A NEW VISION, A BETTER PARTNERSHIP, A BRIGHTER FUTURE.

comprehensive annual financial report for the year ended 12.31.2013

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN





A NEW VISION, A BETTER PARTNERSHIP, A BRIGHTER FUTURE.

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

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SECTION 1: INTRODUCTION

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2013 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, 2012 Comprehensive Annual Financial Report. This marks the 25th consecutive year MERS has received this honor.



Public Pension Standards Award in 2013

MERS also received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award in 2013, 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).



Municipal Employees' Retirement System



Letter of Transmittal, April 30, 2014

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, 2013.

"A New Vision, A Better Partnership, A Brighter Future," is the theme for this year's publications. As we close out 2013, we are proud to announce our new Vision — a Vision we know will result in a better partnership and a brighter future for our members. The new Vision that is now driving MERS is based around providing outstanding customer service and value to members and participants: "By 2016, MERS 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."

As a measure of our strength and moving toward a brighter future, this year we celebrate another new record for us: our retirement trust funds at year end held \$8.8 billion for more than 100,000 participants enrolled in a variety of MERS products, the highest amounts in our history.

MERS Profile

MERS was created in 1945 by the Michigan Legislature as a statewide voluntary organization. We provide system administration and are an investment vehicle for local governmental entities throughout Michigan, including cities, counties, townships, medical care facilities, road commissions, authorities, tribal governments, etc. Today, it's popular to talk about the need to increase "shared services" among government agencies, where one centralized organization provides the same service to many governments. MERS is one of the largest, oldest, and most successful shared services stories in Michigan's history.

In 1996, the Michigan Legislature and Governor agreed to separate MERS from state government. MERS started its independent status with just under 500 employer members. Today, we serve over 800 local governments.

MERS offers retirement options including the MERS Defined Benefit (DB), Defined Contribution (DC) and a Hybrid (H) Plan (a combination of DB and DC). We are an agent multiple-employer plan, meaning that assets are pooled for investment purposes but separate trusts are maintained for each individual employer. The MERS Retirement Board serves as the fiduciary of the funds and has oversight responsibilities for the System.

Report Structure and Contents

Section 38.1536 of the Michigan Compiled Laws requires the Retirement 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 Retirement 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 strong, positive returns during the year ending December 31, 2013. The MERS Defined Benefit Portfolio earned a net return of 14.75% (after investment expenses), and placed MERS in the top half for performance for the last 10-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 substantially from \$7.7 billion to \$8.8

billion, an increase of 13% 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. The most recent MERS actuarial valuation is as of December 31, 2012. At that date, there were 479 municipal governments in MERS that were funded at 70% or higher (67% of all municipal governments in MERS). Included in that statistic are 108 municipal governments (15% of all municipal governments in MERS) that were fully funded at a ratio of 100% or higher. There were 96 municipalities (13% 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.

Many municipal governments are providing more participant directed account benefits for their employees. MERS is also experiencing high growth in this area. 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 Saving Program. These plans are designed to provide or supplement other pension-related benefits and help individuals achieve their retirement readiness goals. In 2013, these MERSmanaged assets grew by \$122 million to \$572 million, a growth rate of 27% for the year.

The MERS Retiree Health Funding Vehicle and Investment Services Programs also experienced excellent growth in 2013. Five new municipalities joined them this year, with assets growing by \$104 million to \$516 million in total funds, a growth rate of 25% for the year. The Retiree Health Funding Vehicle now has 137 municipal members, while the Investment Services Program now has two participating municipalities.

We continue to work closely with all municipalities to help them with cost reduction options for their retirement and retiree health care programs. As a part of reducing

"As we close out 2013, we are proud to announce our new Vision — a Vision we know will result in a better partnership and a brighter future for our members." costs for MERS plans, 280 divisions also increased their employee contributions, 53 divisions adopted a lower defined benefit for new hires, and 19 divisions adopted Bridged Benefits prospectively. These efforts helped strengthen the financial condition of all these plans.

New assets for 2013 include \$55 million in our Defined Benefit Plan for three new municipalities joining MERS. Hybrid Plan municipalities had excellent growth, increasing to 64 municipalities from 55 the previous year. In addition, another 24 new employers joined the Health Care Savings Program, bringing that total to 225 municipalities.

During 2013, MERS continued year two of the internal cost-reduction program. The goal of the program is to keep our operating costs as low as possible so we maximize invested funds for our members, while enhancing our customer service. Through stronger cost-control measures, new budgeting techniques and reengineering our business processes, we reduced our administrative costs by \$3.9 million in 2013, which is a 15% reduction. Our administrative costs are now running at the level of spending we had in 2010, when we were 30% smaller in size. To our members, that means we've been able to absorb a 30% increase in workload while improving service without any increase in administrative cost.

INTRODUCTION 2013 comprehensive annual financial report

Legislative Issues

During 2013, MERS' staff spent time partnering with other stakeholders to provide education and background material on legislative initiatives that impacted our municipal customers. We were especially focused on legislation related to Revenue Sharing/the Economic Vitality Incentive Program (EVIP) and Health Care Savings Program. Late in the year, the legislature passed PA 269 of 2013 (SB 541) that clearly exempted Health Care Accounts (that are both post-employment and designed for retiree health care) from the list of employer-provided benefits that are counted against the caps created by passage of PA 152 of 2011. This change has the positive effect of allowing more municipalities to offer cost-effective health care accounts to their employees.

MERS also continues to work with the Michigan Municipal League, Michigan Association of Counties, and the state Department of Treasury to develop templates and standards for reporting compliance with the state EVIP and County Incentive Program requirements. Our goal is to help make this less burdensome for our employers.

Key 2013 Initiatives and Highlights

In 2013, MERS completed its most important initiative in years. Teams of MERS employees reached out to employers across the entire state in several dozen listening sessions, where we asked what we do well and what we can do better. After hundreds of face-to-face discussions, we compiled that direct feedback for future action plans to address the issues we heard. Most important, we also completed a new, threeyear Strategic Plan for 2014-2016 that incorporated what we heard from our customers. Completing the Strategic Plan took months of significant planning effort and involved all MERS staff. The new plan has a Vision Statement, major goals and targets, objectives, initiatives, and business plan projects that when completed will carry out and help achieve the Vision. To ensure every employee feels connected to the Strategic Plan, each employee also has an individual performance plan with specific goals to achieve, tied to the Strategic Plan.

One key initiative in the new Strategic Plan is to conduct reengineering and process improvement reviews of all MERS core and supporting processes. This work began in 2013 and will continue for the next 18 months. As an outcome of this work, MERS will redesign all its key processes to ensure it is operating efficiently and in a cost-effective manner. This work should also free up capacity and help MERS better control its future costs and manage its growth effectively. During 2013, MERS began upgrading our eight-year-old pension administration software to the latest release. This new computer functionality will enhance our ability to serve our customers at a lower cost, and it positions us to further streamline and enhance our service delivery.

Our Employer Services staff led an initiative to upgrade our participant directed account services, especially self-service features provided to participants and retirees over the internet. Alerus Retirement Solutions is our new partner in providing these services, which began October 1, 2013.

We also began a retirement readiness initiative in 2013, which when fully implemented in 2014-15, 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 postemployment financial goals. Additionally, employers will become informed on the advantages of having retirementready employees and how MERS benefits can play a role in ensuring that happens.

The MERS Finance team also implemented a new fixed asset program during the year, which improved our fixed asset reporting and strengthened our internal control over fixed assets.

In 2015, the Governmental Accounting Standards Board (GASB) will require all state and local governments to implement substantial changes for reporting pensionrelated activities in their financial statements (as detailed in GASB Statements No. 67 and 68). MERS has engaged a team of Finance and Employer Services staff to work with municipalities on how MERS can best help employers aet this information. During 2013, MERS determined it needs substantial information technology enhancements and more actuarial work to provide this service to municipalities. We worked with three municipalities in particular to develop the planning we will need over the next 18 months to complete this work. The new standards may also require significant communication efforts by employers so stakeholders understand the true financial impact in their local communities. At the 2013 MERS Annual Meeting, a panel of GASB experts (including MERS staff) presented ideas on how to handle these challenges.

Best Practices

We continually strive to keep our standards at the highest level to ensure stability as a leader among our peers. We are honored that for the 25th consecutive year, the Government Finance Officers Association (GFOA) awarded MERS its Certificate of Achievement for Excellence in Financial Reporting award for our 2012 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.

Acknowledgement

We are very grateful to our Board members for your time and dedication, which makes it possible for MERS to be successful at building "a better partnership and a brighter future" for our employers, members and retirees. Your conscientious oversight and diligence of our well-run system is much 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 INTRODUCTION 2013 comprehensive annual financial report

Municipal Employees' Retirement System



Letter from the Chairperson, April 30, 2014

Dear MERS Members:

On behalf of the MERS Retirement Board, it is my pleasure to present the 68th Comprehensive Annual Financial Report (CAFR) of the Municipal Employees' Retirement System of Michigan for the year ended December 31, 2013. This financial report provides information on the status of our Retirement System.

The most important decision we make as a Retirement Board is to appoint our Chief Executive Officer (CEO) to run MERS day-to-day. I am very pleased to highlight the accomplishments MERS has made during the first year of our new CEO, Mr. Chris DeRose. Because of Chris's leadership and experience with two other large public pension funds, he was able to quickly help MERS establish a new Vision and Strategic Plan, along with the initiatives, goals and projects to grow our system and to strengthen us to meet all our future challenges. In his first year, he and his leadership team truly lived our new theme: "A New Vision, A Better Partnership, A Brighter Future."

For the 2013 year just ended, I am pleased to report that our investment portfolio realized a net return after investment expenses of 14.75%, and that our total assets have grown by \$1 billion to \$8.8 billion. To help ensure we continue to grow wisely, we spent the last year positioning our asset allocation strategy to match the future market and economic challenges we will face today and tomorrow. To strengthen our customer service, MERS also spent much of the year listening closely to our customers and learning what we can do better. Many suggestions we heard about are incorporated in our new Strategic Plan. Improvements to our processes are underway across all parts of MERS and we are reviewing all our operations from top to bottom with a goal to become more efficient. I am excited that we have been successful in reducing our administrative costs over the last two years. To have reduced our operating costs to 2010 levels is strong evidence that we are doing more to help reduce costs for our customers at a time when they really need help.

Annually, MERS surveys the membership for ways to improve the System. Overall the staff receives high marks for the level of service they provide. Using various benchmarks as comparison to other public systems, MERS scores high in administering retirement plans and related products. The staff works diligently to find the appropriate solutions to meet members' needs. I am very proud of the competency of our staff and their dedication to 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 provide expertise and professionalism to our members. 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 New Vision, A Better Partnership, A Brighter Future" for MERS and our members.

Sincerely,

Michael Brown, Chairperson MERS Board of Trustees

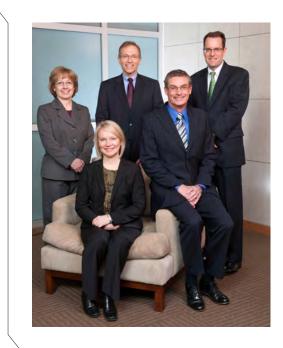
MERS RETIREMENT BOARD AND CHIEF EXECUTIVE OFFICER



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
Public Members:	Michael Gilmore, Delta Dental, Okemos; James R. Wiersma, Haworth, Holland
Retiree Member:	John Ogden, City of Port Huron

MERS OFFICERS



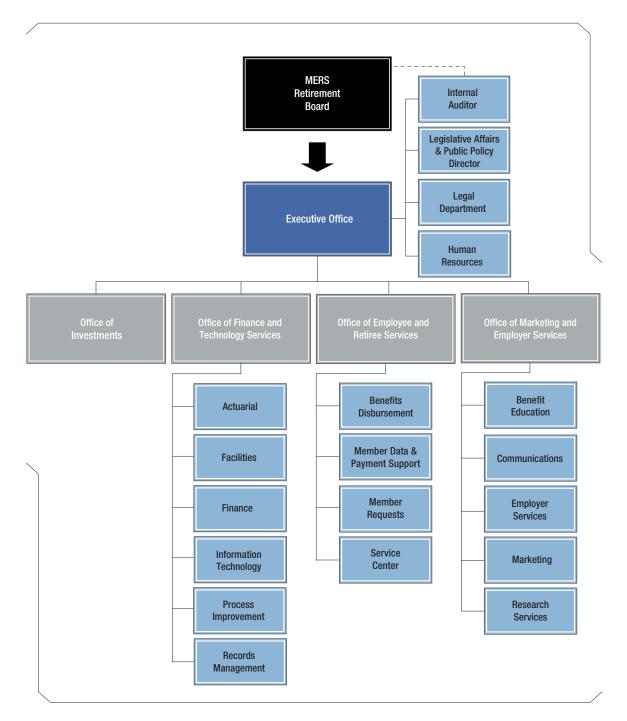
From left to right:

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 – 2013



OUTSIDE PROFESSIONAL SERVICES

Professional Consultants

Actuaries Pension Trustee Advisors, Inc Tegrit Actuarial Consulting, LLC

Auditors Andrews Hooper Pavlik PLC Plante & Moran PLLC

Banking JPMorgan Chase Northern Trust

Business Consulting

Analysts International Corporation Orion Development Group

Human Resource Advisors Gallagher Benefit Services, Inc.

