountain Pacific Advisors	Currency Hedge	20,306,776
<b>Total</b>		<b>\$1,025,879,846</b>

## DIVERSIFYING STRATEGIES CLASS SUMMARY

As of December 31, 2014, the Diversifying Strategies portfolio had a market value of \$631.5 million, representing 7.1% of the total portfolio. The targeted allocation of the portfolio is 10.0% of the total portfolio. Currently, the portfolio includes investments in middle market direct lending, litigation finance, healthcare royalties, bank regulatory capital, and opportunistic credit. The majority of these investments were funded in 2014 with the creation of the asset class in the MERS portfolio. Performance for the diversifying

strategies was 7.50% gross of fees for the year.

The Diversifying Strategies allocation is expected to provide downside protection and uncorrelated returns with traditional asset classes – specifically equities. Core fixed income has traditionally been one of the most diversifying asset classes, but the low return expectations for the asset class make it less attractive on a risk-adjusted basis. Consequently, non-traditional asset classes must be considered as an alternative.

Diversifying Strategies Performance as of December 31, 2014 (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Diversifying Strategies	7.50%			
Custom Diversifying Strategies Blend*	4.41	6.73%	4.33%	4.07%
<b>EXCESS</b>	<b>3.09</b>			

\*HFRI Fund of Funds Index + 1%

Diversifying Strategies – Investment Managers

Investment Manager	Style	Portfolio Market Value
Orchard Global Asset Management	Bank Regulatory Capital	\$ 192,754,495
Gerchen Keller Capital	Litigation Financing	3,490,975
MC Credit Partners	Middle Market Direct Lending	9,151,017
Napier Park Global Capital	Global Opportunistic Credit	233,216,148
Wood Creek Capital Management	Intangible/Tangible Assets	30,178,209
Orchard Global Asset Management	Structured Lending	41,287,236
Connor, Clark & Lunn Investment Management	Canadian Small/Mid Cap Market Neutral Equity	104,550,610
Comvest Partners	Lower Middle Market Direct Lending	16,872,494
<b>Total</b>		<b>\$ 631,501,184</b>

### Investment Management Fees

Since management fees directly affect the returns of a manager, a best effort is made to achieve the best fee agreement possible. MERS leverages the scale of investments to negotiate deals that are at the lower end of industry standards and more than competitive with peers. While it is understood that

superior managers often have higher fee structures, performance expectations and cost are carefully balanced. Fees are the only factor that one can be certain of ex-ante; thus it is critical to minimize them to the extent possible. All else being equal, managers with lower fees will be favored.

#### Schedule of Investment Fees – as of December 31, 2014

Investment Managers	Average Assets Under Management*	Annual Fee	Average Basis Points
Global Equity	\$ 1,932,970,961	\$ 10,417,345	53.89%
Global Fixed Income	1,456,540,214	3,060,500	21.01
Real Assets	787,868,094	1,110,325	14.09
<b>Total</b>	<b>\$ 4,177,379,269</b>	<b>\$ 14,588,170</b>	<b>34.92</b>

\* The above table presents the 2013 investment managers' fees MERS incurred, excluding alternative investment and commingled funds. The alternative investment and commingled fund portfolio's results are reported to MERS net of fees, therefore the management fees paid for these investments are not reported in the above table.

#### Investment Custodian

State Street Bank and Trust 1,030,636

#### Securities Lending Agent

State Street Bank and Trust 1,579,340

**Total Investment Fees \$ 17,198,146**

Schedule of Investment Commissions as of December 31, 2014

Brokerage Firm	Shares Traded	Total Dollars	Commission/Share
Instinet, LLC	52,877,053	\$ 701,831	0.0133
Nesbitt Burns	26,102,011	358,542	0.0137
Cantor Fitzgerald & Company	12,108,235	233,381	0.0193
Goldman Sachs & Company	13,473,522	231,148	0.0172
Barclays Capital, Inc.	11,528,753	163,896	0.0142
Credit Suisse Securities (USA) LLC	23,010,834	151,243	0.0066
State Street Global Markets, LLC	55,317,156	143,716	0.0026
Morgan Stanley and Company Incorporated	10,325,271	116,143	0.0112
Merrill Lynch, Pierce, Fenner, and Smith Inc.	4,873,519	114,110	0.0234
J.P. Morgan Securities, Inc.	3,953,188	105,413	0.0267
Knight Equity Markets, LP	4,948,944	101,207	0.0205
Citigroup Global Markets, Inc.	7,833,553	94,053	0.0120
Canaccord Genuity Corporation	7,147,821	88,952	0.0124
JonesTrading Institutional Services, LLC	3,910,928	82,412	0.0211
Raymond James and Associates Incorporated	5,158,783	114,994	0.0223
Bloomberg Tradebook, LLC	4,979,904	63,271	0.0127
RBC Capital Markets	2,967,694	60,566	0.0204
CIBC World Markets, Inc.	3,853,329	57,777	0.0150
Scotia Capital, Inc.	3,863,137	50,411	0.0130
Instinet Pacific Limited	5,022,388	43,135	0.0086
Craig-Hallum Capital Group LLC	2,039,032	42,941	0.0211
Pershing LLC	2,855,910	40,222	0.0141
Weeden & Company	1,114,542	39,960	0.0359
UBS Securities, LLC	1,824,582	38,713	0.0212
J.P. Morgan Clearing Corporation	1,604,918	36,667	0.0228
Subtotal (25 Largest)	272,695,007	3,274,704	0.0120
Remaining Total	128,709,438	1,176,314	0.0091
<b>Total Commissions</b>	<b>401,404,445</b>	<b>\$ 4,451,018</b>	<b>0.0111</b>

## MERS INVESTMENT MENU SUMMARY FOR THE DEFINED CONTRIBUTION PROGRAM, HYBRID (PART II) PLAN, HEALTH CARE SAVINGS PROGRAM, AND 457 SUPPLEMENTAL RETIREMENT PROGRAM FOR PARTICIPANTS; AND RETIREE HEALTH FUNDING VEHICLE AND INVESTMENT SERVICES PROGRAM FOR MUNICIPAL EMPLOYERS

The Board, together with MERS' Office of Investments, selects the menu of investment options for the MERS' Defined Contribution Program, Hybrid Plan (Part II), Health Care Savings Program, and 457 Supplemental Program (Participant Directed Accounts) and Retiree Health Funding Vehicle and Investment Services Program (Institutional Funds). In addition, the Board establishes and maintains investment guidelines, approves any material changes, and directs staff to help participants with investment education.

The MERS Investment Menu is divided into three categories consisting of Retirement Strategies, Premium Select Options, and a Self-Directed Brokerage Account. The availability of the investment options in these categories is dependent on the plan of which a participant or municipality partakes.

### Retirement Strategies

Retirement Strategies, also known as Target Date Funds, are complete, diversified investment options whose asset allocation changes as the participants move toward and through retirement. They provide diversification across asset types and styles while managing volatility and disciplined rebalancing through active management. Retirement Strategies are the default investment selection for the Defined Contribution Program, Hybrid (Part II), and the 457 Deferred Compensation Program. Retirement Strategies is also available as an investment option in the Health Care Savings Program.

### Premium Select Options

Premium Select Options are investment portfolios that are either constructed from portions of the MERS Total Market Fund or are portfolios managed by external managers outside of the MERS Total Market Fund.

### Self-Directed Brokerage Account

The Self-Directed Brokerage Account offers access to a broader selection of funds. This option has requirements that are needed for participants to be eligible to use as well as a minimum account balance. Further description of the brokerage account can be found in the Understanding the MERS Investment Menu Summary on the MERS website at [www.mersofmich.com/investments](http://www.mersofmich.com/investments). The Brokerage Account is not available for the MERS Health Care Savings Program.

In 2014, MERS restructured the investment menu for all Participant Directed Accounts and Institutional Funds. This change consolidated investment options to a more manageable number for the benefit of MERS' participants and expanded the number of investment options of the Institutional Funds from the original four to a total of thirteen options for employers. Below is a list of the investment menu for both Participant Directed Accounts and Institutional Funds. For performance and fee information of individual funds, please review the MERS Investment Summary, which is updated on a quarterly basis and available on the MERS website at [www.mersofmich.com/investments](http://www.mersofmich.com/investments). A full description of each investment option can also be found on the MERS website.

