# MERS: the art of retirement

## MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
## 2011 summary annual financial report

for the fiscal year ended
12.31.2011

MERS
Municipal Employees' Retirement System

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2011 comprehensive annual financial report

for the fiscal year ended
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Debra Peake – Interim Chief Executive Officer
Leon E. Hank, CPA – Chief Financial Officer

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## ABOUT MERS

The Municipal Employees' Retirement System (MERS) of Michigan exists to provide quality retirement and related services with cost-effective plan administration for members and beneficiaries. We are an independent public nonprofit organization that has partnered with Michigan municipal organizations for more than 65 years, helping them deliver on their promise of a retirement for their employees.

FORM 4042A 20120629 100

# MERS Products

## MERS Defined Benefit Plan –

MERS Defined Benefit is a traditional pension plan that promises employees a lifetime retirement benefit. At retirement, members receive a specific monthly benefit calculated using a pre-determined formula based on salary and service. The plan is funded by the municipality (with or without pre-tax employee contributions). We also allow municipalities non-membership access to the MERS Total Market Fund, through our Investment Services Program. Groups benefit from our professionally managed fund and economies of scale, while maintaining local control of their pension administration.

## MERS Defined Contribution Plan –

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. We offer access to MERS investments, while streamlining the number of funds, making for simple and strategic investing.

## MERS 457 Supplemental Retirement Program –

MERS 457 Program is a deferred compensation program for public sector employees, helping them save for the future above and beyond other retirement plans from their employers. The program offers each employee a self-directed account in which a portion of their salary is deposited into an invested account they manage. The employee decides the level of contributions and how to invest the assets to meet their goals and personal risk tolerance. When an employee leaves employment, their benefits are based on the total amount of money in their account.

## MERS Hybrid Plan –

MERS Hybrid Plan is two plans in one. Employees will have the security of a defined Benefit portion and the flexibility and investment choice of a defined contribution portion. At retirement, employees receive a modest lifetime benefit and a separate account (made up of member and employer contributions and investment interest earned).

## MERS Health Care Savings Program –

MERS Health Care Savings Program is a tax-favored individual medical investment account sponsored by employers. Once the employee leaves, the account balance is available for tax-free reimbursement of medical expenses for the employee and eligible dependents.

## MERS Retiree Health Funding Vehicle –

The Retiree Health Funding Vehicle is a medical trust which allows municipalities to save and grow assets to offset retiree health care liability. The funding vehicle allows employers to proactively set aside assets to begin funding their liability, and to take advantage of the economies of scale of the MERS portfolios.

## MERS Premier Advantage –

MERS Premier Advantage is a Medicare Advantage program, designed exclusively for MERS members who are eligible for Medicare. MERS partnered with Humana to cover all Medicare Part A and Part B benefits, as well as many other medical expenses and comprehensive prescription drug coverage, all at a lower out-of-pocket cost than Medicare.

## MERS Group Life & Disability Insurance Program –

MERS pools employer purchasing power to preserve the quality and affordability of Life, Accidental Death and Dismemberment, Short Term Disability, and Long Term Disability Insurance. MERS partners with The Standard Insurance company to offer affordable insurance.

“ You know trust is one of the most important things to me. I think MERS is at its core about a long-term trust. But, they’ve also been innovative and an industry leader in making sure that we are able to change and provide products that continue that trust.

I am MERS because of their trust and commitment. ”

Michael Brown

# introductory section

Michael Brown is a County Administrator of Barry County, Michigan. He is also on the MERS Retirement Board.

He’s been a MERS member since 1993.

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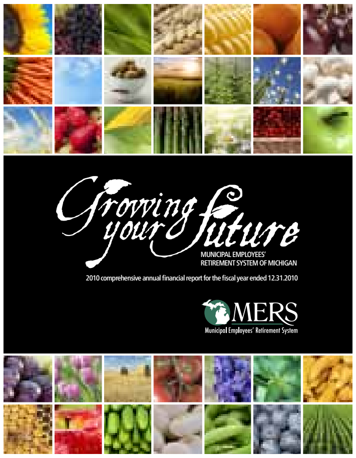
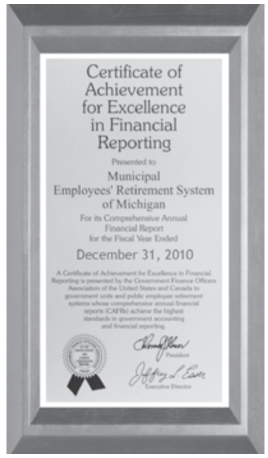




## Certificate of Achievement for Excellence in Financial Reporting

MERS received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the December 31, 2010 Comprehensive Annual Financial Report. This marks the 23rd consecutive year MERS has received this honor.

## Public Pension Standards Award in 2011

MERS also received the Public Pension Coordinating Council (PPCC), Public Pension Standards Award in 2011, 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 MERS

Letter of Transmittal, June 29, 2012

Dear Board Members:

It is a pleasure to submit the 2011 Comprehensive Annual Financial Report (CAFR) for the Municipal Employees' Retirement System (MERS) of Michigan. This year's report includes all of the required financial information regarding the System for the fiscal year ending December 31, 2011.

MERS: The Art of Retirement is the theme for this year's publications. Art and various art forms can have many meanings depending on the audience. Britannica defines art as "the use of skill and imagination in the creation of aesthetic objects, environments, or experiences that can be shared with others." After our more than 65 years of experience, we know there is an "art to retirement," and we will continue to use our artistic skills to paint a secure path for our members.

## 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 authorities, cities, counties, medical care facilities, road commissions, townships, tribal governments, etc.

In 1996, the System was granted independence by the Michigan Legislature. MERS started its independent status with just under 500 employer members. Today we proudly count nearly 90,000 participants enrolled in a variety of products offered by MERS.

Retirement options include the MERS Defined Benefit (DB), Defined Contribution (DC) and a Hybrid (H) Plan (a combination of DB and DC). MERS also offers a menu of benefit provisions through pension trust funds. These provisions may be adopted by member employers to create a retirement plan for their employees. Each employer has a trust account in the System, and one municipality cannot borrow from another to balance their account. The MERS Retirement Board serves as the fiduciary of the funds and has oversight responsibilities for the System.

As challenges come our way, we draw on three key strategies adopted by our Board – namely the MERS Ends Policies. These policies state that all members will:

1. Receive accurate information.
2. Experience excellent service.
3. Participate in a cost-effective and innovative system.

These benchmarks drive our business decisions every day, and help identify where improvements are needed or where solutions are working. Our goal is to not just meet but to exceed these expectations.

## Report Structure and Contents

The ultimate responsibility for this report rests with the Board; however the MERS management team is responsible for the preparation, integrity and fairness of the financial statements and other information presented in this report. All necessary internal controls have been identified and are in place to ensure that transactions are authorized, assets safeguarded, and all supporting records are properly retained and managed.

This document meets the reporting requirements of state law as stipulated by Michigan Compiled Laws. The accounting policies followed in preparing the financial statements conform to the U.S. Generally Accepted Accounting Principles (GAAP). The financial information shown throughout this report is consistent with what is displayed in the financial statements. Where necessary, some amounts are based on judgments and estimates using banking and industry best practices.

Andrews Hooper Pavlik PLC, MERS external auditor, conducted an independent audit of the financial statements in accordance with GAAP (page 11). This audit is described in the Independent Auditor's Report in the Financial Section. 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 independent substantiation of the Plan's financial reporting.

This CAFR is divided into five sections, namely: *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, which serves as a narrative and overview of the financial statements. For financial reporting purposes, MERS is considered an independent component of the State of Michigan. The **Investment Section** is comprised of investment activities and performance information; the **Actuarial Section** contains all the facts pertaining to the actuarial assumptions and methods, as well as the actuary's certification letter, and lastly, the **Statistical Section** provides various schedules on member data.

## Financial Summary

The U.S. financial markets "artfully" improved enough in the last quarter to provide positive returns for the year ending December 31, 2011. The MERS portfolio returned 2.3%, and placed MERS in the top quartile for performance for the one, three, five and ten-year period according to the State Street Universe of public funds. Information regarding the investment managers is found in the Investments Section.

MERS actuarial funded ratio declined somewhat for the 2010 valuations primarily due to recognition of investment losses from 2008. The 2010 actuarial valuation has MERS funded at 74.5% compared with a funding ratio of 75.5% with the 2009 valuation.

Although the negative returns of 2008 are still being recognized, MERS uses a 10-year smoothing method to account for gains and losses. The assumed rate of return on the portfolio is set at 8%. Conversations continue between MERS and the actuary about lowering that rate when appropriate. In the meantime, MERS pursues sustainability by adhering to the asset allocation study as adopted by the Board, and closely managing the portfolio with a close eye on the world financial markets.

## Legislative Issues

Last year we spent a significant amount of time on legislative issues – namely the new Economic Vitality Incentive Program (EVIP) and pension taxation. The EVIP includes provisions that stipulate communities certify their intent to implement employee compensation criteria for any new, modified or extended contract for employees not covered by a contract or employee agreement in order to qualify for state revenue sharing.

The House Bill 4361/PA38 reforms how businesses pay taxes. It also reduced or eliminated a number of state income tax exemptions, and the long-standing exemption on the taxation of public pensions.

MERS began collecting 4.35% state income tax from MERS retirees on January 1, 2012. This tax is imposed by age (exempt if born before 1946) and has various exemptions for those born between 1946 and 1952.

## Key Initiatives for 2011

In January we launched the internal management of the Defined Contribution Plan. This effort was the result of extensive research and planning from key staff. Over 9,000 accounts were successfully transferred from the previous third-party administrator, and offered at a lower cost to our members.
As part of the defined contribution initiative, we

rolled out the myMERS portal, which allows all members 24-hour access to their personal accounts through one portal sign-on.

During the summer months, the Health Care Savings Program and Retiree Health Funding Vehicle underwent an enhancement project. We streamlined the investment menu and aligned fund performance and pricing across all participant-directed accounts. All member statements were improved to provide clearer account information.

> After our more than 65 years of experience, we know there is an "art to retirement," and we will continue to use our artistic skills to paint a secure path for our members.

Following the success of the defined contribution project, we launched the MERS 457 Supplemental Retirement Program, and started enrollments near the end of the fiscal year.

## Internal Projects

The Office of Finance and Technology had many projects and included enhancements to Great Plains software, the establishment of SharePoint, and the selection of the human resources software. Network improvements centered on video conferencing, security, server virtualization, and firewall upgrades.

The Library and Records Center's FileNet software system was upgraded to allow member and municipal file conversion from ImageNow into FileNet. New scanners were installed along with the development of a release and deployment process for records.