Investment Custodian 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 Lending Agent State Street Bank and Trust Company

Systems Implementation and Maintenance

Epicor Software Corporation Informaxion Solutions LLC Innovative Communications, Inc. Logicalis Maner Costerisan OpenText Panatrack, Inc. Tegrit Group, LLC

Third-Party Administrator Alerus Financial NA Tegrit Group, LLC

Investment Managers

Domestic Equity AMBS Investments C.S. McKee Downriver Capital Management EAM Investors Hellman Jordan Irving Magee Kennedy Capital Management Mellon Capital Morgan Dempsey Punch Investments Seizert Capital Wellington Management

International Equity

Acadian Asset Management BlackRock Consilium Frontier Equity Fund Driehaus Global Growth Frontier Market Opportunity Fund Hexam Mountain Pacific Advisors

Fixed Income

C.S. McKee Credit Suisse Elmtree Net Lease Fund First International Advisors Janus Oak Street Orchard Global TCW Funds High Yield Stone Harbor

Overlay Clifton Group

Real Estate The Townsend Group Hancock Timber Center Square Capital Management

Private Equity

Carlyle (AlpInvest Partners) Credit Suisse Mesirow Financial

Commodities Australian Pastoral Fund Cargill Risk Management 9



ACKNOWLEDGEMENTS

The MERS Comprehensive Annual Financial Report (CAFR) for the year ended December 31, 2013, 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 Luke Huelskamp, Senior Finance Manager Courtney Overfield, Accounting Analyst Danielle Grice, Accounting Analyst Carrie Barton, Office Administrator Karen Butka, Administrative Assistant Robin Towsley, Accounts Payable and Benefits Coordinator

Additional MERS Staff

Ana Carlson, Senior Graphic Designer, Office of Marketing and Employer Services Betsy Schaeffer, Digital Print and Mail Services Supervisor, Office of Marketing and Employer Services Don Shell, Senior Communications Coordinator, Office of Marketing and Employer Services Claudia Konieczny, Investment Analyst, Office of Investments Ed Mikolay, Senior Investment Officer and Portfolio Manager, Office of Investments Julian Ramirez, Investment Analyst, Office of Investments Karen Strickland, Office Administrator, Office of Investments Lisa Bond Brewer, Communications Director, Office of Marketing and Employer Services Mike Schrauben, Investment Officer and Portfolio Manager, Office of Investments Mike Charette, Senior Investment Officer and Portfolio Manager, Office of Investments Paul Vangilder, Investment Intern, Office of Investments Peter Wujkowski, Investment Officer and Portfolio Manager, Office of Investments Tyler Stoner, Investment Intern, Office of Investments Richard Taylor, Print Production Specialist, Office of Marketing and Employer Services

Special thanks are also extended to Plante Moran, Alerus, State Street and Tegrit Group.



SECTION 2: FINANCIAL

FINANCIAL SECTION 2013 comprehensive annual financial 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



Independent Auditor's Report

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 or the "System"), as of and for the year ended December 31, 2013 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.





To the Retirement Board Municipal Employees' Retirement System of Michigan

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, 2013 and the changes 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 approximately \$2.9 billion at December 31, 2013, whose fair values have been estimated by management in the absence of readily determinable market values. Management's estimates are based primarily on information provided by the fund managers of the general partners. Our opinion has not been modified with respect to this matter.

Effective December 31, 2013, MERS adopted the provisions of GASB 67, Financial Reporting for Pensions, as discussed in Note 2. Adopting this new accounting standard resulted in significant changes to the defined benefit related footnote disclosures and required supplementary information schedules.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis and 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 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.

To the Retirement Board Municipal Employees' Retirement System of Michigan

The schedule of administrative expenses, schedule of investment expenses, and schedule of payments for consultants and services are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the 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 have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Report on Summarized Comparative Financial Information

Other auditors have previously audited Municipal Employees' Retirement System of Michigan's December 31, 2012 financial statements, and the other auditors expressed an unmodified audit opinion on those basic financial statements in their report dated May 8, 2013.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated April 28, 2014 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, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Municipal Employees' Retirement System of Michigan's internal control over financial reporting and compliance.

Alante 1 Moran, PLLC

April 28, 2014



MANAGEMENT'S DISCUSSION AND ANALYSIS

This narrative overview and analysis of MERS' financial condition for year ended December 31, 2013, is presented in conjunction with the Chief Executive Officer's 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 schedules with explanatory notes and three supplementary expense schedules.

FINANCIAL HIGHLIGHTS

The following financial highlights occurred during the year ended December 31, 2013:

- Total 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 13% during 2013. MERS finished the year with \$8.8 billion in net position, \$1.1 billion higher than the previous year and the highest asset level in MERS' history.
- Investment returns saw a gain of 14.75% net of investment expenses for the year. The 10-year return of 6.91% is below the target of MERS' expected investment rate of return of 8%.
- MERS' most recent actuarial valuation dated December 31, 2012, showed 479 of MERS' 711 municipalities are funded 70% or better, with 108 municipalities over 100% funded.
- Administrative expenses decreased by 15% in 2013 to \$22 million, while MERS grew significantly and brought in 106 new municipal programs. This decrease is significantly lower than previous

years' administrative expenses, reflecting stronger cost-control measures implemented in 2012.

- Investment expenses totaled \$20 million. This is an 11% increase from 2012, primarily due to higher investment manager fees associated with a 13% increase is assets under management.
- Contribution revenue declined by 38% from \$997 million in 2012 to \$636 million in 2013. A one-time contribution of \$467 million from the City of Flint in 2012 is the cause of the decline.
- Total annual retirement benefits paid to retirees and beneficiaries increased \$108 million to a total of \$706 million.
- The difference between MERS' actuarial and market value assets improved in 2013, as the actuarial calculation is 106% of the market value of assets, when compared to 114% in 2012. Total Defined Benefit Plan actuarial assets and market value of assets were valued at \$8.2 billion and \$7.7 billion respectively at Dec. 31, 2013.

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Basic Financial Statements

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

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

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

The "Comparison Statement of Plan Net Position" and "Comparison Statement of Changes in Plan Net Position" provide a comparative summary of the financial condition of the System 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 plans.

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Comparison Statement of Plan Net Position (Dollars in Thousands)

	As of Dec. 31, 2013	As of Dec. 31, 2012	Increase (Decrease) Amount	Increase (Decrease) Percent
Assets				
Cash and Short-Term Investments	\$44,752	\$47,927	\$(3,175)	-7%
Receivables	949,153	945,682	3,471	0
Interfund Receivables	1,480	305	1,175	385
Loans	4,791	3,932	859	22
Investments, at fair value	8,648,688	7,634,304	1,014,384	13
Invested Securities Lending Collateral	1,033,070	618,756	414,314	67
Other Assets/Prepaids	515	284	231	81
Net Capital Assets	14,403	8,508	5,895	69
Total Assets	10,696,852	9,259,698	1,437,154	16
Liabilities				
Purchase of Investments	878,653	893,464	(14,811)	-2
Securities Lending Collateral	1,034,384	620,739	413,645	67
Administrative/Investment Costs/Forfeitures	17,574	10,197	7,377	72
Interfund Payables	1,480	305	1,175	385
Total Liabilities	1,932,091	1,524,705	407,386	27
Net Position-Restricted for Pension and Health Benefits and Investment				
Accounts Held for Others	\$8,764,761	\$7,734,993	\$1,029,768	13%

Increase Year ended Year ended (Decrease) (Decrease) Percent Additions \$635,983 \$996,946 \$(360,963) **Contributions** -36% 1,117,469 371,337 50 Investment Net Income Investing Activities 746,132 Investment Net Income-Securities Lending 5,074 3,759 1,315 35 Miscellaneous Income 121 94 27 29 Deductions 706,270 598,752 107,518 18 Benefits Special Expenses and Fees Transfers and Forfeitures 0 -18 /1 626 /1 760 (134) Administrative Expense 21,912 25,853 (3,941)-15 **Total Deductions** 625,436 1,029,768 -8 Net Increase (Decrease) 1,121,495 (91,727) Net Position-Restricted for Pension and Health Benefits and Investment Accounts Held for Others 7,734,993 Balance Beginning of Year 6.613.498 17 1,121,495 \$8,764,761 1,029,768

Comparison Statement of Changes in Plan Net Position (Dollars in Thousands)





Analysis of Plan Net Position

The plan net position increased by more than \$1 billion over the previous fiscal year primarily due to investment returns of \$1.1 billion and new municipalities joining MERS contributing \$55 million in assets.

The overall employer and employee contributions decreased \$361 million in 2013, chiefly because one large municipality (City of Flint) joined MERS in 2012, significantly increasing 2012 contributions. In 2012, new municipalities joining MERS brought \$477 million in assets compared to \$55 million in 2013. Some municipalities also had fluctuations due to changes in required actuarial contribution rates resulting from salary adjustments, plan modifications, and the number of employees. Regular employee contributions are increasing as a percentage of pay relative to employer contributions.

MERS had capital assets, net of accumulated depreciation, of approximately \$14.4 million. Of the total, \$7.1 million is comprised of software and computer servers needed to run the System's pension administration and financial programs, and \$6.8 million is 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 2014, accrued administrative and investment expenses, and securities' lending collateral.



Investment Activities

The performance of the Total Market Fund was favorable when compared to the investment benchmark over the past 10 years. The 2013 net return of 14.75% was above the 8% actuarial return assumption target for the year. For the three, five, seven, and 10-year periods, the net returns were 9.15%, 11.66%, 5.02%, and 6.91% respectively. Net investment income (net appreciation in fair value, less investment expenses, plus securities lending income) was \$1.1 billion 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, 2013, is in the Investments Section. A summary of the total System's assets is on page 67.



Funding Status

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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 being 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. These ratios and numbers are in the Required Supplementary Information.

The MERS Retirement 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

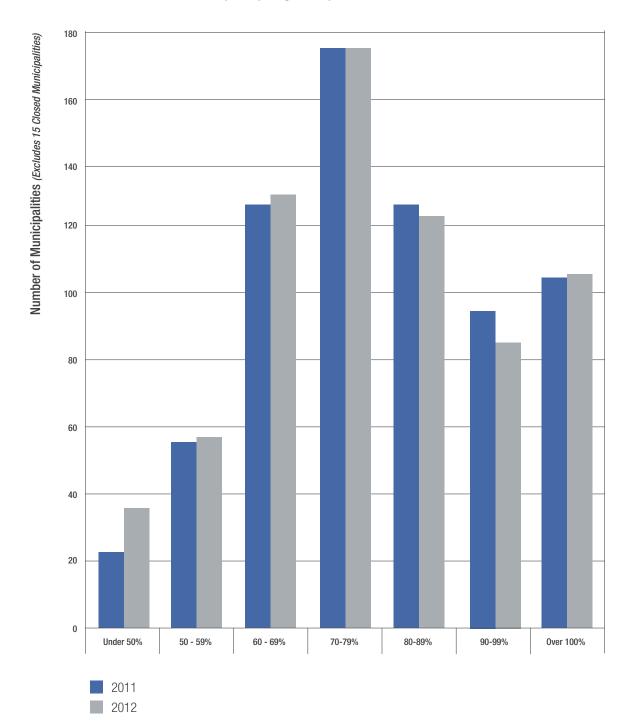
The actuarial method for calculating the accrued liability for all plans is entry age normal with the objective of maintaining employer contributions approximately level as a percentage of member payroll. A detailed discussion of the funding method is in the Actuarial Section.

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, 2012. On that date, of all 711 individual MERS municipalities, 108 municipalities (15% of all Defined Benefit Plan and Hybrid Plan municipalities in MERS) were funded at 100% or higher and the majority, 479 municipalities, were funded at 70% or higher (67% 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 continued to improve in 2013. The end of the year actuarial calculation of assets is 106% of the market value of assets. This compares favorably with 2012 and 2011, when the actuarial value of assets were 114% and 121% respectively. Ideally, the differences between actuarial value and market 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.