## Participant Directed Accounts

**1 Retirement Strategies**

2005 Retirement Strategy  
 2010 Retirement Strategy  
 2015 Retirement Strategy  
 2020 Retirement Strategy  
 2025 Retirement Strategy  
 2030 Retirement Strategy  
 2035 Retirement Strategy  
 2040 Retirement Strategy  
 2045 Retirement Strategy  
 2050 Retirement Strategy  
 2055 Retirement Strategy  
 2060 Retirement Strategy

**2 Premium Select Options***Portfolios Built for You*

MERS Total Market Portfolio  
 MERS Global Stock Portfolio (100/0)  
 MERS Capital Appreciation Portfolio (80/20)  
 MERS Established Market Portfolio (60/40)  
 MERS Balanced Income Portfolio (40/60)  
 MERS Capital Preservation Portfolio (20/80)  
 MERS Diversified Bond Portfolio (0/100)

*Funds to Build Your Own Portfolio*

Large Cap Stock Index  
 Mid Cap Stock Index  
 Small Cap Stock Index  
 Emerging Market Stock  
 International Stock Index  
 Real Estate Stock  
 Bond Index  
 High-Yield Bond  
 Short-Term Income  
 Stable Value (DC Only)

**3 Self-Directed Brokerage Account**

TD Ameritrade (DC & 457 Only)

## Institutional Funds

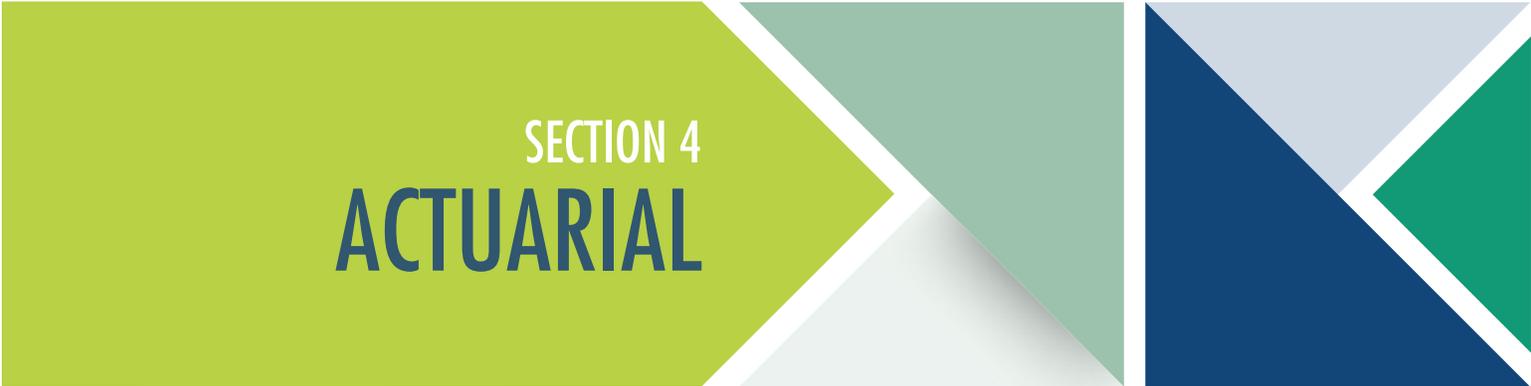
*Portfolios Built for You*

MERS Total Market Portfolio  
 MERS Global Stock Portfolio (100/0)  
 MERS Capital Appreciation Portfolio (80/20)  
 MERS Established Market Portfolio (60/40)  
 MERS Balanced Income Portfolio (40/60)  
 MERS Capital Preservation Portfolio (20/80)  
 MERS Diversified Bond Portfolio (0/100)

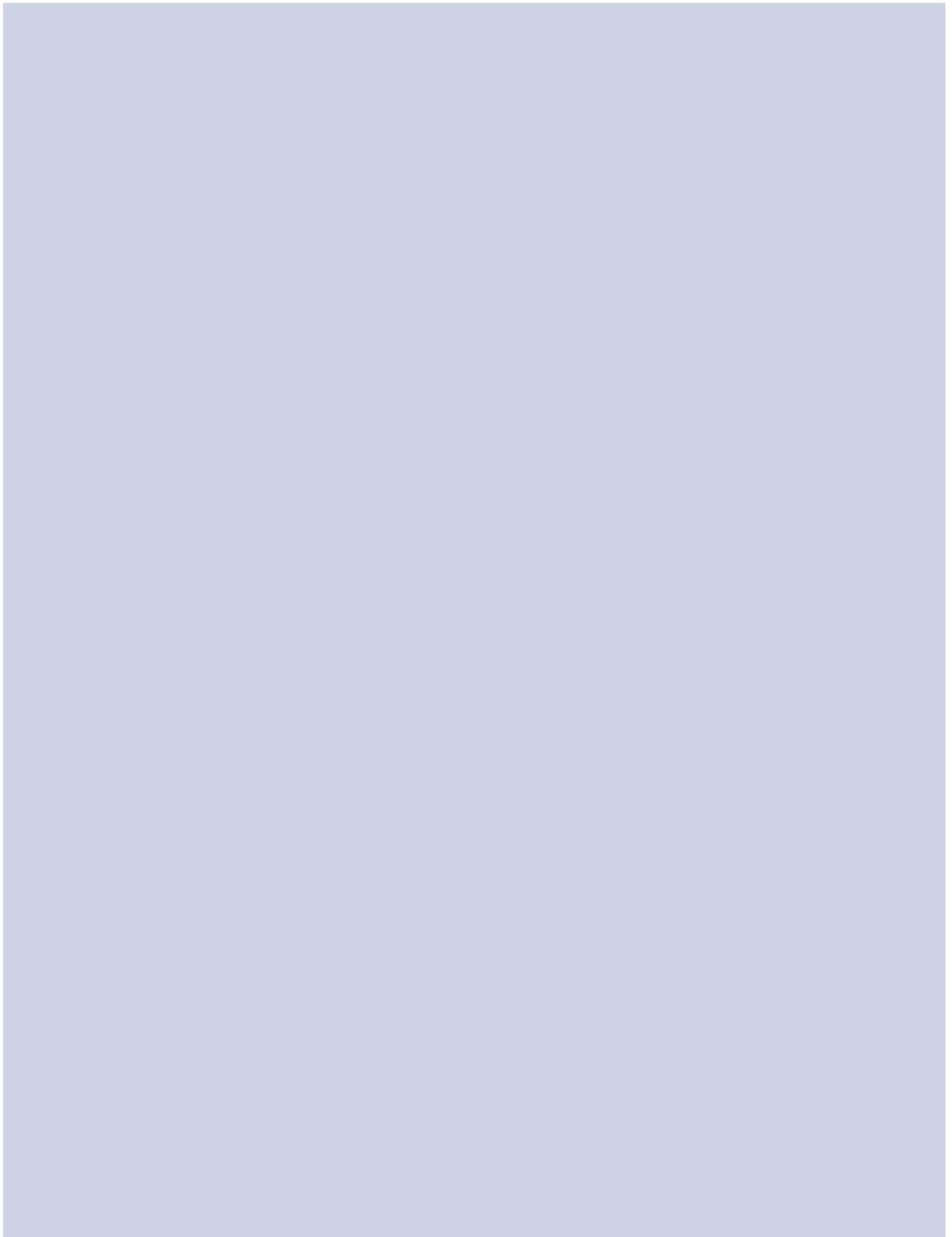
*Funds to Build Your Own Portfolio*

Large Cap Stock Index  
 Mid Cap Stock Index  
 Small Cap Stock Index  
 Emerging Market Stock  
 International Stock Index  
 Short-Term Income

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SECTION 4  
**ACTUARIAL**





**CBIZ Retirement Plan Services**

CBIZ Benefits & Insurance Services, Inc.  
17187 N. Laurel Park Dr., Ste. 250  
Livonia, MI 48152  
<http://retirement.cbiz.com>

September 15, 2014

The Retirement Board  
Municipal Employees' Retirement System of Michigan  
1134 Municipal Way  
Lansing, Michigan 48917

Dear Board Members:

The basic financial objective of the Municipal Employees' Retirement System of Michigan (MERS) is to establish and receive contributions for each municipality and court which:

- (1) fully cover the cost of benefits that members earn during the coming fiscal year, and
- (2) amortize the unfunded costs of benefits earned based on past service, and which
- (3) when combined with present assets and future investment return will be sufficient to meet the financial obligations, of each municipality and court under MERS, to present and future retirees and beneficiaries.

In order to measure progress toward this fundamental objective, MERS has annual actuarial valuations completed. Separate actuarial valuations are prepared for each participating municipality and court. The purpose of the December 31, 2013 annual actuarial valuations was to (i) measure MERS' funding progress, (ii) establish contribution requirements for fiscal years beginning in 2015 that provide for the normal cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered) and amortization of unfunded actuarial accrued liabilities over a reasonable period (generally 25 years), and (iii) provide actuarial information in connection with applicable Governmental Accounting Standards Board statements. The valuations should not be relied upon for any other purpose. The valuations were completed based upon population data, asset data, and plan provision data as of December 31, 2013.

The actuarial valuations are based upon financial data, plan provision data, and participant data which are prepared by MERS' administrative staff. We checked the data for internal and year-to-year consistency as well as general reasonableness, 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 MERS' administrative staff. The actuary summarizes and tabulates population data in order to analyze long term trends. MERS' external auditor audits the actuarial data annually.

This letter was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This letter may be provided to parties other than the System only in its entirety and only with the permission of the System.

Retirement Board  
September 15, 2014  
Page 2 of 3

Actuarial valuations are based on assumptions regarding future rates of investment return and inflation, rates of retirement, withdrawal, death, disability, and pay increase among MERS members and their beneficiaries. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. The assumptions and methods comply with the requirements of Governmental Accounting Standards Board Statement No. 25. The demographic assumptions adopted by the Retirement Board were based upon the actual experience of MERS during the years 2004 to 2008.

The economic assumptions were last revised by the Board for the December 31, 2012 annual valuations. Future actuarial valuation results may differ significantly from those presented in the annual valuations due to such factors as experience differing from that anticipated by the actuarial assumptions, or changes in plan provisions, actuarial assumptions/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.

Assets are valued on a market related basis that fully recognizes expected investment return and averages unanticipated market return over a 10-year period.