MERS Service Center continued a quality assurance initiative to ensure accuracy on calls using a SharePoint platform. New processes including queue messaging and scheduling kept average call abandon rates below 5.8%.

## 2011 Highlights

New assets for 2011 included $8 million in defined benefit and $70 million in participant-directed accounts. Retirement service was expanded to include 12 new municipalities and five new divisions. Approximately 30 new employers joined the Health Care Savings Program, which now includes 7,000 participants. In addition, 176 divisions increased employee contributions, 63 divisions adopted a lower defined benefit for new hires, 14 divisions adopted Bridged Benefits, and 31 divisions adopted the Hybrid Plan.

The Internal Auditor completed 14 audits with no material weaknesses found. Opportunities for improvement were identified and put into development.

## 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 23rd consecutive year, MERS was the proud recipient of the Government Finance Officers Association (GFOA) annual award for our 2010 Comprehensive Annual Financial Report. MERS Summary Annual Financial Report, which summarizes the CAFR, also received the GFOA award, which is mailed to all active and retired members of the System. For 2011, we are also pleased to accept the Budget Award from GFOA for the ninth consecutive year.

A complete copy of the CAFR is provided to the Governor, the members of both Legislative branches, and the Office of the State Treasurer, as required by law.

## Acknowledgement

In closing, my deep gratitude goes to the entire MERS staff for their hard work and dedication to ensure the successful operation of MERS. They use innovation, skill and a commitment to service to paint the right retirement plan for all our members.

I am also very grateful to the Board members for their continued work and dedication. Their conscientious oversight and diligence is exemplary. I would also like to extend my appreciation to the many organizations and advisors who work in partnership with MERS to ensure the continued success of the System.

Finally, I wish to congratulate former CEO Anne Wagner on her retirement from MERS. Anne has been a driving force and a visionary behind MERS growth and innovation. We wish her all the best in her new role as a MERS retiree.

**Respectfully submitted,**

**Debra Peake**
**Interim Chief Executive Officer**

Municipal Employees' Retirement System MERS

## Letter from the Chairperson, June 29, 2012

Dear Board Members:

On behalf of the MERS Retirement Board, it is a pleasure to present the 66th Comprehensive Annual Financial Report (CAFR) of the Municipal Employees' Retirement System of Michigan for the fiscal year ended December 31, 2011. This financial report provides information on the status of our Retirement System.

The MERS 2011 Annual Meeting was held at the Grand Traverse Resort in Traverse City with a record turnout of member delegates, guests and staff. During the business meeting, the delegates duly elected Mr. Randy Gerard, Township Manager of Marquette Township, and Mrs. Amy Deford, Retirement Administrator of Saginaw County, each to a three-year term on the Board beginning January 1, 2012. Mr. Gerard will serve as the officer member and Mrs. Deford as the employee member. The Board also appointed Mr. Jim Wiersma to a three-year term serving as one of the two external expert professionals. The Board is delighted to have these fine individuals serve the System and I extend my sincere congratulations to everyone. In addition, at the 2012 January Board meeting, I was elected to serve as the chairperson, and Mr. Michael Brown, County Administrator of Barry County, was elected as chairperson pro tem.

The Retirement Board is comprised of nine volunteer members, three employer and three employee members elected by the membership; two expert investment professionals and one retiree member appointed by the Retirement Board. This group works diligently to fulfill their fiduciary responsibilities in serving the membership. MERS is fortunate to have trustees with such diverse backgrounds, expertise and experience.

Each year the Board reviews the MERS Investment Policy along with the Investment Management Plan. The goal of the review is to assure the proper risk targets are being met, and to preserve and maximize the long term growth of the System's assets. Every five years a full asset allocation study is undertaken. Preparations will start in 2014 for the next study which examines all aspects of risk and portfolio construction. The target completion date will be 2015.

Our members can remain confident that we are focused on providing accurate information, excellent service, and a cost-effective, innovative System. MERS vision statement our present is your future reflects how seriously we believe what we do every day is for the future of all of our members

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 our member's needs.

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 has been my pleasure to serve as MERS chairperson.

**Sincerely,**

**Larry Opelt, Chairperson**
**MERS Board of Trustees**

## MERS RETIREMENT BOARD AND CHIEF EXECUTIVE OFFICER 2011

**Back row from left to right:** Ms. Sally Dreves, Ms. Beverly Crumley, Mr. Bruce Johnson, Mr. James Wiersma, Mr. Michael Brown, Mr. John Ogden, and Ms. Lori Newberg. **Front row from left to right:** Mr. Larry Opelt, Ms. Anne Wagner, and Mr. Randy Girard.

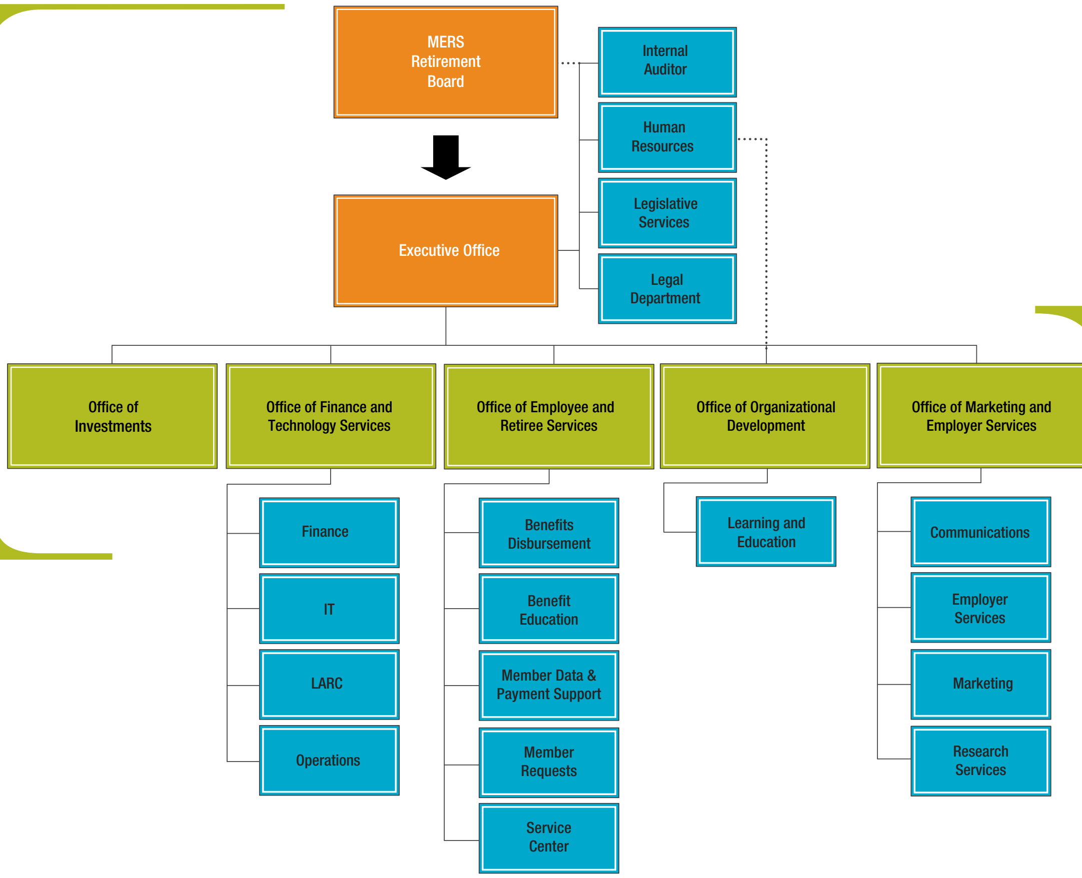
**Officer Members:** John Ogden, Michael Brown, Randy Girard
**Employee Members:** Sally Dreves, Beverly Crumley, Lori Newberg
**Public Members:** Bruce Johnson, James Wiersma
**Retiree Member:** Larry Opelt, Chairperson

## MERS OFFICERS 2011

**From left to right:** Jeb Burns, Debra Peake, Mike Moquin, Anne Wagner, Carrie Lombardo, Leon Hank, Caryn Mateer

# MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

## Organizational Structure – 2011



# OUTSIDE PROFESSIONAL SERVICES

## Professional Consultants

### Actuary
Gabriel, Roeder, Smith & Company

### Auditor
Andrews Hooper Pavlik PLC

### Human Resource Advisors
Gallagher Benefit Services, Inc.

### Investment Custodian
State Street Bank and Trust Company

### Legal Counsel
Ice Miller, LLP
Miller, Canfield, Paddock & Stone, PLC
Reinhart Boerner Van Deuren S.C.

### Legislative Consultants
Karoub Associates

### Medical Advisor
Consulting Physicians

### Security Lending Agent
State Street Bank and Trust Company

### Systems Implementation and Maintenance
Crowe Horwath
JoHo Technology
IBM Corporation
Maner Costerisan
Robbins-Gioia, LLC
Summit Technologies
Tegrit Financial Group

### Third-Party Administrator
Tegrit Administrators, LLC

## Investment Managers

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

### International Equity
Acadian Asset Management
BlackRock
Driehaus Global Growth
Hexam

### Fixed Income
BlackRock
C.S. McKee
Credit Suisse
First International Advisors
Reams Asset Management
TCW Funds

### High Yield
Stone Harbor
Stone Tower

### Overlay
Clifton Group

### Real Estate
The Townsend Group
Hancock Timber
Urdang Capital Management

### Private Equity
Credit Suisse
Mesirow Financial
AlpInvest Partners

### Commodities
Cargill Risk Management
Mount Lucas

# ACKNOWLEDGEMENTS

**The MERS Comprehensive Annual Financial Report (CAFR) for the fiscal year ended December 31, 2011, 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. Preparation would not have been possible without their efforts.**

## Office of Finance and Technology Services – Management

Betsy Waldofsky, Finance Director

Luke Huelskamp, Senior Finance & Budget Director

## Office of Finance and Technology Services – Technical and Support Staff

Courtney Overfield, Accounting Analyst

Danielle Grice, Accounting Analyst

Jen Wyble, Office Administrator

Karen Butka, Administrative Assistant

Robin Towsley, Accounts Payable Coordinator

## Additional MERS Staff

Ana Carlson, Senior Graphic Designer, Office of Marketing & Employer Services

Bekki Becsey, Communications Specialist II, Office of Marketing & Employer Services

Betsy Schaeffer, Digital Print and Mail Services Supervisor, Office of Marketing & Employer Services

Bob Griffin, Investment Officer & Portfolio Manager, Office of Investments

Claudia Konieczny, Investment Analyst, Office of Investments

Jamison Smythe, Senior Investment Officer & Portfolio Manager, Office of Investments

Jen Mausolf, Marketing/Product Development Director, Office of Marketing & Employer Services

Joe Thompson, Internal Auditor

Lisa Bond Brewer, Communications Director, Office of Marketing & Employer Services

Mike Charette, Senior Investment Officer & Portfolio Manager, Office of Investments

Michael Schrauben, Investment Officer & Portfolio Manager, Office of Investments

Nita Campbell, Digital Print and Mail Services Supervisor, Office of Marketing & Employer Services

Richard Taylor, Print Production Specialist, Office of Marketing & Employer Services

Special thanks are also extended to our auditors Andrews Hooper Pavlik PLC, actuary Gabriel, Roeder, Smith & Company, Tegrit Administrators, and Tegrit Financial Group.