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Statement of Plan Net Position as of December 31, 2013 (Dollars in Thousands)

	Defined Benefit	Defined Contribution	Health Care Savings Program
Assets			
Cash and Short-Term Investments	\$41,145	\$476	\$1,584
Receivables			
Employer and Member Contributions	34,919	313	313
Sale of Investments	816,075	15,661	8,718
Investment Income	14,899	288	160
Loans		4,728	
Interfund Receivables	1,480		
Other	55	9	
Total Receivables	867,428	20,999	9,191
Investments, at fair value			
Fixed Income	2,158,055	41,759	23,246
Equities	3,782,422	73,190	40,745
Private Equity	540,745	10,464	5,825
Real Estate	319,761	6,318	3,517
Commodities	324,313	6,276	3,494
Cash Equivalents	441,184	8,537	4,752
Mutual Funds		320,251	3,393
Total Investments	7,566,480	466,795	84,972
Invested Securities Lending Collateral	940,053	18,190	10,127
Prepaid Expenses	451		
Capital Assets, at cost,			
net of accumulated depreciation	14,403		
Total Assets	9,429,960	506,460	105,874
Liabilities			
Purchase of Investments	799,540	15,471	8,613
Securities Lending Collateral	941,249	18,213	10,139
Forfeitures and Reserves		4	,
Administrative and Investment Costs	13,155		
Interfund Payables		51	1,353
Total Liabilities	1,753,944	33,739	20,105
Net Position-Restricted for Pension and Health Benefits and Investment Account Held for Others	\$7,676,016	\$472,721	\$85,769

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, 2013	Total Year Ended Dec. 31, 2012
\$1,445	\$26	\$76	\$44,752	\$47,927
1,065		17	36,627	32,583
53,780	962	960	896,156	895,670
987	18	18	16,370	17,429
		63	4,791	3,932
			1,480	305
			64	71
55,832	980	1,058	955,488	949,990
143,406	2,566	2,562	2,371,594	2,290,661
251,349	4,495	4,487	4,156,688	3,186,334
35,933	643	642	594,252	554,363
21,698	388	387	352,069	441,740
21,551	385	385	356,404	393,898
29,317	524	524	484,838	475,875
		9,199	332,843	291,432
503,254	9,001	18,186	8,648,688	7,634,303
62,468	1,117	1,115	1,033,070	618,756
			451	214
			14,403	8,508
622,999	11,124	20,435	10,696,852	9,259,698
022,333	11,124	20,433	10,030,032	9,239,090
F0 100	051	0.40	070 050	000 404
<u>53,130</u> 62,547	<u>951</u> 1,119	<u>948</u> 1,117	878,653	<u> </u>
02,047	1,119	4,415	4,419	3,518
		4,410	13,155	6,679
26		50	1,480	305
115,703	2,070	6,530	1,932,091	1,524,705
\$507,296	\$9,054	\$13,905	\$8,764,761	\$7,734,993

FINANCIAL SECTION 2013 comprehensive annual financial report

Statement of Changes in Plan Net Position for the Year Ended December 31, 2013 (Dollars in Thousands)

	Defined Benefit	Defined Contribution	Health Care Savings Program
Additions			
Contributions and Transfers In			
Employer Contributions and Other	\$409,563	\$42,706	\$12,164
Plan Member Contributions	88,410	20,370	
Total Contributions and Transfers In	497,973	63,076	12,164
Investment Income			
Net Appreciation/Depreciation in Fair Value	906,197	61,726	6,883
Interest Income	56,038	1,084	603
Dividend Income	40,597	786	437
	1,002,832	63,596	7,923
Less Investment Expense	18,930	72	94
Net Investment Income Before Securities			
Lending Activities	983,902	63,524	7,829
Security Lending Activities			
Security Lending Income	6,775	131	73
Security Lending Expenses			
Borrower Rebates	1,005	19	11
Management Fees	1,154	22	12
Total Securities Lending Expenses	2,159	41	23
Net Income from Security Lending Activities	4,616	90	50
Total Net Investment Income	988,518	63,614	7,879
Miscellaneous Income	121		
Total Additions	1,486,612	126,690	20,043
Deductions			
Benefits	662,708	26,021	2,316
Special Expenses and Fees	71		
Transfers and Forfeitures			622
Administrative Expenses	20,271	812	126
Total Deductions	683,050	26,833	3,064
Net Increase/Decrease	803,562	99,857	16,979
Net Position-Restricted for Pension and			
Health Benefits and Investment Accounts			
Held for Others			
Balance Beginning of Fiscal Period	6,872,454	372,864	68,790
Balance End of Fiscal Period	\$7,676,016	\$472,721	\$85,769

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, 2013	Total Year Ended Dec. 31, 2012
Ф <u>го</u> 111		\$77	\$522,621	ФООО 474
\$58,111		4,582	113,362	<u>\$898,474</u> 98,472
58,111		4,659	635,983	996,946
	* / * / *			
53,967	\$1,045	1,450	1,031,268	654,612
<u> </u>	<u>67</u> 48	<u> </u>	<u>61,581</u> 44,614	61,550
				47,936
60,388 868	1,160 18	1,564 12	1,137,463 19,994	764,098 17,966
000	10	12	19,994	17,900
59,520	1,142	1,552	1,117,469	746,132
	,	,	, , ,	
450	8	8	7,445	5,207
67	1	1	1,104	510
77	1	1	1,267	939
144	2	2	2,371	1,449
306	6	6	5,074	3,758
59,826	1,148	1,558	1,122,543	749,890
			121	95
117,937	1,148	6,217	1,758,647	1,746,931
14,341	300	584	706,270	598,752
14,341	300	304	700,270	<u> </u>
4			626	760
659	10	34	21,912	25,853
15,004	310	618	728,879	625,436
102,933	838	5,599	1,029,768	1,121,495
		2,000	.,	.,,
404,363	8,216	8,306	7,734,993	6,613,498
\$507,296	\$9,054	\$13,905	\$8,764,761	\$7,734,993





NOTES TO BASIC FINANCIAL STATEMENTS

Year ended December 31, 2013

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. It consists of the following members, each of whom, except for the retiree member and the Retirement Board appointees, shall be from a different county at the time of election:

• Two members, appointed by the Retirement 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 Retirement 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 Retirement Board is three years. Members of the Retirement 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 MERS Retirement 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.

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"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."

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 (\$255,000 for 2013 and \$260,000 for 2014) 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 Retirement 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 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.

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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.

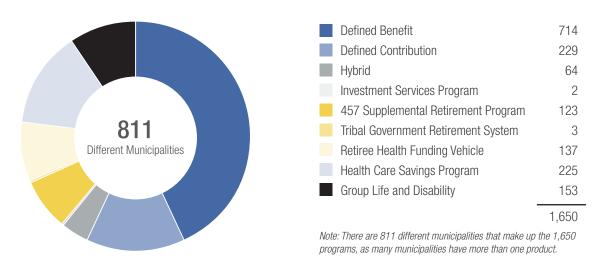
The MERS Retiree Health Funding Vehicle became operational in the fall of 2004 and was made available to all municipalities in Michigan. Participating municipalities can contribute monies to the Trust as desired and no contribution method in imposed. These funds constitute a health care fund, which enable 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 Core Investment Options 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 MERS 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.

99,680

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, 2013

MERS Participants as of December 31, 2013

	Defined Benefit	Defined Contribution	Hybrid	Health Care Savings Program	457
Active	34,534	8,564	984	7,359	703
Deferred	8,063	NA	72	NA	NA
Retired	34,107	NA	13	NA	NA
Contributions not Vested	8,826	NA	133	NA	NA
Terminated	NA	2,776	NA	1,976	68
Product Totals	85,530	11,340	1,202	9,335	771
Total MERS Employment*					108,178

Total MERS Participants**

* 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 DB vested, Terminated Status DB not vested but has a contribution balance, Terminated Status Hybrid vested, Terminated Status Hybrid not vested but has a contribution balance, Terminated Status DC with a contribution balance, or Terminated Status HCSP with a contribution balance.

2. Summary of Significant Accounting Policies

Reporting Entity

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The Retirement 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 Retirement Board appoints the Chief Executive Officer who manages and administers the System under the supervision and direction of the Board.

MERS is an independent non profit 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 formal commitments, as well as statutory or 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 MERS Retirement 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 2013, MERS contributed 10.3% of compensation; employees contributed 4% of compensation to the plan as required. In addition, MERS contributed an additional \$1.5 million to increase our funding level in 2013.

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)
\$11,347,345	\$11,893,235	\$545,890	95.41%	\$9,113,922	5.99%
					<u> 14.18</u> 10.87
	Value of Assets (a)	Value of Assets (a) Accrued Liability (AAL) (b) \$11,347,345 \$11,893,235 13,500,888 14,947,095	Value of Assets (a) Accrued Liability (AAL) (b) (Over) AAL (UAAL) (b-a) \$11,347,345 \$11,893,235 \$545,890 13,500,888 14,947,095 1,446,207	Value of Assets (a) Accrued Liability (AAL) (b) (Over) AAL (UAAL) (b-a) Ratio (a/b) \$11,347,345 \$11,893,235 \$545,890 95.41% 13,500,888 14,947,095 1,446,207 90.30	Value of Assets (a) Accrued Liability (AAL) (b) (Over) AAL (UAAL) (b-a) Ratio (a/b) Payroll (c) \$11,347,345 \$11,893,235 \$545,890 95.41% \$9,113,922 13,500,888 14,947,095 1,446,207 90.30 10,195,504

Schedule of Funding Progress

Actuarial Accrued Liability from December 31, 2012 and December 31, 2011 Actuarial Valuations

	2012	2011
Active Members	\$10,787,751	\$12,326,833
Retirees and beneficiaries currently receiving benefits	4,171,177	2,218,957
Vested former members not yet receiving benefits	1,647,617	331,206
Nonvested terminated employees (pending refunds of		
accumulated member contributions)	70,747	70,099
Total Actuarial Accrued Liability	16,677,292	14,947,095
Net assets available for benefits at actuarial value (\$13,689,806 and \$11,196,483 at market value		
for December 31, 2012, and 2011, respectively)	15,655,156	13,500,888
Unfunded Actuarial Accrued Liability	\$1,022,136	\$1,446,207

Three-Year Trend Information Schedule of Employer Contributions

Fiscal Year Ended	Annual Required Cost (ARC) Contribution	Percentage of ARC Contributed	Net Pension Obligation
December 31, 2011	\$955,176	100%	
December 31, 2012	1,032,600	100	-
December 31, 2013	1,233,660	100	-

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Post-Employment Benefits

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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. 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 25, 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.

GASB 63

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, with an impact expected in 2014.

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 on *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 found in Required Supplementary Information.

Capital Assets

MERS occupies two buildings in Delta Township (west of Lansing). These properties have previously been a part of the Investment Portfolio and were actively managed by MERS Office of Investments staff. In 2013, MERS purchased from the MERS investment portfolio the two buildings and the related land, at an appraised fair market value, paying \$6,761,877 in total.

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 40 years.

Capital Assets	Buildings	Land	Office Furniture and Equipment	Software	Total Capital Assets
Balances December 31, 2012			\$3,142,204	\$18,700,132	\$21,842,336
Additions	\$5,495,361	\$1,266,516	352,753	1,406,432	8,521,062
Deletions and Transfers	-		(1,340,110)	(164,964)	(1,505,074)
Balances December 31, 2013	\$5,495,361	\$1,266,516	\$2,154,847	\$19,941,600	\$28,858,324
Accumulated Depreciation					
Balances December 31, 2012	\$-	\$-	\$2,053,220	\$11,280,682	\$13,333,902
Depreciation Expense			896,403	1,874,040	2,770,443
Deletions and Transfers			(1,329,251)	(319,776)	(1,649,027)
Balances December 31, 2013	\$-	\$-	\$1,620,372	\$12,834,946	\$14,455,318
Net Capital Assets December 31, 2013	\$5,495,361	\$1,266,516	\$534,475	\$7,106,654	\$14,403,006

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, 2012, from which the summarized information was derived.

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

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New Accounting Pronouncements

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 notes disclosures, as well as required supplementary information. MERS implemented GASB statement No. 67 in the year ended December 31, 2013. When MERS implements GASB 68, the related disclosures of the impact of the retirement plan for MERS employees will be modified.

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 inflow and outflow 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 in 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.

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

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. 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, 2013, balance was \$729 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, 2013, balance was \$6.9 billion.

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• 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 Retirement Board. In 2013, 100% of the reserve was allocated leaving a zero balance at year end.

Other Reserves

Each of the products outside of 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, 2013, reserve balances were as follows: Defined Contribution \$473 million; Health Care Savings Program \$86 million; Retiree Health Funding Vehicle \$507 million; Investment Services Program \$9 million; and 457 Program \$14 million.

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

4. Investments and Deposits

The Retirement 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), and 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 Retirement 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, 2013, all securities held met the required statutory provisions and Retirement 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 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 2013 the annual money weighted rate of return net of investment expenses measured on monthly inputs was 14.97%. FINANCIAL SECTION 2013 comprehensive annual financial report

MERS Investment Policies are directed by the Retirement 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 management activities. The MERS Retirement Board appoints public members with investment expertise to serve on the Investment Committee, which then reports directly to the Board concerning investment guidelines, principles and procedures. The Retirement 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 diligence. The Board is granted authority and fiduciary responsibility for investment policies under 1945 PA 135 and 1965 PA 314 under Michigan statute.

The Investment Committee 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 Investment Committee (IC) in 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 Investment Committee 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 Investment Committee.

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 Investment Committee and Board of Directors.

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

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

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

There are a few investment funds where the portfolio of the fund exceeds 5% of the pension plan's net position. The three managers are EB DV Mellon Tangent Added Fund, Janus, and Credit Suisse First Boston, these funds however, have many individual diversified investments under each fund's control, so that no one specific position exceeds the investment guideline limits.