Based on the actuarial valuations, MERS' staff prepared the following supporting schedules in the Comprehensive Annual Financial Report:

#### Financial Section

- Schedule of Funding Progress
- Schedule of Employer Contributions

#### Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Annual Percentage Increase in Salary
- Rates of Withdrawal (Excluding Death or Disability)
- Retirement Rates
- Rates of Withdrawal Due to Disability
- Mortality Tables
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added To and Removed From Rolls
- Solvency Test
- Summary of Plan Document Provisions

#### Statistical Section

- Schedule of Average Benefit Payments – Defined Benefit Plan
- Schedule of Retired Members by Type of Option Selected – Defined Benefit Plan
- Schedule of Retired Members by Type of Benefit – Defined Benefit Plan

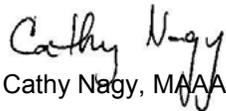
Retirement Board  
September 15, 2014  
Page 3 of 3

To the best of our knowledge, the actuarial valuations are complete and accurate and are made in accordance with generally recognized actuarial methods, in compliance with Act No. 220 of the Public Acts of 1996, as amended, and the MERS plan document, as revised. All of 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. The actuarial assumptions used in the December 31, 2013 annual actuarial valuation reports produce results that we believe are reasonable.

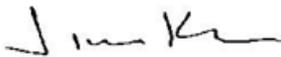
Respectfully submitted,



Alan E. Sonnanstine, MAAA, ASA



Cathy Nagy, MAAA, FSA



W. James Koss, MAAA, ASA

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

An actuarial valuation is the mathematical process that estimates plan liabilities and employer contribution requirements for the purpose of financing the Retirement System. This process is repeated annually to update the liabilities and contribution requirements for changes in member census and plan features, and to reflect actual plan experience in the process. The valuation reflects the current language of the Municipal Employees' Retirement Act of 1984, as last amended by Public Act 490 of 2004, embodied in the MERS Plan Document (as revised).

In addition to using current membership and financial data, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events. The assumptions and methods used in the December 31, 2013, actuarial valuations are those adopted by the MERS Retirement Board (Board). The actuarial assumptions were last revised as of December 31, 2013. The most recent experience study for the System was completed in March 2010, and covered the period from January 1, 2004, through December 31, 2008.

There have been no changes in the funding method that was adopted by the Board commencing with the December 31, 1993, valuations. The basic funding method is entry age normal, and employer contribution amounts are developed as a level percentage of payroll.

Valuation assets (cash and investments) were valued for each municipality using a 10-year smoothing method. For the 2006 valuation and later, 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) that is spread over 10 years. (Board adopted in 2006.)

The employer contribution rate has been determined for each municipality based on the entry age normal funding method (adopted 1994). Under the entry age normal cost funding method, the total employer contribution is comprised of the normal cost plus the level annual percentage of payroll payment required to amortize the unfunded actuarial accrued liability over a period of 26 years. The 26-year period will decline by one year in each of the following six

annual valuations until it reaches 20 years with the December 31, 2018, valuation. For closed divisions (new hires are not covered by the MERS Defined Benefit Plan or Hybrid provisions in a linked division) of active municipalities, the amortization period for positive unfunded liabilities is decreased annually by two years until the period reaches five years. Negative unfunded accrued liabilities are amortized over 10 years. The total normal cost is, for each active member, the level percentage of payroll contribution (from entry age to retirement) required to accumulate sufficient assets at the member's retirement to pay for his or her projected benefit. The employer normal cost is the total normal cost reduced by the member contribution rate. Closed municipalities (no longer actively participating in MERS) are covered by special funding.

For employers that adopt E-1 or E-2 post-retirement benefit increases, retirement benefits are assumed to increase by an annual, non-compounded rate of 2.5%. (Board adopted in 1981.)

There have been no recent changes that have had an impact on the System. Municipalities have the ability to modify provisions that apply to their individual plan. The individual municipality contribution rates are modified to account for changes in provisions of the plan selected by the municipality.

MERS' staff has provided the data about persons currently covered and present assets. Although examined for general reasonableness, the actuary has not audited the data. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The Board adopted the assumptions used in the actuarial valuations after consulting with the actuary.

Details on MERS' provisions, actuarial assumptions, and actuarial methodology follow this section.

Note: the Annual Actuarial Valuation addresses assets and liabilities for participation under the MERS Defined Benefit Plan, including the defined benefit portion (Part I) of the Hybrid Plan. The defined contribution portion of the Hybrid Plan (Part II) is not addressed in the valuation results as it is not a defined benefit program.

## ASSUMPTIONS AND METHOD CHANGES

The December 31, 2013, actuarial valuation reflects the following changes in the actuarial assumptions:

- The minimum funding requirement for poorly funded closed divisions is fully phased in.

### Actuarial Assumptions

To calculate MERS' contribution requirements, assumptions are made about future events that could affect the amount and timing of benefits to be paid, and the assets to be accumulated. The economic and demographic assumptions include:

- An assumed rate of investment return used to discount liabilities and project what plan assets will earn.
- A mortality table projecting the number of members who will die before retirement, and the duration of benefit payments after retirement.
- Assumed retirement rates projecting when members will retire and commence receiving retirement benefits.
- A set of withdrawal and disability rates to estimate the number of members who will leave the workforce before retirement.
- Assumed rate of pay increases to project member compensation in future years.

### Interest Rate

Funding plan benefits involves the accumulation of assets to pay benefits in the future. These assets are

invested, and the net rate of investment earnings is a significant factor when determining the contributions required to support the ultimate cost of benefits. For the 2013 actuarial valuation, the long-term investment yield, net of administrative and investment expenses, is assumed to be 8%. This assumption was first used for the December 31, 1981, actuarial valuation. The reader should note that, given that the actuarial value of assets is currently 6% higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 8% investment return assumption.

### Pay Increases

Because benefits are based on a member's final average compensation (FAC), it is necessary to make an assumption with respect to each member's estimated pay progression. The pay increase assumption used in the actuarial valuation projects annual pay increases of 4.5% in the long term (1%, 2% and 3% for calendar years 2014, 2015, and 2016, respectively) plus a percentage based on an age-related scale to reflect merit, longevity and promotional pay increases.

The pay increase assumption for sample ages is shown below. The 4.5% long-term wage inflation assumption was first used for the December 31, 1997, actuarial valuation. The merit and longevity pay increase assumption was first used for the December 31, 2011, actuarial valuation.

### Annual Percentage Increase in Salary

Sample Ages	Base Inflation	Merit and Longevity	Total Percentage Increase in Salary
20	4.50%	13.00%	17.50%
25	4.50	6.80	11.30
30	4.50	3.26	7.76
35	4.50	2.05	6.55
40	4.50	1.30	5.80
45	4.50	0.81	5.31
50	4.50	0.52	5.02
55	4.50	0.30	4.80
60	4.50	0.00	4.50

\* For calendar years 2014, 2015, and 2016, the wage inflation assumption is 1%, 2% and 3%, respectively, instead of 4.5%. The 4.5% assumption was first used for the December 31, 1997, actuarial valuations.

### Inflation

Although no specific price inflation assumption is needed for this valuation, the 4.5% long-term wage inflation assumption would be consistent with a price inflation of 3% – 4%.

### Payroll Growth

For divisions that are open to new hires, the number of active members is projected to remain constant, and the total payroll is projected to increase 4.5% annually in the long term (1%, 2% and 3% annually for calendar years 2014, 2015 and 2016, respectively). The 4.5% assumption was first used for the December 31, 1997, actuarial valuations.

### Increase in Final Average Compensation

The 1999-2003 and 2004-2008 experience studies determined that for some retirees of some municipalities, the actual final average compensation (FAC) at retirement was larger than would be expected based on reported annual pays and FACs for the years just before retirement. Some possible sources for the differences are:

- Lump sum payments for unused paid time off. Unused sick leave payouts have been excluded from FAC since the mid 1970s. However, since that time it has become popular to combine sick and vacation time into paid time off, which is included

in the FAC. Consequently, the lump sums that are includible in FAC have grown over the years.

- Extra overtime pay during the final year of employment. Our studies only reflect any increase in overtime during the final year, not any increase that occurs during the full three or more year averaging period.

The amount of unexpected FAC increase varies quite a bit between municipalities. Some municipalities show no sign of FAC loading, while other municipalities show increases above the average increase. This is presumably the result of different personnel policies among municipalities.

The Board adopted new FAC assumptions to be first used for the December 31, 2011, annual actuarial valuations. These assumptions reflect an FAC load of 0% to 8% for each municipality, based on the municipality's experience. The FAC increase assumption(s) for each municipality are shown in individual annual actuarial valuation reports. Note that for divisions that adopted Sick Leave in FAC (SLIF), the assumption is developed individually for each division based on the specific SLIF provision and/or past experience.

### Withdrawal Rates

The withdrawal rates are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability. The assumed rates of withdrawal applied in the current valuation are based on years of service and scaled up or down according to each division's experience.

Sample rates of withdrawal from active employment, prior to the scaling factor, are shown below. These rates were first used for the December 31, 2008, actuarial valuations.

The base withdrawal rates (see the table below) are multiplied by a scaling factor to obtain the assumed withdrawal rates. The scaling factor for each division is shown in each municipality's annual actuarial report.