"I really feel like I have a security blanket waiting for me when the time comes when I'm able to retire. I always feel like I don't have to worry. I know MERS is going to be there.

I am MERS because I have a secure future."

Akemi Gordon

# financial section

Akemi Gordon is a Finance Director, UP Transportation Authority.

She's been a MERS member since 2000.

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# Independent Auditor's Report

AHP
CPAs & ADVISORS

ANDREWS HOOPER PAVLIK PLC
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Independent Auditor's Report

Municipal Employees' Retirement System of Michigan Retirement Board:

We have audited the accompanying statement of plan net assets of the Municipal Employees' Retirement System of Michigan as of December 31, 2011, and the related statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of the management of the Municipal Employees' Retirement System of Michigan. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year comparative information has been derived from the 2010 financial statements and, in our report dated June 29, 2011, we expressed an unqualified opinion on those financial statements.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Municipal Employees' Retirement System of Michigan's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Municipal Employees' Retirement System of Michigan as of December 31, 2011, and the changes in plan net assets for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated June 29, 2012, on our consideration of the 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The financial statements include summarized prior year comparative information. Such information does not include sufficient detail to constitute a presentation in conformity with U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with the financial statements for the year ended December 31, 2010, from which summarized information was derived.

AUBURN HILLS | BAY CITY | GRAND RAPIDS | GREATER LANSING | MIDLAND | SAGINAW
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# Independent Auditor's Report

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule of Funding Progress, and Schedule of Employer Contributions be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in the Schedule of Administrative Expenses, Schedule of Investment Expenses, and the Schedule of Payments to Consultants and Services are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

The Introductory, Investment, Actuarial and Statistical sections listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Introductory, Investment, 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.

Andrews Hooper Pavlik PLC

Okemos, Michigan
June 29, 2012

# MANAGEMENT'S DISCUSSION AND ANALYSIS

This narrative overview and analysis of MERS financial condition for fiscal year ended December 31, 2011, is presented in conjunction with the Interim Chief Executive 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, two required supplementary schedules with explanatory notes and three supplementary expense schedules.

Due to the long-term nature of the Defined Benefit Plan, financial statements alone cannot provide sufficient information to reflect the System's ongoing plan perspective. This financial report consists of two financial statements, and two required schedules of historical trend information.

## Basic Financial Statements

1. Statement of Plan Net Assets.
2. Statement of Changes in Plan Net Assets.
3. Notes to Basic Financial Statement.

The "Statement of Plan Net Assets" and "Statement of Changes in Plan Net Assets" provide the current financial condition of the MERS Defined Benefit Plan, Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle, and the Investment Services Program. The Hybrid Plan is included in the Defined Benefit and Defined Contribution totals.

The "Comparison Statement of Plan Net Assets" and "Comparison Statement of Changes in Plan Net Assets" presented in the Management's Discussion and Analysis provides a comparative summary of the financial condition of the System as a whole.

## Required Supplemental Information

1. Schedule of Funding Progress.
2. Schedule of Employer Contributions.
3. Notes to the Schedules of Required Supplementary Information.

The “Schedule of Funding Progress” shows the progress MERS has made in accumulating sufficient assets to pay future retirement benefits when due. The schedule sets forth the actuarially funded status of the Defined Benefit Plan with historical trends in funding.

The “Schedule of Employer Contributions” shows the current annual employer contributions and the historical trend of employer contributions. From a long-term investment perspective, these schedules provide a better understanding of the changes over time in the funded status of the Plan.

## 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 the Defined Benefit Plan.

# FINANCIAL HIGHLIGHTS

The following financial highlights occurred during fiscal year ended December 31, 2011:

- Total net assets for the Defined Benefit Plan, Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle and Investment Services Program increased by $29 million during the 2011 fiscal year. MERS finished the year with $6.6 billion in net assets, slightly higher than the previous year.
- MERS actuarial funded ratio declined somewhat for the 2010 valuations primarily due to recognition of investment losses from 2008. The 2010 actuarial valuation has MERS funded at 74.5% compared with a funding ratio of 75.5% with the 2009 valuation.
- Total retirement benefits paid to retirees and beneficiaries increased $54 million to a total of $518 million. This is due to an aging population and an increase in retirements. This is not a cause of concern as it is built into the actuarial projections.
- Administrative expenses increased 16% in 2011 to $25 million. Most of this increase was due to reporting administrative expenses for the Defined Contribution, Retiree Health Funding Vehicle and the Health Care Savings Program, that had previously been difficult to report due to being combined with investment returns.

  Additional staff to handle the increased number of retirees, and an increase in legal services, computer consultants, and software maintenance also contributed to the administrative expense increase.
- Investment expenses totaled $19 million. This is a slight decrease from 2010 primarily due to lower investment manager fees.

## Comparison Statement of Plan Net Assets

| | As of Dec. 31, 2011 | As of Dec. 31, 2010 | Increase (Decrease) Amount | Increase (Decrease) Percent |
|---|---|---|---|---|
| **Assets** | | | | |
| Cash and Short-Term Investments | $104,657,607 | $43,807,281 | $60,850,326 | 138.90% |
| Receivables | 346,321,828 | 292,252,201 | 54,069,627 | 18.50 |
| Interfund Receivables | 276,317 | - | 276,317 | 100.00 |
| Loans | 3,815,831 | 3,281,585 | 534,246 | 16.28 |
| Investments, at fair value | 6,533,652,171 | 6,509,674,895 | 23,977,276 | 0.37 |
| Invested Securities Lending Collateral | 771,417,923 | 965,406,902 | (193,988,979) | -20.09 |
| Other Assets/Prepaids | 66,004 | 173,239 | (107,235) | -61.90 |
| Net Capital Assets | 7,300,506 | 6,346,492 | 954,014 | 15.03 |
| **Total Assets** | **7,767,508,187** | **7,820,942,592** | **(53,434,405)** | **-0.68** |
| **Liabilities** | | | | |
| Purchase of Investments | 370,788,064 | 252,618,509 | 118,169,555 | 46.78 |
| Securities Lending Collateral | 776,695,757 | 972,419,765 | (195,724,008) | -20.13 |
| Administrative and Investment Costs | 6,239,634 | 11,661,471 | (5,421,837) | -46.49 |
| Interfund Payables | 276,317 | - | 276,317 | 100.00 |
| Other Accounts Payable | 10,621 | 94,565 | (83,944) | -88.77 |
| **Total Liabilities** | **1,154,010,393** | **1,236,794,310** | **(82,783,917)** | **-6.69** |
| **Net Assets Held in Trust for Pension and Health Benefits and Investment Accounts Held for Others** | **$6,613,497,794** | **$6,584,148,282** | **$29,349,512** | **0.45%** |

## Comparison Statement of Changes in Plan Net Assets

| | Year ended Dec. 31, 2011 | Year ended Dec. 31, 2010 | Increase (Decrease) Amount | Increase (Decrease) Percent |
|---|---|---|---|---|
| **Additions** | | | | |
| Contributions | $451,389,816 | $519,556,971 | $(68,167,155) | -13.12% |
| Transfers from Defined Benefit Plan | 133,792 | 1,005,605 | (871,813) | -86.70 |
| Transfers from Other Plans and Other Items | | 3,696,142 | (3,696,142) | 100.00 |
| Investment Net Income Investing Activities | 136,531,099 | 812,538,191 | (676,007,092) | -83.20 |
| Investment Net Income-Securities Lending | 2,900,411 | 3,294,781 | (394,370) | -11.97 |
| Miscellaneous Income | 446,219 | 1,726,190 | (1,279,971) | -74.15 |
| **Total Additions** | **591,401,337** | **1,341,817,880** | **(750,416,543)** | **-55.93** |
| **Deductions** | | | | |
| Benefits | 517,664,569 | 464,089,382 | 53,575,187 | 11.54 |
| Refunds of Contributions | 7,956,336 | 7,011,682 | 944,654 | 13.47 |
| Special Expenses and Fees | 444,000 | 1,648,860 | (1,204,860) | -73.07 |
| Transfers to Defined Contribution Plan | 133,792 | 1,005,605 | (871,813) | -86.70 |
| Medical Disbursements Paid to Members | 1,473,832 | 889,941 | 583,891 | 65.61 |
| Disbursements Paid to Municipalities | 9,073,910 | 5,564,350 | 3,509,560 | 63.07 |
| Forfeited Employer Contributions | 16,106 | 85,142 | (69,036) | -81.08 |
| Administrative Expense | 25,289,280 | 21,773,212 | 3,516,068 | 16.15 |
| **Total Deductions** | **562,051,825** | **502,068,174** | **59,983,651** | **11.95** |
| Net Increase (Decrease) | 29,349,512 | 839,749,706 | (810,400,194) | -96.50 |
| Net Assets Held in Trust for Pension and Health Benefits and Investment Accounts Held for Others | | | | |
| Balance Beginning of Year | 6,584,148,282 | 5,744,398,576 | 839,749,706 | 14.62 |
| **Balance End of Year** | **$6,613,497,794** | **$6,584,148,282** | **$29,349,512** | **0.45%** |

## Analysis of Plan Net Assets

Combined plan net assets increased by $29 million over the previous fiscal year. Looking at additions to and deductions from plan net assets, the increase was primarily due to net investment gains of $139 million. The Health Care Savings Program saw a 12% increase in net assets from the previous year due to new groups joining the program. The Retiree Health Funding Vehicle also saw an increase in net assets of 17% compared to the previous year.

The employer and employee contributions declined by $73 million in 2011. Some municipalities also had fluctuations due to changes in required actuarial contribution rates resulting from salary adjustments, plan modifications, and the number of employees.

Total employer contributions declined by 12% due to less employer contributions coming in from new groups joining MERS. Employee contributions decreased by 19% down to $75 million from the previous year. Regular employee contributions are increasing as a percentage of pay relative to employer contributions.