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 it deposits. Balances on deposit 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 MERS Retirement 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, 2013, 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, 2013, 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, 2013

Quality Rating	Agencies	Asset Backed	Bank Loan	Convertible Bonds	Corporate Bonds	Credit Default Swap	Foreign Currency	LMTD Part Units
AAA/Aaa	\$646,755	\$1,842,658	\$-	\$-	\$12,526,415	\$-	\$(335,294)	\$-
AA+/Aa1	52,511	0	0	0	26,195,359	0	1,119,930	0
AA/Aa2	0	991,074	0	0	23,736,979	0	517,063	0
AA-/Aa3	0	1,348,968	0	0	32,878,493	0	0	0
<u>A+/A1</u>	294,394	0	0	0	45,278,879	0	10	0
<u>A/A2</u>	35,636	1,640,998	0	0	55,113,583	0	0	0
<u>A-/A3</u>	0	0	0	59,360	93,059,637	0	0	0
BBB+/Baa1	54,266	406,239	0	0	86,474,125	0	573,776	0
BBB/Baa2	0	1,050,949	0	0	96,522,064	0	0	0
BBB-/Baa3	0	0	0	40,590	120,733,313	0	391	0
BB+/Ba1	0	0	586,047	53,261	43,975,884	0	0	0
BB/Ba2	25,001	99,538	0	0	32,716,651	0	0	0
BB-/Ba3	0	0	0	406,133	36,254,642	0	0	0
<u>B+/B1</u>	0	0	474,042	0	26,390,593	0	0	0
<u>B/B2</u>	0	0	336,671	598,998	20,764,784	0	0	0
<u>B-/B3</u>	0	29,146	636,528	49,669	16,941,916	0	0	0
CCC+/Caa1	0	0	0	0	8,466,265	0	0	0
CCC/Caa2	0	902,581	0	0	635,675	0	0	0
CCC-/Caa3	0	0	726,556	0	0	0	0	0
<u>CC/Ca</u>	0	0	0	0	4,312,297	0	0	0
<u>C</u>	0	0	0	0	0	0	0	0
D/C	0	739,089	0	0	0	0	0	0
NA	0	0	0	0	0	0	0	0
Cash with no ratings	0	0	0	0	7,651,698	0	0	0
<u>NR*</u>	0	433,422	457,126	1,839,604	2,988,608	-143,581	1,332	624,288,884
Totals	1,108,563	9,484,662	3,216,970	3,047,615	793,617,860	(143,581)	1,877,208	624,288,884

* The Not Rated classification includes \$624 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 61	\$2,384,482,387
Difference from Investments	-18,445,477
Payables settling in 2014	-224,981,652
Margin Variation settling in 2014	-1,125,002
Receivables settling in 2014	234,798,268
Equities Holdings Difference	9,753,864
Small difference	-1
Total	\$18,445,477

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Mortgage Backed Securities	Municipals	Quasi Sovereign	Short-Term Cash	Sovereign	U.S. Treasuries	Total	% of Portfolio
\$132,439,607	\$-	\$-	\$-	\$47,265,564	\$277,375,252	\$471,760,957	19.94%
267,358	0	0	0	22,162,877	92,362,866	142,160,901	6.01%
0	2,284,332	0	0	10,649,436	1,014,821	39,193,705	1.66%
0	1,076,236	0	0	9,079,581	0	44,383,278	1.88%
63,538	0	0	0	3,214,908	3,567,630	52,419,359	2.22%
631,795	0	1,687,127	0	32,820,699	0	91,929,838	3.89%
531,689	0	1,782,986	0	25,441,900	0	120,875,573	5.11%
919,211	0	3,610,707	0	11,650,473	964,260	104,653,057	4.42%
37,499	0	10,282,527	0	25,097,097	0	132,990,136	5.62%
2,733,376	0	12,909,077	0	39,063,446	0	175,480,192	7.42%
0	0	8,921,322	0	9,746,643	0	63,283,157	2.67%
6,019,944	0	6,192,523	0	13,025,656	0	58,079,312	2.45%
2,029,938	0	2,709,628	0	2,960,298	0	44,360,639	1.87%
906,457	0	4,582,083	0	5,005,976	0	37,359,152	1.58%
982,085	0	2,933,300	0	3,204,663	0	28,820,500	1.22%
823,322	0	2,479,565	0	2,708,952	0	23,669,099	1.00%
0	0	0	0	0	0	8,466,265	0.36%
1,837,959	0	0	0	0	0	3,376,215	0.14%
0	0	0	0	0	0	726,556	0.03%
0	0	2,096,127	0	2,290,042	0	8,698,467	0.37%
0	0	0	0	0	0	0	0.00%
181,850	0	0	0	0	0	920,939	0.04%
0	0	0	0	0	0	0	0.00%
0	0	3,719,348	47,752,171	4,063,429	0	63,186,646	2.67%
2,937,869	0	0	0	16,439,702	0	649,242,966	27.44%
153,343,497	3,360,568	63,906,321	47,752,171	285,891,342	375,284,829	2,366,036,910	100%

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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 viceversa. 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, 2013, 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.

Investment Type	Market Value	Weighted Effective Duration
Agency	\$44,711,374	5.74
Asset Backed	13,628,929	1.88
Cash Equivalent	16,384,792	5.05
CMBS	15,542,182	2.75
CMO	11,278,187	4.68
Convertible	112,621	10.40
Corporate	690,718,938	4.72
Euro	6,505,742	2.86
Foreign	235,985,080	6.06
Loans	3,040,601	10.66
Mortgage Pass-Through	80,073,984	3.92
Preferred Stock	4,745,572	9.27
Quasi Sovereign	63,990,779	5.05
Sovereign	69,677,597	5.05
Swaps	-143,581	17.36
Unclassified	6,710,115	6.10
US Treasury	320,691,987	3.24
Yankee (Intl bonds in U.S. dollars)	57,032,936	5.60
	\$1,640,687,835	

Effective Duration – December 31, 2013

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, 2013.

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. 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, 2013, 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, 2013, the \$529.6 million carrying amount of the Plan's cash and cash equivalents was comprised of \$509 million of short-term investments, and \$10.9 million in deposits, of which \$10.5 million was subject to custodial credit risk because it was uninsured and uncollateralized.

Foreign Currency Risk in U.S. Dollar Denominations – December 31, 2013

		Fixed		Real	
Currency	Equities	Income	Currency	Estate	Total
Australian dollar	\$8,775,800	\$40,208,343	\$76,057	\$106,404	\$49,166,604
Brazilian real	7,333,242	13,742,354	5,259		21,080,855
British pound sterling	82,724,794	4,015,286	127,775	61,000	86,928,855
Canadian dollar	28,080,855		65,808	37,989	28,184,652
Danish krone	7,559,755				7,559,755
Euro	78,266,892	65,244,041	361,920		143,872,853
Hong Kong dollar	49,329,158		188,595	235,801	49,753,554
Hungarian forint		6,260,257	40		6,260,297
Indonesian rupiah	203,579		10,085		213,664
Israeli shekel	409,055		958		410,013
Japanese yen	107,956,115		16,373		107,972,488
Malaysian ringgit	712,019	15,385,417	74,902		16,172,338
Mexican peso	786,753	14,949,699	657,992	5,387,851	21,782,295
New Zealand dollar	134,018	15,226,649	517,063		15,877,730
Norwegian krone	12,019,773	8,778,325	80,302		20,878,400
Philippine peso	7,472,532		17,314		7,489,846
Polish zloty	864,642	16,027,795			16,892,437
Russian ruble		7,705,736			7,705,736
Singapore dollar	8,689,319		189,412	486,837	9,365,568
South African rand	2,168,369	9,142,013	63,130		11,373,512
South Korean won	29,981,946	16,553,517	72,139		46,607,602
Swedish krona	3,863,129	10,202,862			14,065,991
Swiss franc	10,405,040				10,405,040
Taiwan dollar	4,397,333		2,009,312		6,406,645
Thailand baht	3,387,196				3,387,196
Turkish lira	1,579,037	8,538,941		93,765	10,211,743
Investment Securities	\$457,100,351	\$251,981,235	\$4,534,436	\$6,409,647	\$720,025,669

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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 loans 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 loans at 102% plus accrued interest, MERS management believes that there is no credit risk per GASB 40 since 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, 2013, 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 \$5 million in 2013, excluding unrealized gains and losses.

Collateral Held and Fair Value of Securities on Loan – December 31, 2013

Fair Value of Securities on Loan	Nature of Collateral	Collateral Held
\$1,011,651,380	Cash	\$1,036,463,328
-	Non-Cash	-
\$1,011,651,380		\$1,036,463,328

Securities Lending Collateral

	S & P Rating	Percentage	Amount
Short-Term Credit Patinga	A-1+/P-1 *	7.88%	\$81,527,571
Credit Ratings	<u>A-1/P-1 *</u>	53.39	552,209,421
Long-Term	AAA	0.60	6,179,747
Credit Ratings	AA	6.96	72,026,342
	Α	23.27	240,670,061
	BBB+	0.00	0
	BBB	0.10	1,015,849
	BBB-	0.00	0
	BB+	0.00	0
	BB	0.00	0
	BB-	0.00	0
	Other	7.81	80,755,930
		100.00%	1,034,384,921
Net accumulated depreciat	ion in fair value		-1,314,613
Invested Securities Lending	g Collateral		\$1,033,070,308

* 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, 2013. 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. For the year ending December 31, 2013 the change in fair value of the futures contracts resulted in \$7,130,740 in investment income.

Swap Contracts and Structured Notes - December 31, 2013

Name	Maturity Date	Position	Cost	Market Value	Unrealized Gain	Counterparty
MARKIT CMBX.NA.AAA.4	2/17/51	Short	\$(1,150,216)	\$(104,213)	\$1,046,003	Citi Global Markets Limited
MARKIT CMBX.NA.AM.4	2/17/51	Short	(80,324)	(39,3t68)	40,956	Citi Global Markets Limited
Dow Jones UBS Commodity Index	5/30/14	Long	291,686,576	291,916,133	229,557	Cargill 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	\$9,780,534
Pending Payable	(10,163,983)
Foreign Currency Forward Contract Asset (Liability)	\$(383,449)

Futures Contract	Expiration Date	Long/Short	Cost	Market Value	Unrealized Gain
US 2 Year Note	03/31/14	Short	\$(881,000)	\$(879,248)	\$1,752
US 5 Year Note	03/31/14	Long	59,326,599	58,582,438	(744,162)
US 10 Year Note	03/20/14	Short	(38,861,062)	(38,036,562)	824,500
US Long Bond	03/20/14	Long	35,859,100	35,285,929	(573,172)
Brent Crude	11/13/14	Long	912,690	956,970	44,280
Gold	06/16/14	Long	1,547,280	1,444,320	(102,960)
S&500 E-Mini Futures	03/21/14	Long	177,708,626	182,545,065	4,836,439
MSCI Emerging Market Futures	03/21/14	Long	117,159,380	119,779,040	2,619,660
US Dollar Put / Japanese Yen Call Option	02/24/14	Long	217,000	1,332	(215,668)

Futures and Options Contracts - December 31, 2013

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 \$1,350,107,645 for investment in private equity securities. As of December 31, 2013, \$956,876,269 was invested in private equity leaving \$393,231,376 available for future investments. Capital call commitments were at \$304,926,850.

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 \$274 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 2.6 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. Commitments and Contingencies

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.

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, 2016. Any additional amounts if required to be founded aren't expected to be significant.

6. Related Parties

Tegrit Group is 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 is the majority stockholder of Tegrit Group holding the investment in the MERS Strategic Opportunity Fund. Tegrit Administrators, a former division of the Tegrit Group, was the record-keeper for the MERS Defined Contribution Plan, Defined Contribution portion of the Hybrid Plan, Retiree Health Funding Vehicle, Investment Services Program, 457 Program, and the Health Care Savings Program for most of 2013. Tegrit Group sold this division to Alerus Retirement Solutions during the fall of 2013. MERS signed three-year contracts with two other divisions of Tegrit Group effective for 2014-2016. Tegrit Technology is used for building and maintaining pension software; Tegrit Actuarial will be performing actuarial work. MERS paid Tegrit Group \$4,293,222 in 2013 for these 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 2013 Cobalt paid MERS \$68,878 to cover the year's expenses.

7. Funded Status and Funding Progress

The 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 2013 were determined by actuarial valuations as of December 31, 2011. Approximately 78% of the participating municipalities have fiscal years that begin January 1 or July 1.

8. 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 2014.

9. Summary Information – actuarial funding methods and assumptions

Valuation Date	December 31, 2012
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Payroll, Open
Remaining Amortization Period	There are 26 years for positive unfunded liabilities, and 10 years for negative unfunded liabilities. The 26-year period will decline by one year in each of the following six 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.
	For divisions that are closed to new hires, and the new hires are not covered by 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 for positive unfunded liabilities is decreased annually by 2 years until the 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, 2012, 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.
Asset Valuation Method	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.
Actuarial Assumptions	Investment Rate of Return – 8%.
Projected Salary Increases	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 2013, 2014, 2015, and 2016, the wage inflation assumption is 1%, 1%, 2% and 3%, respectively, instead of 4.5%.
Post-Retirement Benefit	A 2.5% annual post-retirement benefit adjustment – if adopted by individual municipalities.



DROP+: Delayed Retirement Option 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%.

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

As of December 31, 2013 the balance of the amounts held by the pension plan pursuant to the DROP+ Program was \$0.00

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

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.

 t 1 0 fisca	Investment Returns years	
		201

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

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.

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Schedule of Administrative Expenses for the Year Ended December 31, 2013

Administrative Expenses	
Personnel Services	
Salaries	\$8,917,501
Social Security	627,267
Retirement	2,398,455
Insurance	1,675,096
Total Personnel Services	13,618,319
Professional Services	
Third Party Administrator	1,640,948
Actuarial Services	1,362,550
Audit Services	56,400
Commercial Banking	100,024
Computer Consultant/Maintenance	20,022
Consultants	6,960
Legal Services	288,162
Medical Services	78,975
Total Professional Services	3,554,041
Communication	
Advertising / Promotional Supplies	14,508
Annual Meeting	62,100
Board Travel and Meetings1	33,994
Library and Records Storage	13,961
Outreach	28,977
Postage / Shipping	231,216
Printing and Copying Services	100,094
Telephone / Communications	239,388
Travel and Meetings	284,880
Total Communication	1,009,118
Rentals	
Equipment Rental	42,760
Office Rental	687,600
Total Rentals	730,360
Miscellaneous	
Depreciation	2,770,443
Equipment Purchases	30,267
Insurance	255,986
Building / Equipment Maintenance	329,728
Office Supplies	75,693
Operating Expenses	(68,461)
Payroll Processing	17,835
Personnel Support	113,075
Professional Development & Tuition	113,077
Software Support	1,505,737
Subscriptions / Memberships	38,555
Service Fees ²	(2,181,861)
Total Miscellaneous	3,000,074
Total Administrative Expenses	\$21,911,912

Schedule of Investment Expenses for the Year Ended December 31, 2013

Investment Expenses	
Personnel Services	
Salaries	\$1,136,385
Social Security	75,915
Retirement	117,876
Insurance	142,799
Total Personnel Services	1,472,975
Professional Services	
Commercial Banking	1,130,706
Investment Managers	16,925,602
Investment Performance	102,000
Other Consultants	78,066
Total Professional Services	18,236,374
Communication	
Travel	103,745
Total Communication	103,745
Miscellaneous	
Memberships	8,815
Professional Development	10,893
Operating Expenses	3,068
Software Support	157,671
Total Miscellaneous	180,447
Total Investment Expenses	\$19,993,541

Note: See accompanying Independent Auditor's Report.