### Rates of Withdrawal (Excluding Death or Disability) from Active Employment Before Retirement

Sample Years of Service	% of Active Members Withdrawing Within the Next Year
0	20.0%
1	17.0
2	14.0
3	11.0
4	9.0
5	6.5
10	5.0
15	3.7
20	3.0
25	2.7
30	2.6
34 and Over	2.4

## Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. The retirement rates for Normal Retirement are determined by each member's replacement index at the time of retirement. The replacement index is defined as the approximate percentage of the member's pay (after reducing member contributions) that will be replaced by the member's benefit at retirement. The index is calculated as:

$$\text{Replacement Index} = 100 \text{ multiplied by } \frac{\text{Accrued Benefit}}{\text{Pay} - \text{Member Contributions}}$$

Retirement rates for early reduced retirement are determined by the member's age at early retirement.

The revised normal retirement rates below were first used for the December 31, 2009, actuarial valuations. The early retirement rates were first used for the December 31, 2011, actuarial valuations.

### Normal Retirement – Service Based Benefit F(N) Adopted

Sample Replacement Index	Percent of Eligible Active Members Retiring Within Next Year
5	5%
10	11
15	16
20	19
25	20
30	20
35	20
40	20
45	20
50	20
55	21
60	22
65	24
70	24
75	28
80	32
85	38
90	45
95	48
100+	50

### Normal Retirement Early Retirement – Reduced Benefit

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
50	1.60%
51	1.60
52	2.30
53	3.30
54	4.50
55	3.50
56	3.25
57	3.00
58	4.50
59	5.75

*Municipalities that have adopted a non-standard benefit multiplier after December 31, 1996, that is in excess of the B-4, 2.5% multiplier, will have a retirement rate equal to 75% at the first age at which unreduced plan benefits are available.*

### Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years. The assumed rates of disablement at various ages are shown below. These rates were first used for the December 31, 2011, actuarial valuations.

*\* 85% of the disabilities are assumed to be non-duty, and 15% of the disabilities are assumed to be duty related. For those plans that have adopted disability provision D-2, 55% of the disabilities are assumed to be non-duty, and 45% are assumed to be duty related*

### Rates of Withdrawal Due To Disability

Sample Years of Service	Percent of Active Members Becoming Disabled Within Next Year
20	0.02%
25	0.02
30	0.02
35	0.06
40	0.06
45	0.11
50	0.24
55	0.60
60	0.60
65	0.60

### Mortality Tables

In estimating the amount of reserves required at retirement to pay a member's benefit for the remainder of their lifetime, it is necessary to make an assumption with respect to the probability of surviving to retirement, and the life expectancy after retirement.

The mortality table used to project the mortality experience of plan members is a 50% male/50% female blend of the 1994 Group Annuity Mortality Table. For disabled retirees, the regular mortality

table is used with a 10-year set forward in ages to reflect the higher expected mortality rates of disabled members. These mortality tables were first used for the December 31, 2004, actuarial valuations.

It is assumed that 90% of active members' deaths are non-duty and 10% of deaths are assumed to be duty related.

Possible future mortality improvements are reflected in the mortality assumption.

#### Mortality Tables (Non – Disabled)

Age	Expected Years of Life Remaining	Mortality Rates
20	61.55	0.04%
25	56.68	0.05
30	51.82	0.06
35	46.97	0.07
40	42.13	0.09
45	37.34	0.13
50	32.60	0.20
55	27.98	0.34
60	23.53	0.62
65	19.40	1.16
70	15.66	1.87
75	12.24	2.99
80	9.25	5.07

#### Mortality Tables (Disabled)

Age	Expected Years of Life Remaining	Mortality Rates
20	51.82	0.06%
25	46.97	0.07
30	42.13	0.09
35	37.34	0.13
40	32.60	0.20
45	27.98	0.34
50	23.53	0.62
55	19.40	1.16
60	15.66	1.87
65	12.24	2.99
70	9.25	5.07
75	6.81	8.25
80	4.85	13.46

## Schedule of Active Member Valuation Data

Valuation Dec. 31	Participating Municipalities	Active Members	Active Members Annual Payroll	Annual Average Pay	Percent Increase in Average Pay	Persons on Deferred Status
2004	615	36,766	\$ 1,437,211,517	\$ 39,091	5.2%	5,804
2005	644	36,467	1,462,411,810	40,102	2.6	6,126
2006	668	36,846	1,545,886,480	41,955	4.6	6,235
2007	683	36,518	1,581,597,937	43,310	3.2	6,438
2008	692	36,092	1,624,855,145	45,020	3.9	6,662
2009	699	35,598	1,636,501,282	45,972	2.1	6,726
2010	715	35,816	1,683,983,258	47,018	2.3	6,961
2011	721	35,111	1,669,676,476	47,554	1.1	7,160
2012	726	34,187	1,640,390,877	47,983	0.9	7,262
2013	728	34,809	1,687,391,045	48,476	1.0	7,620

## Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Valuation Dec. 31	Added to Rolls		Removed From Rolls	
	Retirees/ Beneficiaries Number	Annual Benefit	Retirees/ Beneficiaries Number	Annual Benefit
2004	1,553	\$ 32,303,049	725	\$ 6,669,694
2005	1,666	32,839,907	782	7,000,257
2006	2,071	38,752,141	762	4,291,133
2007	2,030	36,947,384	894	5,928,199
2008	2,015	43,573,642	783	5,156,426
2009	1,871	36,164,024	773	4,545,379
2010	2,809	67,149,443	809	9,250,641
2011	2,212	50,594,419	940	11,072,125
2012	2,348	53,957,105	811	9,477,177
2013	3,578	73,762,997	857	11,138,379

Valuation Dec. 31	End-of-Year Rolls			
	Retirees/ Beneficiaries Number	Annual Benefit	% Increase in Annual Benefit	Average Annual Benefit
2004	19,271	\$ 262,221,987	10.8%	\$ 13,607
2005	20,155	288,061,637	9.9	14,292
2006	21,464	322,522,645	12.0	15,026
2007	22,600	353,541,830	9.6	15,643
2008	23,832	391,959,046	10.9	16,447
2009	24,930	423,577,691	8.1	16,991
2010	26,930	481,476,493	13.7	17,879
2011	28,202	520,998,787	8.2	18,474
2012	29,739	565,478,715	8.5	19,015
2013	32,460	628,103,333	11.1	19,350

## SUMMARY OF PLAN DOCUMENT PROVISIONS

There were no recent changes in the nature of the Plan that would have a material impact on the actuarial valuations for December 31, 2013. Pursuant to a collective bargaining agreement, a participating municipality may provide for retirement benefits that are modifications of standard retirement benefits otherwise included, although the Hybrid Plan is not modifiable. The actuary took the known modifications into consideration when determining the municipality contribution rates in the December 31, 2013, actuarial valuation.

The benefits summarized in this section are intended only as general information regarding the Municipal Employees' Retirement System. The Comprehensive Annual Financial Report and valuation are not a substitute for the language of the MERS Act and the MERS Plan Document, as revised. If any conflict occurs between the information in this summary and the MERS Act or the MERS Plan Document, as revised, the provision of the Act and the MERS Plan Document govern.

The December 31, 2013, actuarial valuation was based on the provisions of the MERS Plan Document.

### Defined Benefit Plan

#### Eligibility for Retirement

Monthly retirement payments are made over the lifetime of the retiree and/or over the lifetime of the beneficiary. Payments are based on the choice of benefits adopted by each municipality, and the final payment option elected by the retiring member.

Vesting occurs after 10 years of credited service unless the municipality selects a lesser number of years.

Normal retirement for a member occurs after vesting and attaining age 60. The municipality may choose other combinations of age and service such as age 55 and 15 years of service, age 50 and 25 years of service, etc.

Early retirement benefits are available if the vested member meets either the age 55 with 15 years of service or age 50 with 25 years of service eligibility requirements. The monthly payment is reduced (unless waived by the municipality) for each month the member is younger than the age the unreduced retirement benefits are available.

#### Benefit Formula

The annual benefit equals a specified percentage of the member's final average compensation, multiplied

by the number of years and months of credited service. The plan has several benefit multipliers available. The benefit multipliers vary and are adopted by a participating municipality.

#### Mandatory Retirement

There is no mandatory retirement age.

#### Deferred Retirement

Deferred retirement occurs when an employee leaves MERS covered employment after vesting, but before reaching the minimum retirement age. The member or beneficiary will become eligible for the deferred allowance once they reach the minimum retirement age. However, the member's contributions must remain on deposit with MERS.

#### Maximum Benefit Payable by MERS

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code. Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan under Plan Section 55A.

#### Act 88 (Reciprocal Retirement Act)

If a municipality elects to come under the provision of Act 88, service with former and future public

employers in Michigan may be used to satisfy the service eligibility conditions of MERS.

#### **Final Average Compensation**

Final average compensation (FAC) is the highest monthly average of a member's compensation over a consecutive period of months of credited service. The municipality selects the number of months. A FAC-3 is over a 36-month period, and a FAC-5 is over a 60-month period. The compensation used in calculating the final average compensation cannot exceed the limit set by Internal Revenue Code Section 401(a)(17).

#### **Disability Retirement Allowance – Duty or Non-Duty**

Duty disability is available to a member who becomes totally and permanently disabled while employed by a participating municipality, and after meeting the vesting requirement of the benefit program. The service requirement is waived if the disability is the natural and proximate result of duty-related causes.