MERS had capital assets, net of accumulated depreciation, of approximately $7 million, mostly comprised of software and computer servers needed to run the System's pension administration and financial programs. 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 2012, accrued administrative and investment expenses, and securities' lending collateral.

## Investment Activities

The performance of the Total Market Fund was favorable when compared to the benchmarks. The gross return of 2.30% was below the 8% actuarial return assumption target for the year. For both the five- and ten-year periods, the gross returns were 2.32% and 5.98% respectively, which compared unfavorably to the actuarial return assumption. Net investment gains (net appreciation in fair value, less investment administrative expenses, plus securities lending income) were $139 million for the year. A further detailed analysis of investment returns is in the Investments Section.

MERS investments are managed to control the extent of downside risk that assets are exposed to 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, 2011, is in the Investments Section. A summary of the total System's assets is on page 65.

## Historical Trends

Accounting standards require the "Statement of Plan Net Assets" state investment asset values at fair value and include only benefits and refunds due plan members, beneficiaries, accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the Defined Benefit Plan is in the "Schedule of Funding Progress." The asset value stated in the "Schedule of Funding Progress" is the actuarial value of assets determined by calculating the ratio of market value to book value over a 10-year period. The overall funded ratio decreased slightly from 75.5% to 74.5% for the 2010 valuation mostly attributable to investment experience. The actuarial assumptions used in the most recent valuation are identified in the "Notes to the Schedules of Required Supplementary Information."

Annual required employer contributions, as determined by the actuary, and the actual contributions made by employers are provided in the "Schedule of Employer Contributions." This schedule indicates that employers are meeting their actuarially required contribution payments.

MERS overall financial condition slightly improved in 2011 due to market gains. The Plan continues to remain stable and viable for the years to come. Public pension plans use long-term investment strategies to fund future benefit obligations. The market downturns and upturns are historically considered part of the market cycle in the overall economic process.

## Funding Status

A pension plan is well funded when it has sufficient assets invested to meet all expected future obligations to participants. The greater the level of funding – the larger the ratio of assets to actuarial accrued liability. While the Plan is not totally 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 their 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 in order to achieve the following major objectives:

- Develop level required contribution rates as a percentage of payroll
- 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.

Based upon the valuation results, MERS continues to be in sound financial health in accordance with actuarial principles of level percent of payroll financing.

## Statement of Plan Net Assets as of December 31, 2011

| | Defined Benefit | Defined Contribution | Health Care Savings Program |
|---|---|---|---|
| **Assets** | | | |
| Cash and Short-Term Investments | $97,673,461 | $1,252,961 | $910,313 |
| Receivables | | | |
| Employer and Member Contributions | 36,181,134 | | |
| Sale of Investments | 274,020,465 | 3,436,365 | 2,681,847 |
| Investment Income | 14,720,764 | | |
| Loans | | 3,815,831 | |
| Interfund Receivables | 276,317 | | |
| Other | 140,763 | 16,351 | |
| Total Receivables | 325,339,444 | 7,268,548 | 2,681,847 |
| Investments, at fair value | | | |
| Fixed Income | 1,993,903,226 | 23,744,311 | 18,530,806 |
| Equities | 2,521,701,140 | 30,029,570 | 23,436,019 |
| Private Equity | 586,442,126 | 6,983,621 | 5,450,237 |
| Commodities | 293,221,063 | 3,491,810 | 2,725,119 |
| Cash Equivalents | 117,288,425 | 1,396,724 | 1,090,047 |
| Mutual Funds | | 237,529,028 | |
| Real Estate | 351,865,275 | 4,190,173 | 3,270,142 |
| Total Investments | 5,864,421,255 | 307,365,237 | 54,502,370 |
| Invested Securities Lending Collateral | 771,417,923 | | |
| Prepaid Expenses | 66,004 | | |
| Capital Assets, at cost, net of accumulated depreciation | 7,300,506 | | |
| **Total Assets** | **7,066,218,592** | **315,886,745** | **58,094,530** |
| **Liabilities** | | | |
| Purchase of Investments | 345,378,942 | 4,110,422 | 3,207,902 |
| Securities Lending Collateral | 776,695,757 | | |
| Administrative and Investment Costs | 6,239,634 | | |
| Interfund Payables | | 262,514 | 13,803 |
| Other Accounts Payable | | 10,621 | |
| **Total Liabilities** | **1,128,314,333** | **4,383,557** | **3,221,705** |
| **Net Assets Held in Trust for Pension and Health Benefits and Investment Accounts Held for Others** | **$5,937,904,259** | **$311,503,188** | **$54,872,825** |

*The "Schedule of Funding Progress" is presented in the "Required Supplementary Information" in the Financial Section of this report.*
*The accompanying notes are an integral part of these Financial Statements.*

| Retiree Health Funding Vehicle | Investment Services Program | Total Year Ended Dec. 31, 2011 | Total Year Ended Dec. 31, 2010 |
|---|---|---|---|
| $4,713,250 | $107,622 | $104,657,607 | $43,807,281 |
| | | 36,181,134 | 35,510,409 |
| 14,789,552 | 334,587 | 295,262,816 | 243,973,829 |
| | | 14,720,764 | 12,444,670 |
| | | 3,815,831 | 3,281,585 |
| | | 276,317 | - |
| | | 157,114 | 323,293 |
| 14,789,552 | 334,587 | 350,413,976 | 295,533,786 |
| 102,191,618 | 2,311,906 | 2,140,681,867 | 2,066,121,447 |
| 129,242,342 | 2,923,881 | 2,707,332,952 | 2,816,719,619 |
| 30,056,359 | 679,972 | 629,612,315 | 627,717,674 |
| 15,028,179 | 339,986 | 314,806,157 | 342,482,098 |
| 6,011,272 | 135,995 | 125,922,463 | 181,799,909 |
| | | 237,529,028 | 156,013,743 |
| 18,033,814 | 407,984 | 377,767,388 | 318,820,405 |
| 300,563,585 | 6,799,724 | 6,533,652,171 | 6,509,674,895 |
| | | 771,417,923 | 965,406,902 |
| | | 66,004 | 173,239 |
| | | 7,300,506 | 6,346,492 |
| 320,066,387 | 7,241,933 | 7,767,508,187 | 7,820,942,592 |
| 17,690,580 | 400,218 | 370,788,064 | 252,618,509 |
| | | 776,695,757 | 972,419,765 |
| | | 6,239,634 | 11,661,471 |
| | | 276,317 | - |
| | | 10,621 | 94,565 |
| 17,690,580 | 400,218 | 1,154,010,393 | 1,236,794,310 |
| $302,375,807 | $6,841,715 | $6,613,497,794 | $6,584,148,282 |

## Statement of Changes in Plan Net Assets for the Year Ended December 31, 2011

| | Defined Benefit | Defined Contribution | Health Care Savings Program |
|---|---|---|---|
| **Additions** | | | |
| Contributions and Transfers In | | | |
| Employer Contributions and Other | $298,328,514 | $21,953,373 | $7,306,567 |
| Plan Member Contributions | 64,789,695 | 10,368,042 | |
| Employer Transfers In | | 8,313 | |
| Plan Member Transfers In | | 125,479 | |
| Transfers from Other Plans and Other Items | | | |
| Total Contributions and Transfers In | 363,118,209 | 32,455,207 | 7,306,567 |
| Investment Income | | | |
| Net Appreciation/Depreciation in Fair Value | 54,567,106 | 1,862,434 | 918,372 |
| Interest Income | 53,475,487 | | |
| Dividend Income | 37,890,141 | | |
| | 145,932,734 | 1,862,434 | 918,372 |
| Less Investment Expense | 19,164,458 | | |
| Net Investment Income Before Securities Lending Activities | 126,768,276 | 1,862,434 | 918,372 |
| Security Lending Activities | | | |
| Security Lending Income | 4,151,343 | | |
| Security Lending Expenses | | | |
| Borrower Rebates | 526,431 | | |
| Management Fees | 724,501 | | |
| Total Securities Lending Expenses | 1,250,932 | | |
| Net Income from Security Lending Activities | 2,900,411 | | |
| Total Net Investment Income | 129,668,687 | 1,862,434 | 918,372 |
| Miscellaneous Income | 446,219 | | |
| **Total Additions** | **493,233,115** | **34,317,641** | **8,224,939** |
| **Deductions** | | | |
| Benefits | 497,763,955 | 19,900,614 | |
| Refunds of Contributions | | | |
| Employer | 41,554 | | |
| Plan Member | 7,914,782 | | |
| Special Expenses and Fees | 444,000 | | |
| Transfers to Defined Contribution Plan | | | |
| Employer | 125,479 | | |
| Plan Member | 8,313 | | |
| Medical Disbursements Paid to Members | | | 1,473,832 |
| Disbursements Paid to Municipalities | | | |
| Forfeited Employer Contributions | | | 16,106 |
| Administrative Expenses | 22,069,613 | 826,538 | 717,472 |
| **Total Deductions** | **528,367,696** | **20,727,152** | **2,207,410** |
| **Net Assets** | | | |
| Net Increase/Decrease | (35,134,581) | 13,590,489 | 6,017,529 |
| Net Assets Held in Trust for Pension and Health Benefits and Investment Accounts Held for Others Balance Beginning of Fiscal Period | 5,973,038,840 | 297,912,699 | 48,855,296 |
| **Balance End of Fiscal Period** | **$5,937,904,259** | **$311,503,188** | **$54,872,825** |

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

| Retiree Health Funding Vehicle | Investment Services Program | Total Year Ended Dec. 31, 2011 | Total Year Ended Dec. 31, 2010 |
|---|---|---|---|
| $48,643,625 | | $376,357,558 | $427,317,925 |
| | | 75,166,050 | 92,239,046 |
| | | - | 977,346 |
| | | - | 28,259 |
| | | | 3,696,142 |
| 48,643,625 | | 451,523,608 | 524,258,718 |
| 6,820,323 | $161,694 | 64,329,929 | 731,551,195 |
| | | 53,475,487 | 60,043,753 |
| | | 37,890,141 | 41,036,649 |
| 6,820,323 | 161,694 | 155,695,557 | 832,631,597 |
| | | 19,164,458 | 20,093,406 |
| 6,820,323 | 161,694 | 136,531,099 | 812,538,191 |
| | | 4,151,343 | 5,545,534 |
| | | 526,431 | 1,427,296 |
| | | 724,501 | 823,457 |
| | | 1,250,932 | 2,250,753 |
| | | 2,900,411 | 3,294,781 |
| 6,820,323 | 161,694 | 139,431,510 | 815,832,972 |
| | | 446,219 | 1,726,190 |
| **55,463,948** | **161,694** | **591,401,337** | **1,341,817,880** |
| | | 517,664,569 | 464,089,382 |
| | | 41,554 | 5,823 |
| | | 7,914,782 | 7,005,859 |
| | | 444,000 | 1,648,860 |
| | | 125,479 | 977,346 |
| | | 8,313 | 28,259 |
| | | 1,473,832 | 889,941 |
| 9,073,910 | | 9,073,910 | 5,564,350 |
| | | 16,106 | 85,142 |
| 1,647,556 | 28,101 | 25,289,280 | 21,773,212 |
| **10,721,466** | **28,101** | **562,051,825** | **502,068,174** |
| 44,742,482 | 133,593 | 29,349,512 | 839,749,706 |
| 257,633,325 | 6,708,122 | 6,584,148,282 | 5,744,398,576 |
| **$302,375,807** | **$6,841,715** | **$6,613,497,794** | **$6,584,148,282** |

# NOTES TO BASIC FINANCIAL STATEMENTS

Year ended December 31, 2011

## 1. Reporting Entity and Plan Description

The Municipal Employees' Retirement System (MERS) of Michigan is an agent multiple-employer, statewide public employee pension plan 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.