¹ Board travel and meeting includes \$11,731 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.

² 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.

Firm	Nature of Service	Amount
Tegrit Financial Group, LLC	Software Consulting and Configuration Services	\$2,489,100
Tegrit Administrators, LLC	Third Party Administration	1,251,800
State Street Corporation	Depository Trust Banking Services	1,245,300
Tegrit Actuarial Consulting, LLC	Actuarial Consultants	552,300
Alerus Financial NA	Third Party Administration	389,200
Open Text Inc.	Software Consulting and Configuration Services	105,200
Consulting Physicians	Medical Advisor	79,000
Orion Development Group	Business Consultants	68,800
Miller Canfield	Legal Counsel	68,300
Andrews Hooper Pavlik PLC	Auditing Services	60,200
Informaxion Solutions, LLLC	Software Consulting and Configuration Services	59,300
Epicor Software Corporation	Software Consulting and Configuration Services	53,100
Maner Costerisan	Software Consulting and Configuration Services	38,100
Michigan Legislative Consultants	Legislative Consultants	33,000
Ice Miller LLP	Legal Counsel	32,800
Pension Trustee Advisors, Inc	Actuarial Consultants	29,400
Analysts International Corp	Project Management Services	25,000
Ned Davis	Investment Consultants	25,000
Karoub Associates	Legislative Consultants	20,000

Schedule of Payments to Consultants

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 stated in the Statement of Changes in Plan Net Position.

See accompanying Independent Auditor's Report.

SECTION 3: INVESTMENTS



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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, 2013.

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 global markets experienced modest growth and improving employment levels, as the economic recovery continued to support asset price appreciation. This economic strength was dominated by the United States with tepid improvement in developed Europe; problems within the Eurozone banking sector continued to impede a full recovery. It was a difficult year for emerging markets and commodity-producing nations, as China's economic activity slowed as they began to implement a longterm shift to a more consumer-orientated economy. Governance mistakes contributed negatively to the financial sectors of many emerging market countries. These macro factors are likely to continue to dominate the markets for the foreseeable future, with increased volatility as the recovery enters its sixth year.

The Fed's decision to delay tapering its quantitative easing program continued to support cautious market reflection amongst institutional investors. In the Eurozone, GDP remained in positive territory, decreasing slightly to 0.2% in the fourth guarter. In China, the economy remained strong relative to developed markets at 7.7% annualized for the fourth guarter, down from 7.8%. Recent policy initiatives in China have been viewed as positive by the markets. Emerging market economies continued to have a difficult time as economic activity slowed, with prospects for improvement in 2014 unlikely. The Dow Jones Industrial Average settled in above 16,000 as the year-long rally solidified. The University of Michigan Survey of Consumer Confidence Sentiment jumped to 82.5 and U.S. GDP was strong at 3.2% for the fourth guarter. Headline unemployment in the U.S. dropped below 7.0% to 6.7% in December. The more robust U6 declined significantly to 13.1%. New jobs continue to be added to the economy at

a pace of 227,000 above economists' estimates of 200,000 for the month of December an increase from November. Initial jobless claims increased slightly, but a downward trend continued. The ADP jobs report also showed that small businesses accounted for 108,000 new jobs, while large businesses with more than 500 employees added 65,000 positions. The deleveraging process, substantially completed in the U.S., will continue to have a negative impact on headline GDP growth for several years to come, particularly in Europe. Therefore, a more opportunistic and patient investment approach will be necessary to maximize returns. U.S. markets are showing signs of overvaluation, and a shift toward investments in Europe and the developing world is being implemented.

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 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, the 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 15.0% (14.75% after investment expenses), returning 5.05% for the fourth quarter and 1.32% for the month of December. The fund outperformed its policy benchmark by 65 bps for the year. Yearly performance was strong, with most performance trends continuing. All asset classes produced positive absolute returns for the year, with the exception of

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commodities and fixed income; which produced slightly negative returns on fears of rising interest rates. Equities led fund attribution, returning 31.92%, with larger cap names and growth equities adding modest value over smaller cap stocks. Frontier markets added non-correlated positive returns, but emerging markets continued to sell off and detract compared to their U.S. counterparts — MERS' core equity portfolio returned 35.92%. Fixed income was negative, returning -0.04% yet outperforming the Barclays Aggregate, which returned -2.02%, by 198 bps. MERS' fixed income substitutes produced positive and strong returns, significantly outperforming the Barclays Aggregate Bond Index as a group.

MERS 2013 highlights:

- The MERS Total Market Fund return for 2013 was 15.00% gross of investment fees, outperforming the actuarially assumed rate of 8.00% by 7.00%.
- The MERS Total Market Fund outperformed its custom policy benchmark, gross of investment fees, by 0.65%. This performance is a testament of MERS' portfolio asset allocation, active management, and tactical decision-making. The MERS portfolio is specifically designed to provide downside protection during turbulent markets.

 At the broad asset class level, absolute returns gross of investment fees for the year were as follows:

Total Equity	31.92%
Fixed Income	-0.04%
Real Estate	8.47%
Commodities	-9.99%
Private Equity	19.19%
Cash	0.12%

In conclusion, I would like to thank the Retirement Board, the fiduciaries of the MERS Plan, for their continued support of the Office of Investments. 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 using its collective resources to ensure its member municipalities have sufficient financial resources to meet the pension obligations that each is individually responsible for, under the State of Michigan's Constitution 1963, Article 9, Section 24. MERS is authorized to create subsidiary entities and to provide additional benefits and savings programs to its members at the direction of the Retirement Board. See PA 490 of 2004, 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, 457 Supplemental Retirement Program, Health Care Savings Program, Retiree Health Funding Vehicle, and Investment Services Program. MERS' Retirement Board (Board) has granted full discretion to manage all investment management operations and activities to MERS Office of Investments, except those specifically reserved for the Board.

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 MERS' investment program and offers a map to assist in making prudent and informed investment decisions. This IPS addresses the following issues:

- The goals of 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. At a minimum, the IPS will be updated annually and approved by the Board.

In accordance with GASB 25, 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 guarter 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 2013 the annual money weighted rate of return net of investment expenses measured on monthly inputs was 14.97%.



A. DEFINED BENEFIT PLAN

INVESTMENT OBJECTIVES AND ACTIVITY

In conformity with PERSIA, the primary goal of 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:

- Maintain the stability of the Plan's funded status
- 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
- 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 above median peer rankings for the 3, 5, and 10-year time periods
- Exceed the return of the Fund's Policy Benchmark. The Policy Benchmark currently consists of:

Index	Weighting
Barclays Aggregate Bond Index	30%
S&P 500 Index	20
Russell 2000 Index	15
Custom Real Estate Index*	7
Russell Micro Cap Index	5
MSCI EAFE Index	5
MSCI Emerging Markets Index	5
BofA Merrill Lynch High Yield Master II	5
DJ UBS Commodities Index	5
Citigroup 91-day T-bill	3

PORTFOLIO HIGHLIGHTS

Asset Allocation

The Fund's asset allocation is the single most important determinant of achieving the stated investment goals. The 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;
- Assessment of global economic, political, and regulatory trends to identify portfolio themes;
- 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 Fund:

- Sufficient size and liquidity to permit an investment by the Fund;
- Staff 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 Fund's assets; and
- Ability to readily measure performance and risk against appropriate benchmarks.

Portfolio Weighting Guidelines

New investment strategies (asset classes or subasset 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.

- Strategies may be allocated among several managers to reduce risk.
- Each manager will have a maximum allocation of 15% of the Total Fund.

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

The new allocation is:

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

The allocation prior to the approval in November, as of 12/31/13, was:

Domestic Equity	34.5%
Fixed Income	35.0
International Equity	10.0
Real Estate	7.0
Private Equity	7.0
Commodities	5.0
Cash	1.5

Tactical Asset Allocation

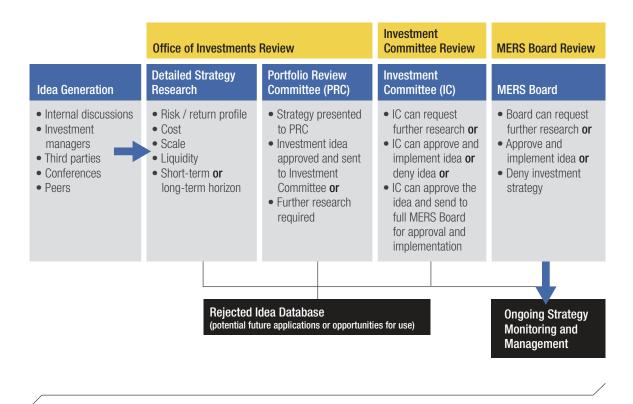
As the financial markets and economic conditions change, certain asset classes become more favorable than others. Therefore, it is necessary to engage in short-term, tactical deviations from the strategic allocation in order to capitalize on unusual or exceptional investment opportunities. Since the markets are so dynamic, these moves will be made very quickly in an effort to take advantage of short-term, systemic inefficiencies and broad-market trends. MERS Office of Investments feels that engaging in such tactical deviations is necessary to produce superior investment returns from a risk/return perspective.

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Investment Strategy Implementation Process

The team is well positioned to identify appealing investment opportunities through the use of a variety of quantitative and qualitative tools. These tools include insight from existing investment managers, research databases, third-party research, and financial publications, among numerous others. There is no timetable for these tactical deviations, but they will typically have a duration of less than one year. Once the short-term opportunities have run their course, the portfolio will be rebalanced to the overall strategic asset allocation.



INVESTMENT THEMES

As the Total Market Fund continues to evolve, several prevalent themes have emerged as guideposts for the Fund's structure. These broad-based themes will continue to be strongly considered in our decision-making process as we look for investment opportunities. We feel successful integration of these themes into the fund will help exceed the stated fund objectives. Naturally, new themes will emerge over time and replace existing themes.

Global 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. Currently there is a strong preference toward investing in the U.S. over developed Europe and prudently increasing our emerging market exposure over the medium term.

Active/Passive Mix

The Fund 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, emerging markets, credit, etc.) where it has proven to be additive. 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 Fund 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 — that returns eventually move up or down toward the mean. 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.



TOTAL MARKET FUND REVIEW

MERS' investments generated a gross return of 15.0% for calendar year 2013 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 global equity and private equity generating some of the highest returns, 31.92% and 19.19%, respectively.

Portfolio Rebalance Policy

MERS adopted a new asset allocation in November 2013; the Investment Guidelines 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

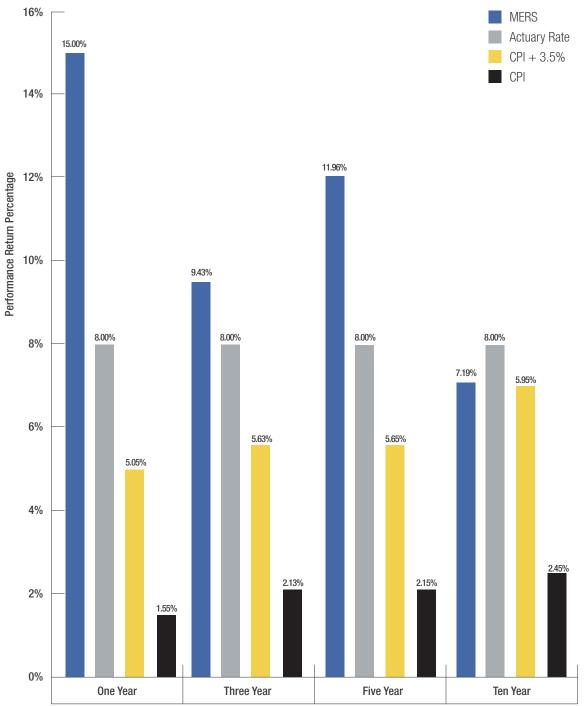
In an effort to minimize tracking error at the Total Fund level, the Office of Investments works with the Clifton Group to monitor allocations and implement a policy overlay using index futures. Asset allocation levels for the following asset classes are monitored daily in relation to the predetermined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

Asset Class	Variation Band %	Index Futures
Domestic Equity	± 10%	S&P 500, S&P 400, or Russell 2000 Index
International Equity	± 20	MSCI EAFE Index
Emerging Markets Equity	± 20	MSCI EM Index
Fixed Income	± 10	Barclays Capital Aggregate Bond Index
Commodities	± 20	Goldman Sachs Commodity Index

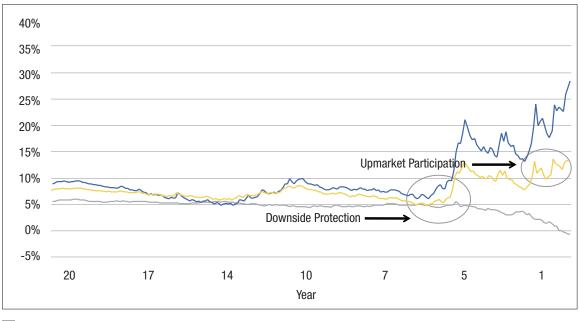
Annual Portfolio Rebalance

The 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.