The allowance is computed in the same manner as a service retirement allowance, except that the reduction for retirement before age 60 is not applied.

If disability is due to duty-connected causes, the amount of the retirement allowance shall not be less than 25% of the member's final average compensation.

#### **Death Allowance – Duty or Non-Duty**

If a member or vested former member with the minimum years of service required to be vested dies before retirement, a monthly survivor allowance may be made payable. If the member is married, the spouse is the automatic beneficiary unless the spouse, in writing, declines a benefit in favor of another named beneficiary.

A contingent survivor beneficiary will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at death, but reduced to reflect an Option II election. The reduction for

retirement before age 60 is not applied. Payment to the contingent survivor beneficiary of a deceased member commences immediately. Payment to the contingent survivor beneficiary of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance.

If there is no named beneficiary and the member leaves a spouse, the spouse will receive an Option II survivor allowance. The amount shall be 85% of the deceased member's or the deceased former vested member's accrued retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at the time of death. Payment to the surviving spouse of a deceased member commences immediately. Payment to the contingent surviving spouse of a deceased former vested member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance. The amount of a surviving spouse's benefit is always the larger of (1) the benefit computed as a contingent survivor beneficiary, and (2) the 85% of accrued retirement allowance benefit described above. If there is no named beneficiary and no retirement allowance being paid to a surviving spouse, unmarried children under 21 will be paid an equal share of 50% of the deceased member's or the deceased former vested member's accrued retirement allowance. The reduction for retirement before age 60 is not applied.

If no retirement benefits are payable on death, the beneficiary or the decedent's estate would receive a refund of the employee's contributions.

A duty death allowance, computed in the same manner as a non-duty death allowance, may be payable to a spouse or child(ren) if death occurs as the natural and proximate result of performance of duty with a participating municipality. The vesting requirement is waived, and the minimum benefit is 25% of the deceased member's final average compensation.

### Member Contributions

Each member may contribute a percentage of their annual compensation, if selected by the municipality, up to the compensation limit under Section 401(a)(17) of the Internal Revenue Code. Interest is credited to accumulated member contributions each December 31 at a rate determined by MERS. Currently MERS is using the one-year U.S. Treasury bill rate determined as of December 31.

If a member leaves the municipality, or dies without a retirement allowance or other benefit payable on their account, the member's accumulated contributions plus interest are refunded with spousal consent to the member, if living, or to the member's surviving spouse or a named beneficiary.

### Post-Retirement Adjustments

Each municipality may elect to provide post-retirement adjustments to retirees and their beneficiaries. The municipality can choose a one-time adjustment, an annual adjustment for all retirees or, an adjustment for future retirees only. This cost-of-living adjustment (COLA) increase is effective in January of each year.

### Forms of Benefit Payment

The member elects a payment option as part of the retirement application process. Once the election is made, the selection is irrevocable after receipt of first payment. The payment options include:

1. Straight Life over the retiree's life only.
2. A reduced benefit to cover retiree and beneficiary as long as either lives.
3. A reduced benefit to cover retiree for their lifetime and further reduced to 75% or 50% of the original reduced amount to cover beneficiary (if the beneficiary outlives the retiree).
4. A reduced benefit for the retiree's life guaranteed for a specified number of years. The reduced benefit continues for the beneficiary even if the retiree dies, but terminates after the guaranteed number of years.

### Deferred Retirement Option Program (DROP+) Partial Lump Sum

Any member (covered or not covered by the Benefit Program DROP+) who is eligible to retire with full, immediate retirement benefits, has the option to retire and receive a monthly benefit payable immediately, or delay the retirement date and continue to work.

If a member is covered by the Benefit Program DROP+ and retires at least 12 months after first becoming eligible for unreduced benefits, they have the option to receive a partial lump sum and a reduced monthly benefit:

- The member can elect a lump sum equal to 12, 24, 36, 48, or 60 times their monthly accrued benefit.
- For each 12 months included in the lump sum, the member's lifetime benefit is reduced by the DROP+ percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: 4, 5, 6, 7, or 8%.

As of June 30, 2013, Benefit Program DROP+ may no longer be adopted.

## HYBRID PLAN

### Part I - Defined Benefit Portion of Hybrid Plan

#### Eligibility for Retirement

Monthly retirement payments are made over the lifetime of the retiree and/or over the lifetime of the beneficiary. Payments are based on the choice of benefits adopted by each municipality, and the final payment option elected by the retiring member.

Vesting occurs after six years of credited service.

Normal retirement for a member occurs after vesting and reaching age 60. (There is not a mandatory or early retirement provision.)

#### Benefit Formula

The annual benefit equals a specified percentage of the member's final average compensation multiplied by the number of years and months of credited service. Percentage options are 1.0, 1.25, and 1.5%, and may be selected by a participating municipality.

#### Mandatory Retirement

There is no mandatory retirement age.

#### Deferred Retirement

Deferred retirement occurs when an employee leaves MERS covered employment after vesting, but before reaching the minimum retirement age. The member or beneficiary will become eligible for the deferred allowance once they reach the minimum retirement age. However, the member's contributions must remain on deposit with MERS.

#### Maximum Benefit Payable by MERS

Section 415 of the Internal Revenue Code governs the maximum benefit that may be paid by MERS. Benefits in excess of the maximum benefit will be paid by the MERS Excess Benefit Plan.

#### Act 88 (Reciprocal Retirement Act)

If the municipality has elected to come under the provision of Act 88, service with former and future public employers in Michigan may be used to satisfy the service eligibility conditions of MERS.

#### Final Average Compensation

Final average compensation (FAC) is computed using the FAC-3 under the Defined Benefit Plan. The compensation used in calculating final average compensation cannot exceed the limit set by Internal Revenue Code Section 401(a)(17).

#### Disability Benefit – Duty or Non-Duty

Benefits are the same as are provided in the Defined Benefit Plan, except that optional benefit program D-2 does not apply.

#### Death Allowance – Duty or Non-Duty

Benefits are the same as are provided in the Defined Benefit Plan, except that the optional benefit program D-2 does not apply.

#### Member Contributions

Each member may contribute a percentage of their annual compensation, if selected by the municipality, up to the compensation limit under Section 401(a)(17) of the Internal Revenue Code. Interest is credited to accumulated member contributions each December 31 at a rate determined by MERS. Currently MERS is using the one-year U.S. Treasury bill rate determined as of December 31.

If a member leaves the municipality, or dies without a retirement allowance or other benefit payable on their account, the member's accumulated contributions plus interest are refunded with spousal consent to the member, if living, or to the member's surviving spouse or a named beneficiary.

#### Post-Retirement Adjustments

There are no post-retirement adjustments within the Hybrid Plan.

### Forms of Benefit Payment

The member elects a payment option as part of the retirement application process. Once the election is made, the selection is irrevocable after receipt of the first payment. The payment options include:

1. Straight Life over the retiree's life only.
2. A reduced benefit to cover retiree and beneficiary as long as either lives.
3. A reduced benefit to cover retiree for their lifetime, and further reduced to 75% or 50% of the original reduced amount to cover beneficiary (if the beneficiary outlives the retiree).

4. A reduced benefit for the retiree's life guaranteed for a specified number of years. The reduced benefit continues for the beneficiary even if the retiree dies, but terminates after the guaranteed number of years.

### Deferred Retirement Option Program (DROP+) Partial Lump Sum

There is no DROP+ option in the Hybrid Plan.

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## PART II - DEFINED CONTRIBUTION PORTION OF HYBRID PLAN

### Contributions — Employer

Any percentage of compensation that is allowed by federal law.

There are three optional vesting schedules for an employer to adopt:

- Immediate vesting upon participation,
- 100% vesting after stated years (the maximum vesting period is five years), or
- Graded vesting percentages per year of service (must be 100% vested after six years).