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.

## Overview of Programs and Services

**The MERS Defined Benefit Plan** is a traditional pension plan that rewards longevity by providing employees a lifetime retirement benefit. At retirement, members receive a specific monthly benefit calculated using a predetermined formula based on salary and length of service. Groups benefit from professionally managed funds and economies of scale, while maintaining local control of their pension administration choices.

**The MERS Defined Contribution Plan** is a qualified retirement plan under Section 401(a) of the Internal Revenue Code. Each participant has an account to which contributions are made and invested. Benefits are based on the amount of money in the account. As a qualified plan, participants are not taxed on contributions or earnings until assets are withdrawn.

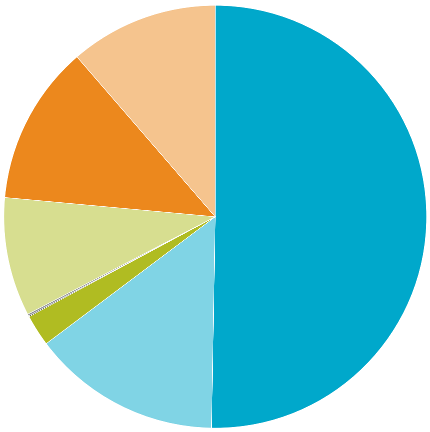
**The MERS Hybrid Plan** is a combination of a fixed defined benefit portion with a flexible defined contribution portion. Hybrid shares the rewards of both plans while maintaining predictable costs. Hybrid offers participants the flexibility of investment choice, while also providing stability of a specific monthly benefit.

**The MERS Health Care Savings Program** is an established employer-sponsored program that provides individual medical reimbursement accounts to participating employees. Once an employee leaves employment, the account balance is available for tax-favored reimbursement of medical expenses for the employee and eligible dependents. The program can be used in addition to an existing retiree health care plan, or on its own. This is an IRS issued Private Letter Ruling and an Integral Governmental Trust under Code Section 115.

**The MERS Retiree Health Funding Vehicle** allows employers to save and grow assets to offset their retiree health care liability. Participating employers join an IRS issued Private Letter Ruling and an Integral Governmental Trust under Code Section 115.

**MERS Investment Services Program** is an investment trust fund that is available to all municipalities to invest funds through the MERS portfolio while maintaining administrative functions at the municipal level. Assets are pooled within the MERS Defined Benefit Plan, resulting in reduced costs and increased investment return opportunities for municipalities.

## MERS Participating Municipalities as of December 31, 2011



| | |
|---|---|
| Defined Benefit | 709 |
| Defined Contribution | 204 |
| Hybrid | 34 |
| Investment Services Program | 1 |
| Tribal Government Retirement System | 2 |
| Retiree Health Funding Vehicle | 128 |
| Health Care Savings Program | 172 |
| Group Life and Disability | 160 |

*Note: There are 789 different municipalities that make up the 1,410 programs, as many municipalities have more than one product.*

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 Membership as of December 31, 2011

| | Defined Benefit | Defined Contribution | Hybrid | Health Care Savings Program |
|---|---|---|---|---|
| Active | 35,136 | 7,176 | 333 | 5,852 |
| Deferred | 7,568 | NA | 15 | NA |
| Retired | 31,409 | 2,017 | 4 | 1,160 |
| **Product Totals** | **74,113** | **9,193** | **352** | **7,012** |
| Total MERS Employment* | | | | 90,670 |

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

MERS was created under Public Act 135 of 1945 as a Defined Benefit Plan 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.

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. 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 June 15, 2005. MERS also applied for an updated application for a Letter of Favorable Determination on September 30, 2008, following Board approval at the September Board meeting. This updated application is part of the Internal Revenue Service's Cycle C program for governmental plan Letters of Favorable Determination. (Please see Note #7 under Subsequent Events.)

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 ($245,000 for 2011 and $250,000 for 2012) 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.

When MERS received a Private Letter Ruling allowing the establishment of an Internal Revenue Code Section 115 Integral Governmental Trust, MERS created two programs – the Health Care Savings Program, and the Retiree Health Funding Vehicle.

The MERS Health Care Savings Program became operational in June 2004 and was made available to all municipalities in Michigan. The employer-sponsored program provides medical reimbursement accounts to participating employees. Medical expenses are reimbursed, as defined in Code Section 213, once employees terminate employment, are on medical leave for six months or longer, or are on disability from any public pension plan.

There are four types of contributions that may be used in the program: 1) Basic Employer (tax-favored), 2) Mandatory Salary Reductions (tax-favored), 3) Mandatory Leave Conversions (tax-favored), and 4) Voluntary Employee Contributions (post-tax).

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

The MERS Retiree Health Funding Vehicle became operational in the fall of 2004 and was made available to all municipalities in Michigan. Participating municipalities can contribute monies to the Trust and no contribution method other than "pay as you go" cash funding is required or imposed on the participating employer. 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 Investment Services Program is an investment trust fund that is available to all municipalities 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.

MERS offers any "municipality" (Plan Section 2b(4); MCL 38.1502B(2) pension, "ancillary benefits, health and welfare benefits, and other post-employment benefit programs" (Plan Section 36(2)(a); MCL 38.1536(2)(a)). The Investment Services Program trust fund complies with all the requirements imposed by the Public Employee Retirement System Investment Act, 1965 Public Act 314. Participation in the Investment Services Program does not qualify as membership in MERS pension plans, and the participating employer does not have a vote at the MERS Annual Meeting.

## 2. Summary of Significant Accounting Policies

### Reporting Entity

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 public corporation. 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). 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.

The Defined Contribution financial statements are prepared using a cash basis of accounting (which approximates the accrual basis of accounting). Plan investments are presented at fair value.

The Health Care Savings Program's financial statements are prepared using a modified cash basis of accounting (which approximates the accrual basis of accounting). Plan investments are presented at fair value. Contributions are pooled on a combined basis subject to the Public Employee Retirement System Investment Act ("PERSIA"), 1965 PA 314, and pursuant to the Public Employee Health Care Fund Investment Act, 1999 PA 149.

The Retiree Health Funding Vehicle's financial statements are prepared using a modified cash basis of accounting (which approximates the accrual basis of accounting). Plan investments are presented at fair value. Contributions are pooled on a combined basis subject to 1965 PA 314, and 1999 PA 149.

The Investment Services Program's financial statements are prepared using a modified cash basis of accounting (which approximates the accrual basis of accounting). Plan investments are presented at fair value. Contributions are pooled on a combined basis subject to 1965 PA 314.

### Use of Estimates

Management of the System has made certain estimates and assumptions relative to the reporting of assets, liabilities, disclosure of contingent assets and liabilities, to prepare these financial statements in conformity with accounting principles generally accepted in the United States. Actual results could differ from these estimates.

## GASB 27

The Governmental Accounting Standards Board (GASB) Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers," requires certain changes in reporting pensions by employers.

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 2011, MERS contributed 11.65% of compensation; employees contributed 2% of compensation.

The following pension information for GASB 27 applies to MERS staff only:

## Schedule of Funding Progress

| Actuarial Valuation December 31 | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded (Over) AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a % of Covered Payroll ((b-a)/c) |
|---|---|---|---|---|---|---|
| 2008 | $7,094,900 | $9,390,969 | $2,296,069 | 75.55% | $7,802,747 | 29.43% |
| 2009 | 9,202,748 | 9,954,321 | 751,573 | 92.45 | 8,198,952 | 9.17 |
| 2010 | 11,347,345 | 11,893,235 | 545,890 | 95.41 | 9,113,922 | 5.99 |

## Actuarial Accrued Liability from December 31, 2010 and December 31, 2009 Actuarial Valuations

| | 2010 | 2009 |
|---|---|---|
| Retirees and beneficiaries currently receiving benefits | $1,558,188 | $922,787 |
| Vested former members not yet receiving benefits | 341,525 | 277,431 |
| Nonvested terminated employees (pending refunds of accumulated member contributions) | 63,420 | 28,437 |
| Current employees | | |
| Accumulated employee contributions, including allocated investment income | 1,239,889 | 1,090,160 |
| Employer financed | 8,690,213 | 7,635,506 |
| **Total Actuarial Accrued Liability** | **11,893,235** | **9,954,321** |
| Net assets available for benefits at actuarial value ($7,352,387 and $5,098,808 at market value for December 31, 2010, and 2009, respectively) | 11,347,345 | 9,202,748 |
| **Unfunded actuarial accrued liability** | **$545,890** | **$751,573** |

## Three-Year Trend Information Schedule of Employer Contributions

| Fiscal Year Ended | Annual Pension Cost (APC) | Percentage of APC Contributed | Net Pension Obligation |
|---|---|---|---|
| December 31, 2009 | $720,804 | 100% | - |
| December 31, 2010 | 994,080 | 100 | - |
| December 31, 2011 | 920,736 | 100 | - |

## Post Employment Benefits

The Government Accounting Standards Board (GASB) Statement No. 50, Pension Disclosures – an amendment of GASB Statements No. 25 and No. 27 – more closely aligns the financial reporting requirements for pensions with other post employment benefits. This enhances information disclosed in the "Notes to Basic Financial Statements," or presented as required supplementary information by pension plans and employers.

The MERS Retiree Health Funding Vehicle is designed to be an investment choice for municipalities rather than a plan for other post employment benefits. The other post employment benefit plan remains with the municipalities for their administration, and implementation of GASB Statement 50 will reside with them.

## 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 investments typically have a quarter lag in reporting, which is an industry standard.