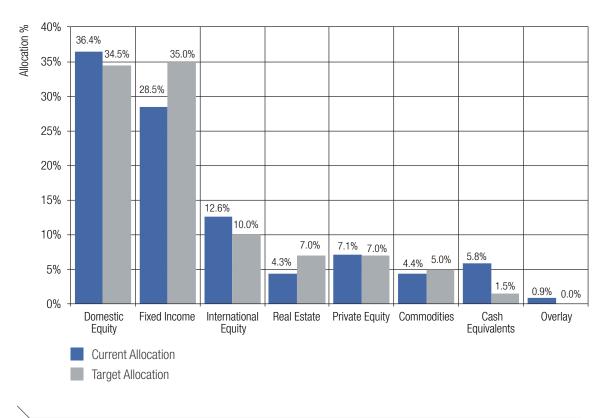
Downside Protection Upside Participation as of December 31, 2013

Barclays US Aggregate Bond IndexMERS

Russell 3000

Downside Protection Upside Participation as of December 31, 2013

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 MERS Total Market Fund 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, 2013

Statistical Performance (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
Annualized Return (gross of fees)	15.00%	9.43%	11.96%	7.19%
Annualized Standard Deviation	5.11	7.78	9.05	9.37
Sharpe Ratio	2.93	1.20	1.31	0.60
Excess Return	0.64	0.64	-0.49	0.37
Beta	0.94	0.94	0.82	0.88
Correlation to Policy Benchmark	0.99	0.99	0.98	0.99

INVESTMENTS SECTION 2013 comprehensive annual financial report

Commission Recapture

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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 Total Market Fund'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% State Street. Recapture dollars are used to offset the administrative, custodial, accounting, and performance measurement costs incurred by the fund. For 2013, \$154,516 was directed by equity managers to SSGM, of which \$98,755 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.

	Gross Earnings	Rebates	Agent Manager Fees	Net Earnings
First Quarter	\$1,594,616	\$325,181	\$253,874	\$1,015,561
Second Quarter	1,912,012	290,749	324,243	1,297,020
Third Quarter	1,829,234	250,084	315,814	1,263,336
Fourth Quarter	2,109,757	238,177	374,308	1,497,272
Totals	\$7,445,619	\$1,104,191	\$1,268,239	\$5,073,189

Securities Lending 2013 Rebates and Fees

Investment Summary for Defined Benefit Plan, Retiree Health Funding Vehicle, Defined Contribution Plan, Health Care Savings Program, 457 and Investment Services Programs as of December 31, 2013

Type of Investment	Market Value
Fixed Income Global Fixed Income	\$2,384,482,387
Total Fixed Income	2,384,482,387
Equities Global Stock	4,187,842,547
Total Equities	4,187,842,547
Private Equity & Commodities Private Equity Commodities	594,251,440 364,791,774
Total Private Equity & Commodities	959,043,214
Real Estate Real Estate	358,546,846
Total Real Estate	358,546,846
Subtotal Investments	7,889,914,994
Cash Equivalents Cash Equivalents	484,859,064
Total Cash Equivalents	484,859,064
Total Investments & Cash	\$8,374,774,058

Reconciliation of Investments to Financial Statements

Total Investments from above	\$8,374,774,058
Receivables - Sale of Investments, Interest & Dividends	(905,723,618)
Bonds in default	(1,189,875)
Real Estate reclassification	(6,761,877)
Small adjustment	1
Investments not in MERS State Street' portfolio	332,843,653
Cash at State Street	(23,907,577)
Payables - Purchases of Investments	878,653,317
Investments on Financial Statements	\$8,648,688,082

Note: Includes receivables and payables for sales and purchases of securities with settlement dates after December 31, 2013.

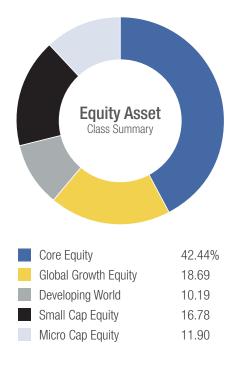


EQUITY ASSET CLASS SUMMARY

As of December 31, 2013, the public equity portfolio had a market value of \$4.2 billion, representing 49.0% of the Total Market Fund. Performance for the total equity portfolio was 31.92% gross of fees for the year.

MERS maintains a significant allocation to publicly traded shares of corporations around the world. Broad exposure to the public equity markets is paramount to achieving the Fund's stated objectives and delivering the actuarial rate of return of 8%. The global equity portfolio has a target allocation of 49.00% of the Total Fund. As of December 31, 2013, the portfolio includes core equity, global growth equity, developing world, small cap equity, and micro cap equity. Exposure is achieved through portfolios 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 are monitored in relation to asset class bands on an ongoing basis and rebalances take place if deemed appropriate. This portfolio is expected to perform well in periods of low to falling inflation and rising economic growth. It is also expected to provide ongoing income through dividend payments as well as downside protection in volatile markets.





Public Equity Performance as of December 31, 2013 (gross of fees)

Portfolio Characteristics	1 Year	3 Year	5 Year	10 Year
MERS Total Global Equity	31.92%	13.76%	18.32%	8.28%
MSCI World Index Net Daily	26.68	11.49	15.02	6.98
Excess	5.24	2.27	3.29	1.30
MERS Core Equity	35.92	17.57	20.82	9.91
S&P500 Index (Daily)	32.39	16.18	17.94	7.41
Excess	3.53	1.39	2.88	2.51
MERS Global Growth Equity	24.34	6.92		
MSCI AC World Growth (Daily)	23.62	10.43		
Excess	0.72	-3.51		
MERS Developing World	4.70	-4.89	6.00	
MERS Developing World Index	8.48	0.81	13.14	
Excess	-3.78	-5.70	-7.14	
MERS Microcap Equity	47.18			
Russell Microcap	45.62	16.52	21.05	6.99
Excess	1.56			
MERS Small Cap Equity	34.03	14.12	20.57	8.44
Russell 2000 (Daily)	38.82	15.67	20.08	9.07
Excess	-4.79	-1.56	0.49	-0.63

Top 10 Equity Holdings as of December 31, 2013

Asset Description	Market Value	Percentage of Total Market Value
Apple, Incorporated	\$25,669,099	0.31%
Citigroup, Incorporated	19,969,020	0.24
Morgan Stanley	18,083,399	0.22
Google, Incorporated	17,098,672	0.20
Concho Resources, Incorporated	16,710,084	0.20
HCA Holdings, Incorporated	16,528,223	0.20
Gilead Sciences, Incorporated	15,613,464	0.19
Terex Corporation	15,466,596	0.18
Exxon Mobil Corporation	15,078,800	0.18
LAM Research Corporation	13,870,865	0.17

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



Public Equity – Investment Managers

Investment Manager	Style	Portfolio Market Value
External Investment Manager		
Blackrock	Frontier Markets Enhanced Index	\$100,138,984
Acadian	International Small Cap	255,638,215
Driehaus	All-Cap Global Growth	384,246,345
Mountain Pacific	Emerging Markets	142,629,260
Hexam	Emerging Markets	93,198,632
Mellon Tangent Added TAA	Large Cap Core/Value	535,046,467
Punch Investments	Micro Cap	102,176,568
Morgan Dempsey	Micro Cap	98,998,916
Eudaimonia	Micro Cap	107,443,304
Kennedy Capital	Micro Cap	100,986,071
Downriver Capital	Micro Cap	33,697,634
C.S. McKee	Small Cap U.S. Core	183,525
Irving Magee	Small Cap U.S. Value	222,566,802
Kennedy Capital	Small Cap U.S. Value	1,235,019
Hellman Jordan	All-Cap U.S. Core	383,204,744
Seizert Capital	SMID Cap U.S. Value	42,995,930
Wellington	Mid Cap U.S. Core	224,532,959
Consilium Frontier Equity	Frontier Markets	41,239,276
Frontier Market Opportunity	Frontier Markets	41,152,510
Internal Investment Manager		
MERS S&P 400	S&P 400 Index	\$422,803,941
MERS S&P 500	S&P 500 Index	560,679,648
MERS S&P 600	S&P 600 Index	166,547,034
MERS Micro Cap	Active Micro Cap	45,390,606

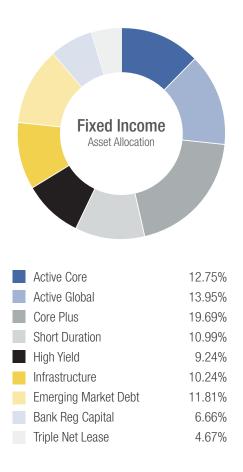
FIXED INCOME ASSET CLASS SUMMARY

As of December 31, 2013, the Total Fixed Income portfolio had a market value of \$2.4 billion, representing 28.50% of the Total Market Fund. Performance for fixed income was -0.04% gross of fees.

Fixed Income

Fixed income is the base of the MERS Total Market Fund, providing exposure to high quality securities that provide stable cash flow and liquidity to the overall portfolio. Fixed income provides meaningful diversification to the Total Market Fund, covering a variety of different macroeconomic environments. Core fixed income tends to perform well in times of falling economic growth and stable to falling inflation. In mid-2012 the fixed income portfolio changed from a traditional strategy to a core and satellite approach. A core and satellite investment strategy incorporates a passive/lower risk "core" component and an "active" satellite element. A core investment is the central part of a portfolio. It demands that the investment be steadily reliable throughout the year preserving capital and liquidity. Core is the foundation from which the rest of the portfolio is built. However, the satellite component is where the strategic deployment of active risk occurs, both short term and long term. The main purpose for this approach is to provide the opportunity to earn greater returns than those generated by the core portion of the portfolio.

Fixed Income Asset Allocation



Fixed Income Performance as of December 31, 2013 (gross of fees)

	1 Year	3 Year	5 Year	10 Year
Fixed Income	-0.04%	4.55%	6.82%	5.46%
Barclay Aggregate (Daily)	-2.02	3.26	4.44	4.55
Excess	1.98	1.29	2.38	0.91



Top 10 Fixed Income Holdings as of December 31, 2013

Asset Description	Market Value	Percentage of Total Market Value
Fannie Mae 6.0% 4/18/2036	\$22,316,004	0.27%
United States Treasury 1.5% 8/31/2018	22,268,344	0.27
United States Treasury 0.25% 11/30/2015	20,942,200	0.25
United States Treasury 2.75% 11/15/2023	20,278,787	0.24
GNMA Pool 5.0% 9/15/2039	18,588,205	0.22
Poland Government Bond 4.0% 10/25/2023	16,027,795	0.19
United States Treasury 0.375% 8/31/2015	15,107,974	0.18
Mexico Government Bond 7.75% 11/13/2042	14,949,699	0.18
Canada Housing Trust 3.15% 6/15/2014	11,014,608	0.13
Australian Government Bond 5.5% 4/21/2023	10,778,014	0.13

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

Fixed Income – Investment Managers

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Investment Manager	Style	Portfolio Market Value
External Investment Manager		
Credit Suisse	Infrastructure	\$244,188,686
C.S. McKee	Core Fixed Income	304,128,644
First International Advisors	Global Bonds	332,750,031
Janus Capital Management	Core Plus	469,507,789
Janus Capital Management	Short Duration	262,116,623
Oak Street Real Estate Capital	Triple Net Lease	69,959,937
Orchard Global Capital	Bank Regulatory Capital	158,758,024
TCW	Emerging Market Debt	281,525,643
Elmtree Net Lease Fund II	Triple Net Lease	41,304,142
Stone Harbor Investments	Global High Yield	220,242,868

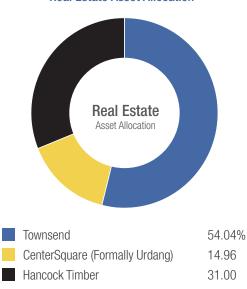
ALTERNATIVE ASSET CLASS SUMMARY

As of December 31, 2013, the alternatives portfolio had a market value of \$1.3 billion, representing 15.8% (4.30% real estate, 4.40% commodities, and 7.10% private equity) of the Total Market Fund. Performance for real estate, commodities, and private equity was 8.47%, -9.99%, and 19.19%, respectively.

Alternative investments are frequently not publically traded and therefore do not have a readily determinable market value. 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 significantly from the values that would have been used had a ready market for these securities existed. The difference could be material.

Real Estate

MERS' real estate target allocation represents 7% of the total Plan, and is diversified among private property partnerships, global real estate investment trusts (REITs), and timber partnerships. The allocation provides diversification, inflation protection, consistent income, and uncorrelated returns to the Total Market Fund.



Real Estate Asset Allocation

REITs (Real Estate)

REITs are securities that trade like stocks on the major exchanges and invest in real estate directly, either through properties or mortgages. REITs offer several benefits over actually owning properties. First, they are highly liquid, unlike traditional real estate. Second, REITs enable sharing in nonresidential properties as well, such as hotels, malls, and other commercial or industrial properties. Third, there is no minimum investment with REITs. REITs do not necessarily increase and decrease in value along with the broader market. However, they pay yields in the form of dividends no matter how the shares perform. REITs can be valued based upon fundamental measures, similar to the valuation of stocks, but different numbers tend to be important for REITs than for stocks.