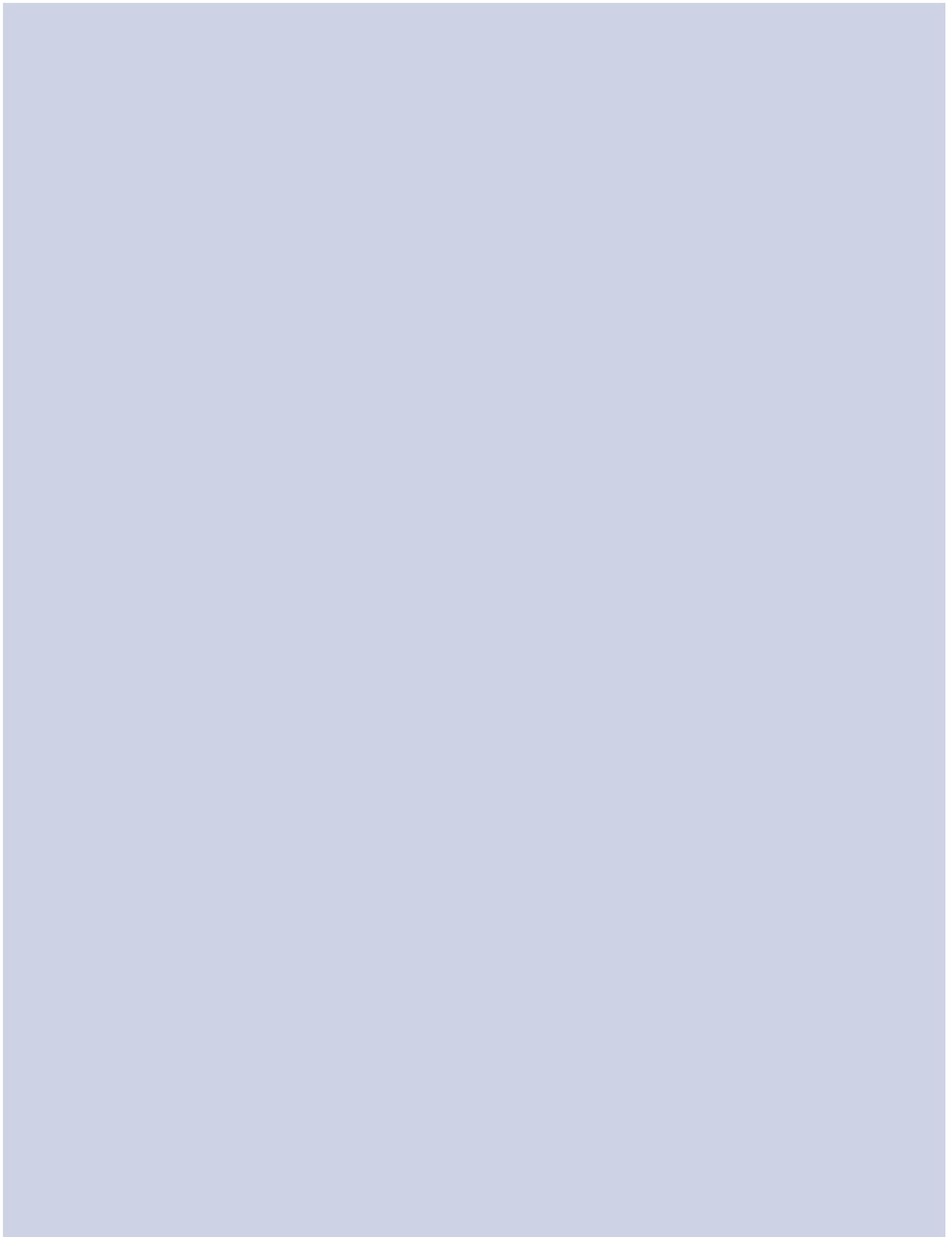
### Contributions — Member

Any percentage of compensation that is allowed by federal law and subject to procedures established by the Retirement Board. Member contributions are vested immediately.

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SECTION 5  
**STATISTICAL**



## STATISTICAL SECTION

The Statistical Section provides pertinent information to assist readers when viewing the Financial Statements, Notes to the Financial Statements, and Required Supplementary Information to help in understanding and assessing the System's overall financial condition. The information reported here is in compliance with GASB Statement 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements for the supplementary information provided in this section.

The schedules and graphs beginning on the next page show financial trend information about the growth of MERS assets for the past 10 years. These schedules provide detailed information about the trends of key sources of additions and deductions to the System's

assets, and assist in providing a context framing of how MERS' financial position has changed over time. The financial trend schedules presented are:

- Changes in Fiduciary Net Position – Last 10 Years
- Schedule of Changes in Reserves

The next schedules show demographic, economic, operating, and trend information about the MERS environment.

- Schedule of Average Benefit Payments
- Schedule of Benefit Expenses by Type
- Schedule of Retired Members by Type of Benefit
- Schedule of Retired Members by Type of Option Selected
- Defined Contribution Plan Participants and total MERS Participants

## Changes in Fiduciary Net Position – Last 10 Years Ended December 31, 2014 (Dollars in Thousands)

	2005	2006	2007	2008
<b>DEFINED BENEFIT PLAN</b>				
<b>Additions:</b>				
Plan Member Contributions	\$ 71,325	\$ 84,124	\$ 61,772	\$ 64,871
Employer Contributions	207,124	286,228	320,204	310,717
Net Investment Gain (Loss)	299,780	634,950	456,280	(1,533,327)
<b>Total Additions to Plan Net Position</b>	<b>578,229</b>	<b>1,005,302</b>	<b>838,256</b>	<b>(1,157,739)</b>
<b>Deductions:</b>				
Benefits and Employee Refunds	278,327	309,635	347,470	379,401
Administrative Expenses	11,557	12,540	13,904	16,365
Special Expenses & Fees	399	526	588	571
<b>Total Deductions from Plan Net Position</b>	<b>290,283</b>	<b>322,701</b>	<b>361,962</b>	<b>396,337</b>
<b>Net Increase (Decrease)</b>	<b>287,946</b>	<b>682,601</b>	<b>476,294</b>	<b>(1,554,076)</b>
<b>Net Position</b>				
Balance Beginning of Fiscal Period	4,619,496	4,907,442	5,590,043	6,066,337
<b>Balance End of Fiscal Period</b>	<b>\$4,907,442</b>	<b>\$ 5,590,043</b>	<b>\$ 6,066,337</b>	<b>\$ 4,512,261</b>
<b>DEFINED CONTRIBUTION PLAN</b>				
<b>Additions:</b>				
Plan Member Contributions	\$4,733	\$5,632	\$6,995	\$6,978
Employer Contributions	16,351	24,765	19,816	20,147
Net Investment Gain (Loss)	8,427	19,196	13,411	(61,679)
<b>Total Additions to Plan Net Position</b>	<b>29,511</b>	<b>49,593</b>	<b>40,222</b>	<b>(34,554)</b>
<b>Deductions:</b>				
Benefits	9,482	10,591	12,764	12,406
Administrative Expenses				
<b>Total Deductions from Plan Net Position</b>	<b>9,482</b>	<b>10,591</b>	<b>12,764</b>	<b>12,406</b>
<b>Net Increase (Decrease)</b>	<b>20,029</b>	<b>39,002</b>	<b>27,458</b>	<b>(46,960)</b>
<b>Net Position</b>				
Balance Beginning of Fiscal Period	144,084	164,113	203,115	230,573
<b>Balance End of Fiscal Period</b>	<b>\$ 164,113</b>	<b>\$ 203,115</b>	<b>\$ 230,573</b>	<b>\$ 183,613</b>
<b>HEALTH CARE SAVINGS PROGRAM</b>				
<b>Additions:</b>				
Employer Contributions	\$ 2,872	\$ 2,301	\$ 2,927	\$ 10,127
Net Investment Gain (Loss)	165	753	719	(4,604)
Miscellaneous Income	8	92	96	162
<b>Total Additions to Plan Net Position</b>	<b>3,045</b>	<b>3,146</b>	<b>3,742</b>	<b>5,685</b>
<b>Deductions:</b>				
Medical Disbursements Paid	52	145	328	462
Forfeitures and transfers		104	118	212
Administrative Expenses	250	197	244	360
<b>Total Deductions from Plan Net Position</b>	<b>302</b>	<b>446</b>	<b>690</b>	<b>1,034</b>
<b>Net Increase (Decrease)</b>	<b>2,743</b>	<b>2,700</b>	<b>3,052</b>	<b>4,651</b>
<b>Net Assets Held in Trust</b>				
Balance Beginning of Fiscal Period	1,323	4,066	6,766	9,818
<b>Balance End of Fiscal Period</b>	<b>\$ 4,066</b>	<b>\$ 6,766</b>	<b>\$ 9,818</b>	<b>\$ 14,469</b>

The Changes in Fiduciary Net Position over the last 10 years chart shows contributions being received from municipalities, investment gains/losses and disbursements to retirees/municipalities. Some products have been in existence for less than 10 years.

2009	2010	2011	2012	2013	2014
\$ 62,677	\$ 83,573	\$ 64,790	\$ 73,133	\$ 88,410	\$ 102,446
350,737	341,354	298,328	783,292	409,563	523,372
789,800	754,011	130,115	668,303	988,639	501,254
<b>1,203,214</b>	<b>1,178,938</b>	<b>493,233</b>	<b>1,524,728</b>	<b>1,486,612</b>	<b>1,127,072</b>
419,576	461,204	505,854	565,695	662,708	707,268
18,793	20,951	22,070	24,412	20,271	17,804
461	389	444	71	71	18
<b>438,830</b>	<b>482,544</b>	<b>528,368</b>	<b>590,178</b>	<b>683,050</b>	<b>725,090</b>
<b>764,384</b>	<b>696,394</b>	<b>(35,135)</b>	<b>934,550</b>	<b>803,562</b>	<b>401,982</b>
4,512,261	5,276,645	5,973,039	5,937,904	6,872,454	7,676,016
<b>\$ 5,276,645</b>	<b>\$ 5,973,039</b>	<b>\$5,937,904</b>	<b>\$ 6,872,454</b>	<b>\$7,676,016</b>	<b>\$ 8,077,998</b>
\$8,086	\$8,694	\$ 10,376	\$ 1,997	\$ 20,370	20,805
21,994	26,374	22,079	40,103	42,706	26,112
39,951	28,971	1,862	38,552	63,614	25,208
<b>70,031</b>	<b>64,039</b>	<b>34,317</b>	<b>80,652</b>	<b>126,690</b>	<b>72,125</b>
8,868	10,902	19,901	18,532	26,021	63,304
		826	759	812	623
<b>8,868</b>	<b>10,902</b>	<b>20,727</b>	<b>19,291</b>	<b>26,833</b>	<b>63,927</b>
<b>61,163</b>	<b>53,137</b>	<b>13,590</b>	<b>61,361</b>	<b>99,857</b>	<b>8,198</b>
183,613	244,776	297,913	311,503	372,864	472,721
<b>\$ 244,776</b>	<b>\$ 297,913</b>	<b>\$ 311,503</b>	<b>\$ 372,864</b>	<b>\$ 472,721</b>	<b>\$ 480,919</b>
\$ 16,964	\$ 11,651	\$ 7,307	\$ 10,742	\$ 12,164	\$ 11,649
2,978	4,055	918	5,406	7,979	3,480
263	377				
<b>20,205</b>	<b>16,083</b>	<b>8,225</b>	<b>16,148</b>	<b>20,143</b>	<b>15,129</b>
512	890	1,474	1,787	2,316	3,011
322	458	16	300	723	469
159	(439)	717	144	125	163
<b>993</b>	<b>909</b>	<b>2,207</b>	<b>2,231</b>	<b>3,164</b>	<b>3,643</b>
<b>19,212</b>	<b>15,174</b>	<b>6,018</b>	<b>13,917</b>	<b>16,979</b>	<b>11,486</b>
14,469	33,681	48,855	54,873	68,790	85,769
<b>\$ 33,681</b>	<b>\$ 48,855</b>	<b>\$ 54,873</b>	<b>\$ 68,790</b>	<b>\$ 85,769</b>	<b>\$ 97,255</b>