## Capital Assets

Office furniture, equipment, and software with a value of $5,000 or more are carried at cost, less accumulated depreciation. The capital assets are depreciated using the straight-line method over the estimated useful lives of the related assets varying from three- to eight-year spans. The table below is a schedule of the capital asset account balances as of December 31, 2010, and December 31, 2011.

## Capital Assets

| Capital Assets | Office Furniture and Equipment | Software | Total Capital Assets |
|---|---|---|---|
| Balances December 31, 2010 | $2,789,073 | $17,255,527 | $20,044,600 |
| Additions | 867,144 | 2,702,480 | 3,569,624 |
| Deletions and Transfers | (127,633) | (215,606) | (343,239) |
| **Balances December 31, 2011** | **$3,528,584** | **$19,742,401** | **$23,270,985** |
| Accumulated Depreciation | | | |
| Balances December 31, 2010 | $1,790,429 | $11,907,678 | $13,698,107 |
| Depreciation Expense | 497,523 | 2,118,087 | 2,615,610 |
| Deletions and Transfers | (127,633) | (215,605) | (343,239) |
| Balances December 31, 2011 | $2,160,319 | $13,810,160 | $15,970,478 |
| **Net Capital Assets - December 31, 2011** | **$1,368,265** | **$5,932,241** | **$7,300,506** |

## Total Columns On Statements

The "Total" columns on the "Statement of Plan Net Assets" and "Statement of Changes in Plan Net Assets" are presented to facilitate financial analysis. Amounts in these columns do not present the plan net assets and changes in plan net assets 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, Retiree Health Funding Vehicle, and Investment Services Program have not been eliminated from the "Total" columns.

Prior year amount have been reclassed for current year presentation.

# 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. Other municipalities jointly fund pension obligations from employee and employer contributions. Monthly employee contributions are based upon a percentage of actual compensation as determined by an annual actuarial valuation. Employer contributions are based upon projected compensation as determined by an annual actuarial valuation. 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 1 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. The municipality determines the employee's 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**

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 reserve's balance at December 31, 2011, was $669,544,791. The "Reserve for Employee Contributions" was fully funded as of the December 31, 2010, MERS Consolidated Actuarial Valuation.

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

All employer contributions are credited to this reserve. Net income is allocated to this reserve from the "Reserve for Expenses and Undistributed 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, 2011, balance was $5,268,359,467. The unfunded actuarial liability was $2,371,798,576 (based on the actuarial value of assets) as of the December 31, 2010, MERS Consolidated Actuarial Valuation.

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

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 2011, the Retirement Board allocated 100% from the "Reserve for Expenses and Undistributed Investment Income" to the "Reserve for Employer Contributions and Benefit Payments," leaving a zero balance at year end.

## Other Reserves

- **Reserve for Defined Contribution Plan**

All additions to and deductions from the Defined Contribution Plan are recorded in this reserve. MERS maintains the individual member account records.

- **Reserve for Health Care Savings Program**

All additions to and deductions from the Health Care Savings Program are recorded in this reserve. MERS maintains the individual member account records.

- **Reserve for Retiree Health Funding Vehicle**

All additions to and deductions from the Retiree Health Funding Vehicle are recorded in this reserve. MERS maintains the separate employer account records for all municipalities.

- **Reserve for Investment Services Program**

All additions to and deductions from the Investment Services Program are recorded in this reserve. MERS maintains the separate employer account records for all municipalities.

# 4. Investments

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, 2011, 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.

## 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 (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, 2011, 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, 2011, is presented on the following pages, by investment category as rated by Standard & Poor's.

## Credit Ratings Summary - December 31, 2011

| Quality Rating | Agencies | Asset Backed | Corporate Bonds | Foreign | LMTD Part Units | Loans |
|---|---|---|---|---|---|---|
| AAA/Aaa | $68,780,047 | $34,475,921 | $70,982,982 | $3,706,280 | $- | $146,092 |
| AA+/Aa1 | 91,053,469 | 2,901,845 | 41,348,146 | 85,158,110 | | |
| AA/Aa2 | 12,305,677 | 2,202,645 | 21,689,513 | 4,329,350 | | |
| AA-/Aa3 | 28,781,010 | 191,356 | 12,306,496 | | | |
| A+/A1 | 12,571,959 | | 28,901,427 | 184 | | |
| A/A2 | 13,402,265 | 1,397,957 | 64,482,075 | 3,943,219 | | |
| A-/A3 | 28,772,089 | 176,510 | 119,689,030 | 6,614,669 | | |
| BBB+/Baa1 | 1,254,360 | 4,496,874 | 58,832,960 | 12,087,077 | | |
| BBB/Baa2 | 23,095,151 | 1,640,409 | 44,346,250 | 5,008,005 | | |
| BBB-/Baa3 | 8,318,713 | | 40,398,016 | 11,262,077 | | 2,938,076 |
| BB+/Ba1 | 1,971,792 | | 30,945,219 | 14,228,351 | | 4,821,042 |
| BB/Ba2 | 6,747,524 | 133,476 | 36,584,162 | 15,983,493 | | 9,317,434 |
| BB-/Ba3 | 1,272,500 | | 42,371,971 | 11,033,992 | | 21,410,620 |
| B+/B1 | 2,443,194 | | 48,580,388 | 17,668,429 | | 27,481,562 |
| B/B2 | 2,095,764 | | 35,990,493 | 8,063,738 | | 21,053,506 |
| B-/B3 | | | 23,245,305 | 2,784,825 | | 14,463,126 |
| CCC+/Caa1 | | | 13,207,111 | 1,954,058 | | 7,369,539 |
| CCC/Caa2 | | 699,875 | 3,110,999 | | | 584,369 |
| CCC-/Caa3 | | 192,188 | 492,087 | | | 486,974 |
| CC/Ca | | | | | | |
| C | | | 25,250 | | | |
| D/C | | 4,062,674 | 857,337 | | | 211,022 |
| NA | | | 76,970 | | | |
| Cash with no ratings | | | | | 6,033,094 | |
| NR* | 2,631,960 | 1,928,213 | 12,647,300 | 809,371 | 234,772,471 | 8,684,368 |
| **Totals** | **$305,497,473** | **$54,499,943** | **$751,111,488** | **$204,635,228** | **$240,805,565** | **$118,967,730** |

** The Not Rated classification includes $235 million in a limited partnership infrastructure without credit ratings. Removing that classification leaves the overall portfolio at 2% not rated. Much of the limited partnership is with government and quasi government entities, backed by guaranteed revenue streams.*

| **Reconciliation of Investments** | |
|---|---|
| Fixed income | $2,158,709,915 |
| Cargill | 296,931,511 |
| Cash | 108,560,260 |
| Subtotal of investments | 2,564,201,686 |
| Total from page 39 | 2,615,768,691 |
| **Difference from investments** | **51,567,005** |
| Payables settling in 2012 | -342,290,804 |
| Receivables settling in 2012 | 280,974,984 |
| Foreign Exch. settling in 2012 | 1,741,404 |
| Manager differences | 8,007,413 |
| Small difference | -2 |
| Total | $(51,567,005) |

| Mortgage Backed Securities | Municipals | Other | Short-Term Cash | U.S. Treasuries | Total | % of Portfolio |
|---|---|---|---|---|---|---|
| $49,944,820 | $1,712,671 | $- | $16,961,968 | $64,427,319 | $311,138,101 | 11.89% |
| 166,031,015 | 5,466,210 | | 70,861,055 | 181,879,700 | 644,699,549 | 24.65% |
| 2,464,220 | 11,788,636 | | 782,860 | 2,674,772 | 58,237,673 | 2.23% |
| 2,591,732 | 16,043,952 | | | | 59,914,547 | 2.29% |
| 3,687,426 | | | | | 45,160,996 | 1.73% |
| 3,718,585 | 6,462,896 | | 2,348,580 | 8,024,316 | 103,779,894 | 3.97% |
| 127,983 | 3,148,259 | | | | 158,528,540 | 6.06% |
| 1,031,187 | | | | | 77,702,459 | 2.97% |
| 4,755,292 | | | 2,870,487 | 9,807,497 | 91,523,090 | 3.50% |
| 2,081,725 | | | | | 64,998,607 | 2.48% |
| 65,752 | | | | | 52,032,156 | 1.99% |
| 127,077 | | | | | 68,893,166 | 2.63% |
| 486,752 | | | | | 76,575,835 | 2.93% |
| 485,051 | | | | | 96,658,624 | 3.70% |
| 344,779 | | | | | 67,548,280 | 2.58% |
| 1,963,593 | | | | | 42,456,849 | 1.62% |
| 100,510 | | | | | 22,631,218 | 0.87% |
| 1,277,644 | | | | | 5,672,887 | 0.22% |
| 6,642 | | | | | 1,177,891 | 0.05% |
| 823,081 | | | | | 823,081 | 0.03% |
| | | | | | 25,250 | 0.00% |
| 1,491,124 | | | | | 6,622,157 | 0.25% |
| | | | | | 76,970 | 0.00% |
| | | | 260,558,654 | | 266,591,748 | 10.19% |
| 6,761,539 | 801,965 | 9,431,409 | 3,131,440 | 10,699,088 | 292,299,124 | 11.17% |
| **$250,367,529** | **$45,424,589** | **$9,431,409** | **$357,515,045** | **$277,512,692** | **$2,615,768,691** | **100%** |

## Interest Rate Risk

Interest rate risk is the risk that an investment's value will change due to a change in the absolute level of interest rates. Interest rate risk is controlled through diversification of portfolio management styles. Duration is a measure of interest rate risk. The greater the duration of a bond or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates and vice-versa. Sensitivity to changing interest rates may derive from prepayment options embedded in an investment. The Board policy, in regard to interest rate risk, is that the effective duration of the domestic portfolio shall be (+/-) 20% of the Barclays Capital Aggregate Index or the Barclays Universal Bond Index. Board policy in regard to global non-investment grade fixed income securities is that the portfolio's duration is (+/-) 2 years of the benchmark duration. The benchmark for global non-investment grade fixed income securities is 1/3 Barclays Capital U.S. Treasury Inflation Protected Securities Index, 1/3 Citigroup High Yield Market Index, and 1/3 JP Morgan Emerging Markets Global Bond Index. As of December 31, 2011, the Plan's exposure to interest rate risk (as measured by the effective duration method summary) is listed on the following page by investment type.