MERS' global REITs underperformed for the year during 2013, after an impressive 2012 returned 28.15%. For the one year REITs returned -1.53% against its custom benchmark's 4.39%. However, the portfolio held strong for the two year and five year, at 12.33% and 15.00%, respectively.

Timber (Real Estate)

MERS has invested in timber since 1995, and has looked at this portion of the portfolio to provide diversification, current income, and capital preservation through its inflation-sensitive pricing characteristics. MERS' investments in timber outperformed the NCREIF Timberland Index by 0.53% in 2013, with a return for the one year at 10.21% gross of fees.

Commodities

The MERS' commodities target allocation represents 5% of the Total Market Fund. Commodities exhibit low correlations to most traditional asset classes and therefore behave differently during market cycles. Unlike stocks and bonds, commodities are expected to perform well during periods of inflation, creating a natural hedge in the portfolio. Exposure to the commodity markets is obtained through an enhanced swap agreement with Cargill.

The commodities portfolio was further diversified with recent direct investments in pastoral land in Australia. This investment will further diversify the portfolio, increase the correlation benefit, and capitalize on global population growth and changing dietary trends.

Private Equity

MERS' private equity target allocation represents 7% of the Total Market Fund and its role within the portfolio is to provide diversification from public equity investments and enhanced returns, as compensation for the higher level of risk undertaken in this asset class. Investments in private equity include U.S. and international, venture capital, buyout, and special situation funds. It should also be noted that Private Equity is a longterm asset class and its performance is more fairly evaluated on a longer time horizon. The asset class has performed much better relative to its benchmark over longer time periods, exceeding the Russell 2000 index over the five and seven-year time periods. MERS' staff expects that the portfolio of private market investments will continue to provide long-term benefits for the Total Market Fund.

Alternative Performance as of December 31, 2013 (gross of fees)

	1 Year	3 Year	5 Year	10 Year
MERS Real Estate	8.47%	9.38%	3.55%	6.50%
MERS Custom Real Estate Benchmark	8.94	9.20	7.10	8.92
Excess Return	(0.47)	0.18	(3.56)	(2.42)
MERS Comodities	(9.99)	(1.67)	5.52	
MERS Custom Commodities Index	(9.52)	(4.00)	1.82	
Excess Return	(0.47)	2.34	3.70	
MERS Private Equity	19.19	11.49	6.76	8.26
Russell 2000	38.82	15.67	20.08	9.07
Excess Return	(19.63)	(4.18)	(13.33)	<u>(0.81)</u>

Alternatives – External Investment Managers

Investment Manager	Style	Portfolio Market Value
Real Estate		
Townsend	Private Real Estate	\$193,749,674
CenterSquare (Formally Urdang)	Global REIT	53,636,268
Hancock Timber	Timber	111,160,904
Commodities		
Cargill	Enhanced Index	296,352,700
Australian Pastoral Fund	Real Assets Investment	54,566,286
Mt. Pacific FX	Currency Hedge	13,872,788
Private Equity		
Credit Suisse	Fund of Funds & Co Investments	423,355,853
MERS Strategic Opportunities	Fund of Funds & Co Investments	66,353,074
Mesirow Capital Partners	Fund of Funds & Co Investments	25,798,964
AlpInvest	Fund of Funds & Co Investments	69,532,714
MERS Internal Private Equity	Fund of Funds & Co Investments	9,210,835



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, 2013

Investment Managers	Average Assets Under Management*	Annual Fee	Average Basis Points
Fixed Income	\$1,588,745,955	\$3,129,570	19.70
Domestic Equities	3,015,011,543	9,161,403	30.39
International Equities	866,919,810	3,385,706	39.05
Real Estate	247,385,942	1,108,596	44.81
Commodities	55,305,899	140,327	25.37
Total Investment Manager Fees	\$5,773,369,149	\$16,925,602	29.32

* 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.

1,130,706	
102,000	
1,268,239	
\$19,426,547	
	102,000

Schedule of Investment Commissions as of December 31, 2013

Brokerage Firm	Shares Traded	Total Dollars	Commission/Share
Instinet	77,468,957	\$769,506	0.0099
Cantor Fitzgerald & Company	11,747,327	250,500	0.0213
Morgan Stanley and Company Incorporated	22,802,212	245,408	0.0108
Credit Suisse Securities	19,320,376	237,421	0.0123
State Street Global Markets, LLC	23,807,905	173,768	0.0073
J.P. Morgan Clearing Corporation	15,843,451	152,103	0.0096
Barclays	8,069,191	128,182	0.0159
Goldman Sachs & Company	5,664,294	121,773	0.0215
JonesTrading Institutional Services, LLC	5,499,711	115,349	0.0210
Merrill Lynch, Pierce, Fenner, and Smith Inc	18,809,440	103,782	0.0055
Knight Direct LLC	10,675,080	95,216	0.0089
Capital Institutional Services, Incorporated	2,811,341	94,881	0.0337
MacQuarie Bank Limited	13,728,250	92,875	0.0068
Knight Equity Markets, LP	3,994,442	89,245	0.0223
Citigroup Inc.	10,756,200	88,714	0.0082
Bloomberg Tradebook, LLC	6,191,155	84,623	0.0137
Craig-Hallum Capital Group LLC	3,526,251	80,702	0.0229
Jefferies & Co.	7,594,628	78,809	0.0104
Robert W. Baird and Company	1,818,036	63,151	0.0347
Pershing Securities Limited	2,360,319	57,587	0.0244
B. Riley & Co., LLC	2,125,263	52,868	0.0249
UBS, LLC	12,610,229	51,116	0.0041
Raymond James and Associates Incorporated	1,649,456	50,250	0.0305
ITG Securities LTD	16,199,072	49,148	0.0030
Daiwa Securities Inc	10,571,877	46,628	0.0044
Subtotal (25 Largest)	315,644,463	3,373,618	0.0107
Remaining Total	88,925,893	1,029,879	0.0116
Total Commissions	404,570,356	\$4,403,498	0.0109



B. MERS INVESTMENT MENU SUMMARY FOR THE DEFINED CONTRIBUTION PLAN, HYBRID (PART II) PLAN, HEALTH CARE SAVINGS PROGRAM, AND 457 PROGRAM

The MERS Retirement Board, together with the Office of Investments, selects the menu of investment options for the MERS Defined Contribution Plan, Hybrid Plan (Part II), Health Care Savings Program, and 457 Supplemental Retirement Program. 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 simplified into four categories or "sleeves" which help streamline the participant's selection process. For performance and fee information of individual funds, please review the MERS Investment Menu Fund and Fee Summary, which is updated on a quarterly basis and available on the MERS website at *www.mersofmich.com/investments*. A full description of each investment option can also be found on the MERS website.

Retirement Strategies

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Retirement Strategies are also known as Target Date Funds. Each fund is a complete, diversified investment program that changes its asset mix as the participant moves toward and through retirement. Retirement Strategies are the default investment selection for the Defined Contribution Plan, Hybrid Part II, and the 457 Program.

INVESTMENTS SECTION 2013 comprehensive annual financial report

Diversified Portfolios

Diversified Portfolios are professionally managed by MERS, and allow access to certain MERS investments. Each fund is a fully diversified portfolio with a target allocation that is rebalanced quarterly. The Diversified Portfolios include the Established Market Fund, which is the default selection for the MERS Health Care Savings Program.

Expanded Funds

Expanded Funds give experienced investors a variety of available funds from which to choose. Used in conjunction with any of the other sleeves of the MERS Investment Menu or by themselves, these funds are designed to further diversify a participant's investment portfolio.

Self-Directed Brokerage Window

The Self-Directed Brokerage Window offers access to a broader selection of funds. Several requirements are needed to be eligible as well as a minimum account balance. The Brokerage Window is not available for the MERS Health Care Savings Program.

C. MERS RETIREE HEALTH FUNDING VEHICLE

The MERS Retirement Board and Office of Investments actively choose and monitor the fund lineup available to employers enrolled in the Retiree Health Funding Vehicle. MERS values a disciplined approach to investing and must also follow Michigan state law and established standards of diligence with strict oversight and management. The funds are professionally managed by a dedicated team of experienced investment professionals and support staff, who are responsible for monitoring all investment activity.

The funds available in the Retiree Health Funding Vehicle are:

- MERS Total Market Fund
- MERS Established Market Fund
- MERS Diversified Bond Fund
- MERS Short-Term Managed Income Fund

D. MERS INVESTMENT SERVICES PROGRAM

The Investment Services Program provides municipalities with non-membership access to the MERS Total Market Fund. Employers benefit from a professionally managed fund, economies of scale, and lower administrative fees while still maintaining local control of administration.

The funds available in the Investment Services Program are:

- MERS Total Market Fund
- MERS Established Market Fund
- MERS Diversified Bond Fund
- MERS Short-Term Managed Income Fund

To view investment activity on the MERS Total Market Fund, see part A of the Investments Section.



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September 20, 2013

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, 2012 annual actuarial valuations was to (i) measure MERS' funding progress, (ii) establish contribution requirements for fiscal years beginning in 2014 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 26 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, 2012.

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.

1134 Municipal Way | Lansing, MI 48917 | www.mersofmich.com | 517.703.9030 | 800.767.6377 | Fax 517.327.8336



Retirement Board September 20, 2013 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 and we reviewed 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

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Retirement Board September 20, 2013 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, 2012 annual actuarial valuation reports produce results that we believe are reasonable.

Respectfully submitted,

Alm E. Sommantin

Alan E. Sonnanstine, MAAA, ASA

Cathy Nagy, MARA, FSA

Jimk

W. James Koss, MAAA, ASA

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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, 2012, actuarial valuations are those adopted by the Retirement Board. The actuarial assumptions were last revised as of December 31, 2012. The most recent experience study for the System was completed in March 2010 and covered the period January 1, 2004, through December 31, 2008.

There have been no changes in the funding method that was adopted by the Retirement 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 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 furnished 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). MERS' actuarial staff members were employees of MERS in 2013. The actuarial staff members are employees of Tegrit Group beginning in 2014. The Retirement 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 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, 2012, actuarial valuation reflects the following changes in the actuarial assumptions:

- Temporary lower wage inflation assumption
- New (additional) minimum funding requirements for poorly funded, closed divisions

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 2012 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%, 1%, 2% and 3% for calendar years 2013, 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 2013, 2014, 2015, and 2016, the wage inflation assumption is 1%, 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%, 1%, 2% and 3% annually for calendar years 2013, 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 Retirement 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 SLIF (Sick Leave in FAC), the assumption is developed individually for each division, based on the specific SLIF provision and/or past experience.

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
<u>0</u>	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
<u>30</u>	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: Replacement Index = 100 multiplied by Accrued Benefit \div by [Pay - 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
<u>85</u>	38
<u>90</u>	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

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

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

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 (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
2003	594	37,159	\$1,381,197,725	\$37,170	3.7%	5,575
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
<u>2011</u>	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

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

	Added to Rolls		Removed From Rolls	
Valuation Dec. 31	Retirees/ Beneficiaries Number	Annual Allowance	Retirees/ Beneficiaries Number	Annual Allowance
2003	1,577	\$31,229,077	672	\$5,623,367
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
<u>2011</u>	2,212	50,594,419	940	11,072,125
2012	2,348	53,957,105	811	9,477,177

	End-of-Year Rolls				
Valuation Dec. 31	Retirees/ Beneficiaries Number	Annual Allowance	% Increase in Annual Allowance	Average Annual Allowance	
2003	18,443	\$236,588,632	12.1%	\$12,828	
<u>2004</u>	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	
<u>2008</u>	23,832	391,959,046	10.9	16,447	
2009	24,930	423,577,691	8.1	16,991	
<u>2010</u>	26,930	481,476,493	13.7	17,879	
<u>2011</u>	28,202	520,998,787	8.2	18,474	
2012	29,739	565,478,715	8.5	19,015	

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, 2012. 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, 2012, 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, 2012, 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 postretirement adjustments to retirees and their beneficiaries. The municipality can choose a onetime adjustment, an annual adjustment for all retirees or, an adjustment for future retirees only. This cost-of-living adjustment (COLA)-type of 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.

DROP+: Delayed Retirement Option 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.

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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.

DROP+ Delayed Retirement Option Partial Lump Sum

There is no DROP+ option in the Hybrid Plan.