**Changes in Fiduciary Net Position – Last 10 Years Ended December 31, 2014 (Dollars in Thousands)**

	2005	2006	2007	2008
<b>RETIREE HEALTH FUNDING VEHICLE</b>				
<b>Additions:</b>				
Employer Contributions	\$ 11,948	\$ 29,365	\$ 67,014	\$ 42,377
Net Investment Gain (Loss)	448	4,463	6,486	(32,642)
Miscellaneous Income				
<b>Total Additions to Plan Net Position</b>	<b>12,396</b>	<b>33,828</b>	<b>73,500</b>	<b>9,735</b>
<b>Deductions:</b>				
Disbursements Paid to Municipalities	96	1,109	5,827	3,857
Transfers & Special Expenses		89	332	487
Administrative Expenses	26	136	185	319
<b>Total Deductions from Plan Net Position</b>	<b>122</b>	<b>1,334</b>	<b>6,344</b>	<b>4,663</b>
<b>Net Increase (Decrease)</b>	<b>12,274</b>	<b>32,494</b>	<b>67,156</b>	<b>5,072</b>
<b>Net Position</b>				
Balance Beginning of Fiscal Period	1,419	13,693	46,187	113,343
<b>Balance End of Fiscal Period</b>	<b>\$ 13,693</b>	<b>\$ 46,187</b>	<b>\$ 113,343</b>	<b>\$ 118,415</b>
<b>INVESTMENT SERVICES PROGRAM</b>				
<b>Additions:</b>				
Employer Contributions		\$ 15,527	\$ 26,680	\$ 2,969
Net Investment Gain (Loss)		726	2,177	(11,607)
<b>Total Additions to Plan Net Position</b>		<b>16,253</b>	<b>28,857</b>	<b>(8,638)</b>
<b>Deductions:</b>				
Disbursements Paid to Municipalities				750
Administrative Expenses		17	238	154
<b>Total Deductions from Plan Net Position</b>		<b>17</b>	<b>238</b>	<b>904</b>
<b>Net Increase (Decrease)</b>		<b>16,236</b>	<b>28,619</b>	<b>(9,542)</b>
<b>Net Position</b>				
Balance Beginning of Fiscal Period		-	16,236	44,855
<b>Balance End of Fiscal Period</b>		<b>\$ 16,236</b>	<b>\$ 44,855</b>	<b>\$ 35,313</b>
<b>457 PROGRAM</b>				
<b>Additions:</b>				
Employee Contributions				
Employer Contributions				
Net Investment Gain (Loss)				
<b>Total Additions to Plan Net Position</b>				
<b>Deductions:</b>				
Benefits				
Administrative Expenses				
<b>Total Deductions from Plan Net Position</b>				
<b>Net Increase (Decrease)</b>				
<b>Net Assets Held in Trust</b>				
Balance Beginning of Fiscal Period				
<b>Balance End of Fiscal Period</b>				

The Changes in Fiduciary Net Position over the last 10 years chart shows contributions being received from municipalities, investment gains/losses and disbursements to retirees/municipalities. Some products have been in existence for less than 10 years.

2009	2010	2011	2012	2013	2014
\$ 48,029	\$ 52,613	\$ 48,644	\$ 78,809	\$ 58,111	\$ 64,161
23,525	29,278	6,820	36,770	59,826	32,947
71,554	81,891	55,464	115,579	117,937	97,108
6,088	5,564	9,074	13,071	14,341	9,556
623	859			4	
54	1,039	1,647	521	659	692
6,765	7,462	10,721	13,592	15,004	10,248
64,789	74,429	44,743	101,987	102,933	86,860
118,415	183,204	257,633	302,376	404,363	507,296
\$ 183,204	\$ 257,633	\$ 302,376	\$ 404,363	\$ 507,296	\$ 594,156
\$ 999			\$ 700		\$ 74,660
3,376	\$ 867	\$ 162	791	\$ 1,148	2,781
4,375	867	162	1,491	1,148	77,441
33,593			106	300	280
4	250	28	11	10	81
33,597	250	28	117	310	361
(29,222)	617	134	1,374	838	77,080
35,313	6,091	6,708	6,842	8,216	9,054
\$ 6,091	\$ 6,708	\$ 6,842	\$ 8,216	\$ 9,054	\$ 86,134
			\$ 8,170	\$ 4,582	\$ 5,788
				77	132
			163	1,558	786
			8,333	6,217	6,706
			21	584	1,230
			6	34	70
			27	618	1,300
			8,306	5,599	5,406
				8,306	13,905
			\$ 8,306	\$ 13,905	\$ 19,311

## Schedule of Changes in Reserves – Year Ended December 31, 2014 (Dollars in Thousands)

	Reserve for Employee Contributions	Reserve for Employer Contributions and Benefit Payments	Reserve for Expenses and Undistributed Investment Income	Total Reserve for Defined Benefit Plan
<b>Additions</b>				
Member Contributions	\$ 102,446			\$ 102,446
Employer Contributions		\$ 523,372		523,372
Net Investment Income			\$ 499,452	499,453
Miscellaneous Income			1,801	1,801
<b>Total Additions</b>	<b>102,446</b>	<b>523,372</b>	<b>501,254</b>	<b>1,127,072</b>
<b>Deductions</b>				
Benefits & Withdrawals	9,277	697,991		707,268
Transfers & Forfeitures				
Administrative Expense			17,804	17,804
Special Expenses and Fees		18		18
<b>Total Deductions</b>	<b>9,277</b>	<b>698,009</b>	<b>17,804</b>	<b>725,090</b>
<b>Net Increase (Decrease)</b>	<b>93,169</b>	<b>(174,637)</b>	<b>483,450</b>	<b>401,982</b>
<b>Other Changes in Reserves</b>				
Investment Income Allocations	1,478	465,921	(467,399)	
Retirement and Division Transfers	(60,004)	60,004		
<b>Total Other Changes in Reserves</b>	<b>(58,526)</b>	<b>525,925</b>	<b>(467,399)</b>	
<b>Net Increase in Reserves After Other Changes</b>	<b>34,643</b>	<b>351,288</b>	<b>16,051</b>	<b>401,982</b>
Reserve Balance Beginning of Year	729,106	6,946,910		7,676,016
<b>Reserve Balance End of Year</b>	<b>\$ 763,749</b>	<b>\$ 7,298,198</b>	<b>\$ 16,051</b>	<b>\$ 8,077,998</b>

The Schedule of Changes in Reserves shows the balance in each of the reserves and changes to those reserves' balances over the year. The Employee Contributions, Employer Contributions and Reserve for Expenses and Undistributed Investment income are components of the Defined Benefit Plan. A balance in the Reserve for Expenses and Undistributed Investment Income will be allocated at a future date.

Reserve for Defined Contribution Plan	Reserve for Health Care Savings Program	Reserve for Retiree Health Funding Vehicle	Reserve for Investment Services Program	Reserve for 457 Program	Total Reserve for Pension Trust Funds
\$ 20,805				\$ 5,788	\$ 129,039
26,112	\$ 11,649	\$ 64,161	\$ 74,660	132	700,086
25,208	3,480	32,947	2,781	786	564,655
					1,801
<b>72,125</b>	<b>15,129</b>	<b>97,108</b>	<b>77,441</b>	<b>6,706</b>	<b>1,395,581</b>
63,304	3,011	9,556	280	1,230	784,649
	469				469
623	163	692	81	70	19,433
					18
<b>63,927</b>	<b>3,643</b>	<b>10,248</b>	<b>361</b>	<b>1,300</b>	<b>804,569</b>
<b>8,198</b>	<b>11,486</b>	<b>86,860</b>	<b>77,080</b>	<b>5,406</b>	<b>591,012</b>
<b>8,198</b>	<b>11,486</b>	<b>86,860</b>	<b>77,080</b>	<b>5,406</b>	<b>591,012</b>
472,721	85,769	507,296	9,054	13,905	8,764,761
<b>\$ 480,919</b>	<b>\$ 97,255</b>	<b>\$ 594,156</b>	<b>\$ 86,134</b>	<b>\$ 19,311</b>	<b>\$ 9,355,773</b>

### Schedule of Average Benefit Payments – Defined Benefit Plan

Valuation Date December 31	Number of Retirees and Beneficiaries	Average Yearly Benefit
2004	19,271	\$ 13,607
2005	20,155	14,292
2006	21,464	15,026
2007	22,600	15,643
2008	23,832	16,447
2009	24,930	16,991
2010	26,930	17,879
2011	28,202	18,474
2012	29,739	19,015
2013	32,460	19,350

The Schedule of Average Benefit Payments shows the historical record and trends of retirees and the benefits they are drawing.