## Effective Duration – December 31, 2011

| Investment Type | Market Value | Weighted Effective Duration |
|---|---|---|
| Agency | $96,539,920 | 2.09 |
| Agency MBS | 39,143,004 | 4.61 |
| Asset Backed | 53,252,903 | 3.34 |
| Cash Equivalent | 104,566,982 | 1.26 |
| CMBS | 32,199,166 | 2.69 |
| CMO | 11,395,114 | 5.42 |
| Commingled Fund | 241,414 | 2.66 |
| Convertible | 174,902 | 9.42 |
| Corporate | 472,846,209 | 5.56 |
| Credit | 41,317,615 | 4.61 |
| Foreign | 224,700,916 | 6.76 |
| Loans | 118,967,730 | 3.52 |
| Mortgage Pass-Through | 135,116,620 | 4.23 |
| Municipal | 5,956,333 | 3.00 |
| Preferred Stock | 89,322 | 22.90 |
| Private Placement | 4,142,570 | 1.03 |
| Quasi Sovereign | 39,781,023 | 5.72 |
| Sovereign | 74,853,147 | 5.72 |
| Swaps | -2,873,158 | 4.35 |
| US Treasury | 327,899,957 | 5.51 |
| Yankee (Intl bonds in U.S. dollars | 82,639,332 | 6.85 |
| | $1,862,951,023 | |

## 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 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 net assets other than those issued or explicitly guaranteed by the U.S. government as of December 31, 2011.

## 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, 2011, is summarized on the following page.

## 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, 2011, the $230.6 million carrying amount of the Plan's cash and cash equivalents was comprised of $224.9 million of short-term investments, and $5.7 million in deposits. The $5.7 million bank balance of deposits was subject to custodial credit risk because it was uninsured and uncollateralized.

## Foreign Currency Risk in U.S. Dollar Denominations – December 31, 2011

| Currency | Equities | Fixed Income | Cash | Real Estate | Total |
|---|---|---|---|---|---|
| Argentine peso | | $425,889 | $13,487 | | $439,376 |
| Australian dollar | $16,793,704 | 31,582,156 | 1,106,754 | $54,375 | 49,536,989 |
| Brazilian real | 17,708,774 | 10,868,053 | 125,829 | | 28,702,656 |
| British pound sterling | 59,847,388 | 1,976,583 | 129,895 | 65,415 | 62,019,281 |
| Canadian dollar | 12,219,089 | 19,539,583 | 15,829 | 85,115 | 31,859,616 |
| Colombian peso | | 1,700,791 | | | 1,700,791 |
| Czech koruna | | 8,055,017 | | | 8,055,017 |
| Danish krone | 4,271,593 | 8,936,959 | 285,649 | | 13,494,201 |
| Euro | 44,205,701 | 53,061,914 | 317,600 | 205,859 | 97,791,074 |
| Hong Kong dollar | 35,574,751 | | 196,819 | 143,195 | 35,914,765 |
| Hungarian forint | | | 36 | | 36 |
| Indonesian rupiah | 1,926,429 | | 10,395 | | 1,936,824 |
| Israeli shekel | 107,200 | | 95 | | 107,295 |
| Japanese yen | 62,498,418 | 22,347,274 | 504,088 | 4,892 | 85,354,672 |
| Malaysian ringgit | 1,160,437 | 11,309,064 | 68,555 | | 12,538,056 |
| Mexican peso | 72,872 | 12,636,275 | 487,371 | | 13,196,518 |
| New Taiwan dollar | 2,175,463 | | 738,329 | | 2,913,793 |
| New Turkish lira | | | 94 | | 94 |
| New Zealand dollar | 71,264 | 15,228,068 | 248,393 | | 15,547,725 |
| Norwegian krone | 5,434,006 | 14,563,190 | 1,369 | | 19,998,565 |
| Philippine peso | 220,966 | 162,011 | 8,726 | | 391,703 |
| Polish zloty | 373,922 | 8,965,509 | 11,313 | | 9,350,744 |
| Singapore dollar | 6,403,044 | | 367,662 | 327,239 | 7,097,945 |
| South African rand | 3,959,631 | 8,149,925 | 439,649 | | 12,549,205 |
| South Korean won | 14,119,833 | 8,168,603 | 17,519 | | 22,305,955 |
| Swedish krona | 1,932,577 | | 66,834 | | 1,999,411 |
| Swiss franc | 3,081,813 | | 2 | | 3,081,815 |
| Thai baht | 1,374,103 | | 12,002 | | 1,386,105 |
| Turkish lira | 304,532 | 1,472,654 | | 1,195,793 | 2,972,979 |
| **Total International Investment Securities** | **$295,837,509** | **$239,149,519** | **$5,174,293** | **$2,081,884** | **$542,243,206** |

## 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 either cash or securities 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. Neither MERS nor the custodian has the ability to pledge or sell collateral securities delivered unless the borrower is in default.

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, 2011, 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 $5,277,834 that is reflected in the financial statements. Security lending produced a net income of $2,900,411 in 2011 excluding unrealized gains and losses.

### Collateral Held and Fair Value of Securities on Loan – December 31, 2011

| Fair Value of Securities on Loan | Nature of Collateral | Collateral Held |
|---|---|---|
| $757,295,831 | Cash | $776,695,757 |
| - | Non-Cash | - |
| **$757,295,831** | | **$776,695,757** |

## Securities Lending Collateral

| | S & P Rating | Percentage | Amount |
|---|---|---|---|
| Short-Term Credit Ratings | A-1+/P-1 * | 29.68% | $230,559,603 |
| | A-1/P-1 * | 43.12 | 334,906,830 |
| Long-Term Credit Ratings | AAA | 4.42 | 34,300,966 |
| | AA | 12.28 | 95,383,054 |
| | A | 9.51 | 73,881,335 |
| | BBB+ | 0.00 | 0 |
| | BBB | 0.25 | 1,974,517 |
| | BBB- | 0.00 | 0 |
| | BB+ | 0.36 | 2,795,499 |
| | BB | 0.00 | 0 |
| | BB- | 0.00 | 0 |
| | Other | 0.37 | 2,893,953 |
| | | **100.00%** | **$776,695,757** |
| Net accumulated depreciation in fair value | | | -5,277,834 |
| Invested Securities Lending Collateral | | | $771,417,923 |

* *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 issuer's 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 indexes. 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, 2011. The notional value associated with these derivative instruments are generally not recorded on the financial statements; however, the amounts for the exposure (unrealized gains/losses) on these instruments are recorded. Interest rate risks associated with these investments are included in the table. MERS does not anticipate additional significant market risk from the swap arrangements.

## Swap Contracts and Structured Notes - December 31, 2010

| Name | Maturity Date | Position | Cost | Market Value | Counterparty |
|---|---|---|---|---|---|
| S&P GSCI Total Return Index | 5/31/12 | Long | $283,947,554 | $279,746,266 | Cargill Risk Management |
| CDX North American High Yield | 12/20/16 | Short | (1,385,010) | (973,266) | Goldman and JP Morgan |
| CDX North American Inv. Grade | 12/20/16 | Short | (360,151) | (162,728) | JP Morgan Chase |
| Int. Rate Swap (USD) | 12/9/19 | Receive Floating | 2,030,000 | 1,745,200 | Citigroup |
| CLN Colombia Govt. | 7/27/20 | Long | 635,468 | 603,006 | Citigroup |
| CLN Brazil Govt. | 1/1/21 | Long | 3,026,703 | 2,939,493 | Citigroup and JP Morgan |
| CLN Colombia Govt. | 7/24/24 | Long | 155,270 | 146,607 | Citigroup |
| CMBX AAA | 12/13/49 | Short | (1,033,288) | (761,312) | Goldman and JP Morgan |
| CMBX Index | 2/17/51 | Short | (1,230,540) | (812,819) | Citigroup |

*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 | $193,765,268 |
| Pending Payable | (191,571,760) |
| **Foreign Currency Forward Contract Asset (Liability)** | **$ 2,193,508** |

## Futures and Options Contracts - December 31, 2011

| Futures Contract | Expiration Date | Long/Short | Cost | Market Value |
|---|---|---|---|---|
| US 2-Yr Treasury Note | 3/31/12 | Short | $ (800,000) | $ (882,188) |
| US 5-Yr Treasury Note | 3/31/12 | Long | 16,700,000 | 21,897,875 |
| US 10-Yr Treasury Note | 3/31/12 | Long | 49,200,000 | 60,642,844 |
| US Long Treasury Bond | 3/31/12 | Short | 14,900,000 | 21,577,063 |
| US Dollar Put / Japenese Yen Call Option | 2/24/14 | Long | 217,000 | 91,350 |

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 derivatives' totals.

## Private Equity and Capital Calls

The MERS Board has approved $862,866,742 for investment in private equity securities. As of December 31, 2011, $852,517,187 was invested in private equity with $70,073,578 recallable return of capital, leaving $80,423,133 available for future investments.

## 5. Commitments and Contingencies

In the normal course of business, benefit claims are in various states of development. Determinations are made through established administrative procedures. The Retirement Board is responsible for making final judgments but may be subject to judicial review. 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. MERS maintains insurance for workers' compensation, owned and leased vehicles, blanket property, fiduciary, fidelity, and faithful performance to cover other risk of loss such as personal injury to employees or others, property damage, or other liability.

## 6. Related Parties

MERS is the majority stockholder of the Tegrit Group, and its division Tegrit Administrators. This is an investment in the MERS Strategic Opportunity Fund held within the MERS Total Market Fund. Tegrit is the recordkeeper for the MERS Defined Benefit Plan, Defined Contribution Plan, Hybrid Plan, Retiree Health Funding Vehicle, Investment Services Program, and the Health Care Savings Program. MERS paid Tegrit $4,216,800 in 2011 for primary pension software and third party administration fees.

## 7. Subsequent Events

In 2012, MERS implemented a 457 Supplemental Retirement Program and took over the development and management of the investment lineup. Additionally, Tegrit Administrators, a MERS majority-owned subsidiary, assumed the 457 Program administration, reporting and recordkeeping.

On April 26, 2012, the Internal Revenue Service issued MERS its most recent Favorable Letter of Determination, stating that MERS meets the requirements of IRC Section 401(a) as applicable to government plans.

# 8. Funded Status and Funding Progress

The funded status of the MERS Defined Benefit Plan is as follows:

### Schedule of Funding Progress – (Dollars in Millions)

| Actuarial Valuation December 31 | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded (Over) AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a % of Covered Payroll ((b-a)/c) |
|---|---|---|---|---|---|---|
| 2010 | $6,945.4 | $9,317.2 | $2,371.8 | 74.54% | $1,684.0 | 140.8% |

Actuarial assumptions include a 10-year smoothed market asset valuation method adopted December 31, 2005, with prospective application and an investment rate of return of 8%. The December 31, 2010, actuarial valuation reflects changes in actuarial assumptions for a temporary lower wage inflation assumption and revised rates of expected employee retirement. The "Schedule of Funding Progress" that follows the "Notes to Basic Financial Statements" presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing relative to actuarial accrued liability.