Part II - Defined Contribution Portion of Hybrid Plan

Contributions — Employer

Any percentage of compensation 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 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

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 how MERS financial position has changed over time. The financial trend schedules presented are:

- Changes in Plan Net Position Last 10 Years
- Schedule of Changes in Reserves

The next schedules show demographic, economic, and operating information about the MERS environment. This information provides context about MERS' economic condition, including:

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

Changes in Plan Net Position - Last 10 Years Ended December 31, 2013 (Dollars in Thousands)

	2004	2005	2006	2007
Defined Benefit Plan				
Additions:				
Plan Member Contributions	\$55,409	\$71,325	\$84,124	\$61,772
Employer Contributions	167,943	207,124	286,228	320,204
Net Investment Gain (Loss)	587,519	299,780	634,950	456,280
Total Additions to Plan Net Position	810,871	578,229	1,005,302	838,256
Deductions:				
Benefits and Employee Refunds	253,028	278,327	309,635	347,470
Administrative Expenses	9,957	11,557	12,540	13,904
Special Expenses & Fees	387	399	526	588
Total Deductions from Plan Net Position	263,372	290,283	322,701	361,962
Net Increase (Decrease)	547,499	287,946	682,601	476,294
Net Position	4 074 007	4 0 4 0 4 0 0	4 007 440	5 500 040
Balance Beginning of Fiscal Period	4,071,997	4,619,496	4,907,442	5,590,043
Balance End of Fiscal Period	\$4,619,496	\$4,907,442	\$5,590,043	\$6,066,337
Defined Contribution				
Additions:				
Plan Member Contributions	\$4,303	\$4,733	\$5,632	\$6,995
Employer Contributions	18,342	16,351	24,765	19,816
Net Investment Gain (Loss)	10,410	8,427	19,196	13,411
Total Additions to Plan Net Position	33,055	29,511	49,593	40,222
Deductions:				
Benefits	6,453	9,482	10,591	12,764
Administrative Expenses				
Total Deductions from Plan Net Position	6,453	9,482	10,591	12,764
Net Increase (Decrease)	26,602	20,029	39,002	27,458
Net Position Balance Beginning of Fiscal Period	117,482	144,084	164,113	203,115
Balance End of Fiscal Period	\$144,084	\$164,113	\$203,115	\$230,573
Health Care Savings Program				
Additions:				
Employer Contributions	\$1,389	\$2,872	\$2,301	\$2,927
Net Investment Gain (Loss)	130	165	753	
Miscellaneous Income	100	8	92	96
Total Additions to Plan Net Position	1,519	3,045	3,146	3,742
Deductions:				
Medical Disbursements Paid	12	52	145	328
Forfeitures and transfers			104	118
Administrative Expenses	184	250	197	244
Total Deductions from Plan Net Position	196	302	446	690
Net Increase (Decrease)	1,323	2,743	2,700	3,052
Net Assets Held in Trust				
Balance Beginning of Fiscal Period		1,323	4,066	6,766
Balance End of Fiscal Period	\$1,323	\$4,066	\$6,766	\$9,818

The Changes in Plan 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.

2008	2009	2010	2011	2012	2013
\$64,871	\$62,677	\$83,573	\$64,790	\$73,133	\$88,410
310,717	350,737	341,354	298,328	783,292	409,563
(1,533,327)	789,800	754,011	130,115	668,303	988,639
(1,157,739)	1,203,214	1,178,938	493,233	1,524,728	1,486,612
379,401	419,576	461,204	505,854	565,695	662,708
16,365	18,793	20,951	22,070	24,412	20,271
571	461	389	444	71	71
396,337	438,830	482,544	528,368	590,178	683,050
(1,554,076)	764,384	696,394	(35,135)	934,550	803,562
6,066,337	4,512,261	5,276,645	5,973,039	5,937,904	6,872,454
\$4,512,261	\$5,276,645	\$5,973,039	\$5,937,904	\$6,872,454	\$7,676,016
\$6,978	\$8,086	\$8,694	\$10,376	\$1,997	\$20,370
20,147	21,994	26,374	22,079	40,103	42,706
(61,679)	39,951	28,971	1,862	38,552	63,614
(34,554)	70,031	64,039	34,317	80,652	126,690
10,406	0 060	10 002	10 001	10 520	06.001
12,406	8,868	10,902	<u> </u>	<u>18,532</u> 759	<u>26,021</u> 812
12,406	8,868	10,902	20,727	19,291	26,833
(46,960)	61,163	53,137	13,590	61,361	99,857
230,573	102 612	244,776	207 012	211 502	270 061
\$183,613	183,613 \$244,776	\$297,913	297,913 \$311,503	311,503 \$372,864	372,864 \$472,721
\$100,010	<i>Q</i> 211,110	\$201,010	¢011,000	Q 012,001	<i>\(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>
\$10,127	\$16,964	\$11,651	\$7,307	\$10,742	\$12,164
(4,604)	2,978	4,055	<u>918</u>	5,406	7,879
162	263	377	010	0,100	1,010
5,685	20,205	16,083	8,225	16,148	20,043
			= .		
462	512	890	1,474	1,787	2,316
212	322	458	<u> </u>	300	622
360	159	(439)		144	12 <u>5</u>
1,034	993	909	2,207	2,231	3,063
4,651	19,212	15,174	6,018	13,917	16,980
9,818	14,469	33,681	48,855	54,873	68,790
\$14,469	\$33,681	\$48,855	\$54,873	\$68,790	\$85,769

Changes in Plan Net Position – Last 10 Years Ended December 31, 2013 (Dollars in Thousands)

	2004	2005	2006	2007
Retiree Health Funding Vehicle				
Additions:				
Employer Contributions	\$1,313	\$11,948	\$ 29,365	\$67,014
Net Investment Gain (Loss)	109	448	4,463	6,486
Miscellaneous Income				
Total Additions to Plan Net Position	1,422	12,396	33,828	73,500
Deductions:			4 4 6 6	5 007
Disbursements Paid to Municipalities Transfers and Special Expenses		96	<u>1,109</u> 89	<u>5,827</u> 332
Administrative Expenses	3	26	136	185
Total Deductions from Plan Net Position	3	122	1,334	6,344
Net Increase (Decrease)	1,419	12,274	32,494	67,156
Net Position	1,415	12,274	52,434	07,130
Balance Beginning of Fiscal Period		1,419	13,693	46,187
Balance End of Fiscal Period	\$1,419	\$13,693	\$46,187	\$113,343
Investment Services Program				
Additions:				
Employer Contributions			\$15,527	\$26,680
Net Investment Gain (Loss)			726	2,177
Total Additions to Plan Net Position	-	-	16,253	28,857
Deductions:				
Disbursements Paid to Municipalities				
Administrative Expenses			17	238
Total Deductions from Plan Net Position	-		17	238
Net Increase (Decrease)	-	-	16,236	28,619
Net Position				
Balance Beginning of Fiscal Period	-	-	-	16,236
Balance End of Fiscal Period	\$-	\$-	\$16,236	\$44,855
457 Program				
Additions:				
Employee Contributions				
Employer Contributions				
Net Investment Gain (Loss)				
Total Additions to Plan Net Position	-	-	-	-
Deductions:				
Benefits Administrative Expenses				
Total Deductions from Plan Net Position				
Net Increase (Decrease)	-			-
Net Assets Held in Trust	-			
Balance Beginning of Fiscal Period	-	-	-	-
Balance End of Fiscal Period	\$-	\$-	\$-	\$-

The Changes in Plan 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.

2008	2009	2010	2011	2012	2013
\$42,377	\$48,029	\$52,613	\$48,644	\$78,809	\$58,111
(32,642)	23,525	29,278	6,820	36,770	59,826
9,735	71,554	81,891	55,464	115,579	117,937
3,857	6,088	5,564	9,074	13,071	14,341
487	623	859			4
319	54	1,039	1,647	521	659
4,663	6,765	7,462	10,721	13,592	15,004
5,072	64,789	74,429	44,743	101,987	102,933
113,343	118,415	183,204	257,633	302,376	404,363
\$118,415	\$183,204	\$257,633	\$302,376	\$404,363	\$507,296
\$2,969	\$999			\$700	
(11,607)	3,376	867	162	791	\$1,148
(8,638)	4,375	867	162	1,491	1,148
750	00 500			100	000
<u>750</u> 154	<u> </u>	250	28	106	<u> </u>
904	33,597	250	28	117	310
(9,542)	(29,222)	617	134	1,374	838
44,855	35,313	6,091	6,708	6,842	8,216
\$35,313	\$6,091	\$6,708	\$6,842	\$8,216	\$9,054
				\$8,170	\$4,582
				163	<u> </u>
	-	-	-	8,333	6,217
				21	584
				6	34
-	-		-	27 8,306	618 5,599
-	-	-	-	0,300	
-	-	-	-	-	8,306
\$-	\$-	\$-	\$-	\$8,306	\$13,905

Schedule of Changes in Reserves – Year Ended December 31, 2013 (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
Additions				
Member Contributions	\$88,410			\$88,410
Employer Contributions		\$409,563		409,563
Net Investment Income			\$988,518	988,518
Miscellaneous Income			121	121
Total Additions	88,410	409,563	988,639	1,486,612
Deductions				
Benefits and Refunds	9,889	652,819		662,708
Transfers and Forfeitures				
Administrative Expense			20,271	20,271
Special Expenses and Fees		71		71
Total Deductions	9,889	652,890	20,271	683,050
Net Increase (Decrease) Other Changes in Reserves	78,521	(243,327)	968,368	803,562
Investment Income Allocations	719	978,518	(979,237)	_
Retirement and Division Transfers	(33,945)	33,945		_
Total Other Changes in Reserves	(33,226)	1,012,463	(979,237)	-
Net Increase in Reserves After Other Changes	45,295	769,136	(10,869)	803,562
Reserve Balance Beginning of Year	683,811	6,177,774	10,869	6,872,454
Reserve Balance End of Year	\$729,106	\$6,946,910	\$-0-	\$7,676,016

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.

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
\$20,370				\$4,582	\$113,362
42,706	\$12,164	\$58,110		\$77	522,620
63,614	7,879	59,827	\$1,147	1,558	1,122,543
					121
126,690	20,043	117,937	1,147	6,217	1,758,646
26,021	2,316	14.341	300	584	706,270
20,021	622	4	000	001	626
812	126	659	9	34	21,911
					71
26,833	3,064	15,004	309	618	728,878
99,857	16,979	102,933	838	5,599	1,029,768
					-
					-
0	0	0	0	0	-
00.057	40.070	400.000		5 500	4 000 700
99,857	16,979	102,933	838	5,599	1,029,768
372,864	68,790	404,363	8,216	8,306	7,734,993
\$472,721	\$85,769	\$507,296	\$9,054	\$13,905	\$8,764,761

Schedule of Average Benefit Payments – Defined Benefit Plan

Valuation Date December 31	Number of Retirees and Beneficiaries	Average Yearly Benefit
2003	18,443	\$12,828
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
<u>2010</u>	26,930	17,879
2011	28,202	18,474
2012	29,793	19,015

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

Schedule of Retired Members by Type of Option Selected – Defined Benefit Plan December 31, 2012, Tabulated by Optional Form of Benefit Being Paid

Type of Benefit	Number of Retirees	Total Monthly Benefit
Beneficiary draws 100% of retiree's benefit	9,300	\$15,359,293
Beneficiary draws 75% of retiree's benefit	1,865	4,369,182
Beneficiary draws 60% of retiree's benefit	116	302,374
Beneficiary draws 50% of retiree's benefit	4,725	8,870,225
Equated Option (changing at Social Security age)	314	212,162
5 year certain and life	281	410,285
10 year certain and life	428	665,609
15 year certain and life	169	237,809
20 year certain and life	332	453,916
Straight life allowance	12,209	16,242,371
Totals	29,739	\$47,123,226

The Schedule of Retired Members by Type of Option Selected shows the number, percentage and distribution of the various payment options as selected by retirees.

Fiscal Year Ended	Regular Benefits	Disability Benefits	Employee Refunds	Total
Dec. 31, 2004	\$237,916	\$9,538	\$3,525	\$250,979
Dec. 31, 2005	263,839	10,308	4,158	278,305
Dec. 31, 2006	293,138	11,035	4,711	308,884
Dec. 31, 2007	326,666	12,791	5,058	344,515
Dec. 31, 2008	355,626	16,729	5,580	377,935
Dec. 31, 2009	391,613	18,254	9,510	419,377
Dec. 31, 2010	433,778	19,415	7,006	460,199
Dec. 31, 2011	476,993	20,812	7,915	505,720
Dec. 31, 2012	535,900	21,284	8,052	565,236
Dec. 31, 2013	631,906	20,913	9,889	662,708

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

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, 2012, 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	24,035	\$41,816,911
Non-Duty Disability1	987	1,119,260
Duty Disability	404	462,834
Beneficiaries ²	3,501	2,938,321
Non-Duty Death	753	725,288
Duty Death	59	60,612
Totals	29,739	\$47,123,226

¹At age 60, these benefit types are converted to normal retirement for age and service ² Includes EDRO alternate payees



Fiscal Year	Number of Participants Total	Defined Benefit	% of Total	Defined Contribution	% of Total	Hybrid	% of Total
December 31, 2003	65,756	60,569	92.1%	5,187	7.9%	N/A	0.0%
December 31, 2004	67,140	61,841	92.1	5,299	7.9	N/A	0.0
December 31, 2005	68,915	62,748	91.1	6,167	8.9	N/A	0.0
December 31, 2006	71,572	64,545	90.2	7,027	9.8	N/A	0.0
December 31, 2007	72,932	65,556	89.9	7,376	10.1	N/A	0.0
December 31, 2008	74,400	66,586	89.5	7,814	10.5	N/A	0.0
December 31, 2009	75,605	67,254	89.0	8,351	11.0	N/A	0.0
December 31, 2010	78,343	69,707	89.0	8,636	11.0	N/A	0.0
December 31, 2011	91,666	81,926	89.4	9,193	10.0	547	0.6
December 31, 2012	93,462	82,331	88.1	10,210	10.9	921	1.0
December 31, 2013	98,072	85,530	87.2	11,340	11.6	1,202	1.2

Defined Contribution Plan Participants and Total MERS Participants

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 trends in Defined Contribution, and overall MERS participants.



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I his 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 05/07/14). 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.