### Schedule of Benefit Payments by Type – Defined Benefit Plan (Dollars in Thousands)

Fiscal Year Ended December 31	Regular Benefits	Disability Benefits	Employee Refunds	Total
2005	\$ 263,839	\$ 10,308	\$ 4,158	\$ 278,305
2006	293,138	11,035	4,711	308,884
2007	326,666	12,791	5,058	344,515
2008	355,626	16,729	5,580	377,935
2009	391,613	18,254	9,510	419,377
2010	433,778	19,415	7,006	460,199
2011	476,993	20,812	7,915	505,720
2012	535,900	21,284	8,052	565,236
2013	631,906	20,913	9,889	662,708
2014	670,032	27,959	9,277	707,268

The Schedule of Benefit Expenses by Type shows the benefits paid as regular pension benefits, disability benefits and refunds for employees who have been terminated and requested refunds of their employee contributions.

**Schedule of Retired Members by Type of Benefit – Defined Benefit Plan**

December 31, 2013, Tabulated by Optional Form of Benefit Being Paid, Tabulated by Type of Benefit Being Paid

Type of Benefit	Number of Retirees	Total Monthly Benefit
Normal Retirement for age and service	26,379	\$ 46,435,771
Non-Duty Disability <sup>1</sup>	1,067	1,221,872
Duty Disability	430	548,725
Beneficiaries <sup>2</sup>	3,758	3,314,918
Non-Duty Death	767	759,668
Duty Death	59	60,990
<b>Totals</b>	<b>32,460</b>	<b>\$ 52,341,944</b>

<sup>1</sup> At age 60, these benefit types are converted to normal retirement for age and service

<sup>2</sup> Includes EDRO alternate payees

**Schedule of Retired Members by Type of Option Selected – Defined Benefit Plan**

December 31, 2013, Tabulated by Optional Form of Benefit Being Paid

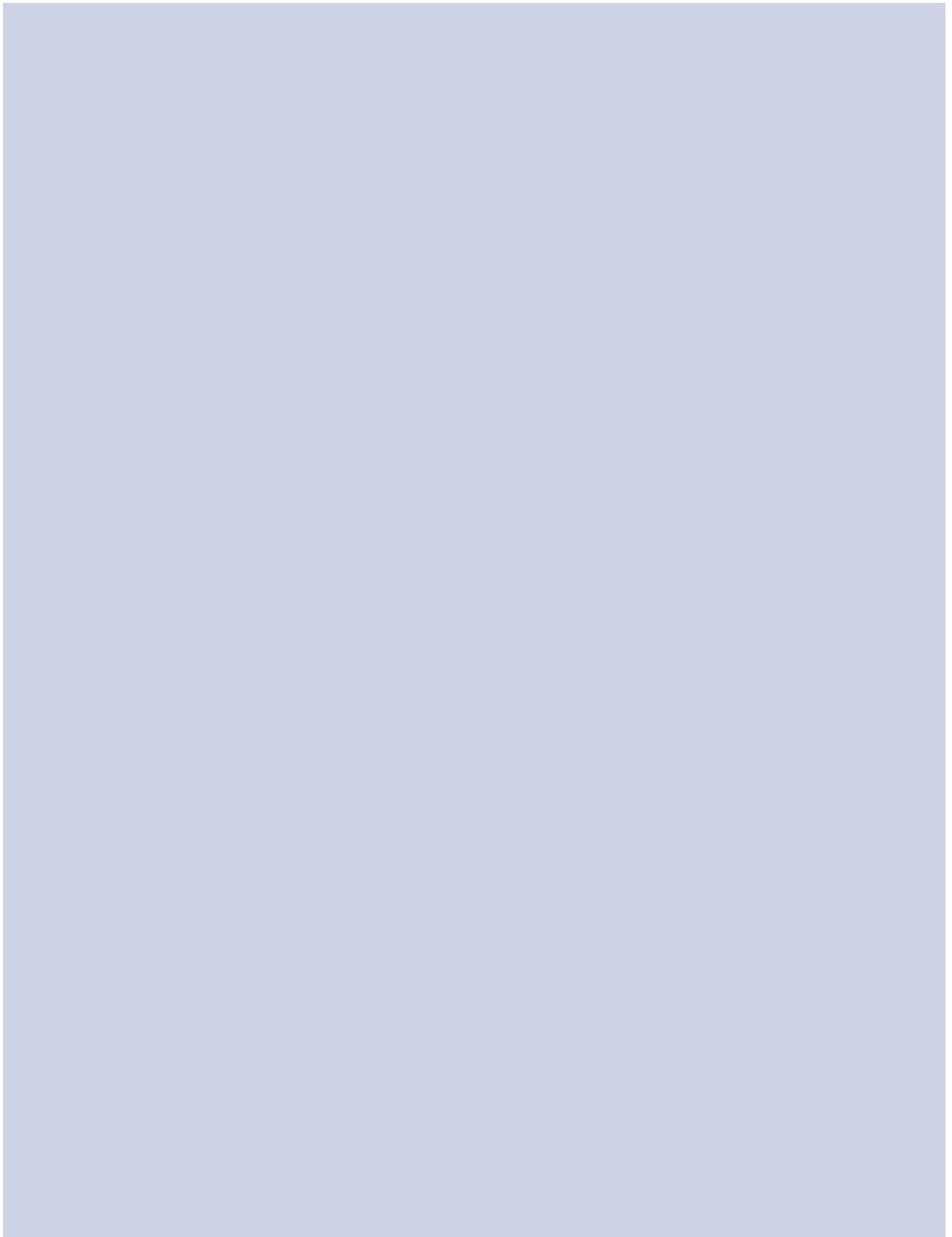
Type of Benefit	Number of Retirees	Total Monthly Benefit
Beneficiary draws 100% of retiree's benefit	9,978	\$ 16,885,400
Beneficiary draws 75% of retiree's benefit	2,041	4,878,852
Beneficiary draws 60% of retiree's benefit	115	308,331
Beneficiary draws 50% of retiree's benefit	4,981	9,520,152
Equated Option (changing at Social Security age)	402	265,591
5 year certain and life	288	431,549
10 year certain and life	567	868,893
15 year certain and life	181	261,978
20 year certain and life	361	493,206
Straight life allowance	13,546	18,427,992
<b>Totals</b>	<b>32,460</b>	<b>\$ 52,341,944</b>

The Schedule of Retired Members by Type of Benefit and by Type of Option Selected present distributions of retirees and beneficiaries on the rolls by the types of benefit being paid and option selected.

### Defined Contribution Plan Participants and Total MERS Participants

Fiscal Year Ending December 31	Number of Participants Total	Defined Benefit	% of Total	Defined Contribution	% of Total	Hybrid	% of Total
2005	68,915	62,748	91.1%	6,167	8.9%	N/A	0.0%
2006	71,572	64,545	90.2	7,027	9.8	N/A	0.0
2007	72,932	65,556	89.9	7,376	10.1	N/A	0.0
2008	74,400	66,586	89.5	7,814	10.5	N/A	0.0
2009	75,605	67,254	89.0	8,351	11.0	N/A	0.0
2010	78,343	69,707	89.0	8,636	11.0	N/A	0.0
2011	91,666	81,926	89.4	9,193	10.0	547	0.6
2012	93,462	82,331	88.1	10,210	10.9	921	1.0
2013	98,072	85,530	87.2	11,340	11.6	1,202	1.2
2014	101,589	87,661	86.3	12,239	12.0	1,689	1.7

Although MERS Defined Contribution Plan participants are not included in the annual actuarial valuation of the MERS Defined Benefit Plan, the trend in Defined Contribution participation is of interest. Numerous municipal divisions have established Defined Contribution Plan benefits for future new employees. Existing Defined Benefit Plan active members in those divisions were offered a choice of plans. The table above shows recent participation trends in Defined Contribution and Hybrid Plans, and overall MERS participants.





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*This publication contains a summary description of MERS benefits, policies or procedures. MERS has made every effort to ensure that the information provided is accurate and up to date (as of the date of publication 05/07/15). If this publication conflicts with the relevant provisions of the Plan Document, the Plan Document Controls. MERS, as a governmental plan, is exempted by state and federal law from registration with the SEC. However, it employs registered investment advisors to manage the trust fund in compliance with Michigan Public Employee Retirement System Investment Act. Past Performance is not a guarantee of future returns. Please make independent investment decisions carefully and seek the assistance of independent experts when appropriate.*