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 2011 were determined by actuarial valuations as of December 31, 2009.

Approximately 78% of the participating municipalities have fiscal years that begin January 1 or July 1.

The annual required contributions shown in the required supplementary schedule represents the summation of each participating municipality's contribution requirements for its fiscal year commencing in the year stated. However, the calculations to determine the percentage contributed use the contributions recorded during MERS fiscal year.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation is in the Actuarial Section.

## Summary Information

| | |
|---|---|
| Valuation Date | December 31, 2010 |
| Actuarial Cost Method | Entry Age Normal |
| Amortization Method | Level Percent of Payroll, Open |
| Remaining Amortization Period | There are 28 years for positive unfunded liabilities, and 10 years for negative unfunded liabilities. The 28-year period will decline by one year in each of the next annual valuations until it reaches 20 years. At the March, 2011, Board meeting, the MERS Board voted to hold the 28-year amortization period for unfunded accrued liabilities constant for the 2010 valuation; then, to let it decline by one year each year beginning with the 2011 valuation. The amortization for unfunded accrued liabilities will reach 20 years with the December 31, 2018, valuation, at which time it will remain constant. For divisions that are closed to new hires, the amortization period for positive unfunded liabilities is decreased annually by 2 years until the period reaches 5 years. |
| 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 0.0% to 8.4% per year attributable to merit and longevity. For the 2009 valuation, the base wage inflation assumption was 2% instead of 4.5%. For the 2010 through 2013 valuations, the base wage inflation assumption will be 1% instead of 4.5%. |
| Post-Retirement Benefit | A 2.5% annual post-retirement benefit adjustment – if adopted by individual municipalities. |

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

## Schedule of Funding Progress – (Dollars in Millions)

| Actuarial Valuation December 31 | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded (Over) AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a % of Covered Payroll ((b-a)/c) |
|---|---|---|---|---|---|---|
| 2005 | $5,026.1 | $6,609.1 | $1,583.0 | 76.05% | $1,462.4 | 108.2% |
| 2006 | 5,493.7 | 7,187.7 | 1,694.0 | 76.43 | 1,545.9 | 109.6 |
| 2007 | 5,973.0 | 7,723.9 | 1,750.9 | 77.33 | 1,581.6 | 110.7 |
| 2008 | 6,245.5 | 8,321.9 | 2,076.4 | 75.05 | 1,624.9 | 127.8 |
| 2009 | 6,443.1 | 8,534.7 | 2,091.6 | 75.49 | 1,636.5 | 127.8 |
| 2010 | 6,945.4 | 9,317.2 | 2,371.8 | 74.54 | 1,684.0 | 140.8 |

## Schedule of Employer Contributions – (Dollars in Millions)

| Fiscal Year | Annual Required Contribution | Percentage Contributed |
|---|---|---|
| 2006 | $199 | 107% |
| 2007 | 258 | 92 |
| 2008 | 224 | 109 |
| 2009 | 229 | 113 |
| 2010 | 264 | 110 |
| 2011 | 266 | 111 |

## Schedule of Administrative Expenses for the Year Ended December 31, 2011

| Administrative Expenses | |
|---|---|
| **Personnel Services** | |
| Salaries | $9,197,486 |
| Social Security | 678,624 |
| Retirement | 1,081,714 |
| Insurance | 1,770,230 |
| **Total Personnel Services** | **12,728,054** |
| **Professional Services** | |
| Third Party Administrator | 1,130,359 |
| Actuarial Services | 1,040,639 |
| Audit Services | 30,300 |
| Commercial Banking | 123,330 |
| Computer Maintenance | 5,124 |
| Consultants | 352,254 |
| Legal Services | 230,142 |
| Medical Services | 65,850 |
| **Total Professional Services** | **2,977,998** |
| **Communication** | |
| Advertising / Promotional Supplies | 30,276 |
| Annual Meeting | 134,841 |
| Board Travel and Meetings | 27,643 |
| Library and Records Storage | 51,944 |
| Postage / Shipping | 242,256 |
| Printing and Copying Services | 39,316 |
| Telephone / Communications | 250,736 |
| Travel and Meetings | 459,004 |
| **Total Communication** | **1,236,016** |
| **Rentals** | |
| Equipment Rental | 108,102 |
| Office Rental | 687,600 |
| **Total Rentals** | **795,702** |
| **Miscellaneous** | |
| Depreciation | 2,615,610 |
| Equipment Purchases | 190,979 |
| Insurance | 261,492 |
| Building / Equipment Maintenance | 436,116 |
| Office Supplies | 105,869 |
| Operating Expenses | 1,225,074 |
| Payroll Processing | 18,271 |
| Personnel Support | 231,478 |
| Professional Development & Tuition | 272,928 |
| Software Purchases and Maintenance | 907,540 |
| Subscriptions / Memberships | 75,135 |
| Service Fees | (2,008,649) |
| Third Party Administration Fees | 3,219,667 |
| **Total Miscellaneous** | **7,551,510** |
| **Total Administrative Expenses** | **$25,289,280** |

*Note: See accompanying Independent Auditor's Report.*

## Schedule of Investment Expenses for the Year Ended December 31, 2011

| Investment Expenses | |
|---|---|
| **Personnel Services** | |
| Salaries | $909,626 |
| Social Security | 62,793 |
| Retirement | 106,124 |
| Insurance | 126,926 |
| **Total Personnel Services** | **1,205,469** |
| **Professional Services** | |
| Commercial Banking | 1,072,485 |
| Investment Managers | 16,058,964 |
| Investment Performance | 102,000 |
| Other Consultants | 101,641 |
| **Total Professional Services** | **17,335,090** |
| **Communication** | |
| Travel | 64,707 |
| **Total Communication** | **64,707** |
| **Miscellaneous** | |
| Memberships | 11,278 |
| Operating Expenses | 308,087 |
| Software Purchases/Maintenance | 239,827 |
| **Total Miscellaneous** | **559,192** |
| **Total Investment Expenses** | **$19,164,458** |

*Note: See accompanying Independent Auditor's Report.*

## Schedule of Payments for Consultants and Services

| Firm | Nature of Service | Amount |
|---|---|---|
| Tegrit Financial Group LLC | Pension Design & Software Support | $2,940,200 |
| State Street Corporation | Depository Trust Banking Services | 1,858,500 |
| Tegrit Administrators | HCSP, RHFV & DC Support | 1,276,600 |
| Gabriel, Roeder, Smith & Company | Actuarial Services | 1,224,200 |
| Kentwood Office Furniture | Office Furniture and Design Services | 325,200 |
| Robbins-Gioia Financial Services Group | FileNet System Implementation & Support | 301,500 |
| Dell Marketing L.P. | Computer Software & Hardware Sales | 248,200 |
| Crowe Horwath LLP | Microsoft GP Implementation & Support | 231,300 |
| Johnston Lewis Associates, Inc. | Business Insurance Services | 158,400 |
| Ice Miller LLP | Legal Counsel | 155,900 |
| American Interiors | Office Furniture and Design Services | 155,500 |
| Abacus Solutions | Software Implementation Advisor & Support | 153,700 |
| DPM Consulting Services | Software Implementation Advisor & Support | 153,400 |
| TEK Systems | Software Implementation Advisor & Support | 146,000 |
| University of Michigan–Ross Executive Education | Leadership Development Programs & Classes | 144,800 |
| PC Connection Sales Corporation | Computer Software & Hardware Sales | 143,500 |
| Bloomberg Finance L.P. | Investment Financial Data Service | 116,000 |
| JoHo Technologies | Software Implementation Advisor & Support | 88,100 |
| Daymark Software LLC | CRM Software Support | 83,700 |
| New London Management Associates LLC | Human Resources Consulting Services | 73,900 |
| Consulting Physicians | Medical Advisors | 65,900 |
| Leaf Financial Services | PC Equipment Leasing Services | 64,000 |
| Andrews Hooper and Pavlick PLC | Auditing Services | 62,100 |
| Michigan Municipal Risk Management | Business Insurance Services | 49,900 |
| Reinhart Boerner Van Deuren S.C. | Legal Counsel | 49,800 |
| Investor Responsibility | Investment Financial Data Service | 49,500 |
| Oracle America, Inc | PeopleSoft Software Support | 47,600 |
| CBIZ Human Capital | Compensation Consulting Services | 47,600 |
| Riverside Integrated Systems, Inc. | Building Security Services | 44,400 |
| Presort Mailing Services, Inc. | Mass Mailing Services | 43,900 |
| Carol L. Grainger | Training Materials Production Services | 41,000 |
| GaveKal Capital Management LTD | Investment Financial Data Service | 40,000 |

*All items are rounded up or down to the nearest $100.00.*

*Note: 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 Assets.*

*Note: See accompanying Independent Auditor's Report.*



“When I considered leaving my previous employer, MERS was at the top of the decision-making process. The retirement plan that they have here was great and I felt like I could stay. It's somewhere I could stay for the rest of my life. I had friends at my old job and it was hard to leave them, but the security I have with MERS was really the selling point.”

I am MERS because I am secure.

Ron Coleman

# investments section

Ron Coleman is an Electrical Distribution Tech II at Holland Board of Public Works.

He's been a MERS member since 1996.

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# Chief Investment Officer Report

**Dear Members:**

I respectfully submit the investment activity report for the Municipal Employees' Retirement System of Michigan's Comprehensive Annual Financial Report for the fiscal year ending December 31, 2011.

It seems that every year investing becomes a little more challenging or at least more interesting than the prior year. Factors like extreme market volatility, increasing and often unpredictable government policy intervention, an interconnected global economy, and the communication of data at ever increasing speeds has dramatically magnified the complexity and challenges in managing institutional assets. Yet, while the market conditions are complicated, the perspective of a disciplined approach to investing, combined with sound governance, adds value and keeps MERS strong and viable for the future.

Prior to the drama of 2011, the U.S. was the world's triple-A safe haven. Market participants did not debate or care about the merits of raising the U.S. debt limit. Meetings between European heads of state were seen to be largely ceremonial, not transactional. Governments, whether democratic or autocratic, generally were in control of their citizenry. Central bankers did not see themselves as saviors. Regulators and legislators took small steps to improve markets, not large dramatic actions that could prove to be more damaging than good in the end. The current global uncertainty reflects a generational transition point. Old orthodoxies are giving way to new governance and market structures. While I expect this transitional period to continue for some time, I sincerely believe that an extended period of global growth and a stronger economic framework will be the result. Monitoring the situation and taking advantage of opportunities will be at the forefront of our investing strategy going forward.

The year 2011 can be divided into two parts. The first half from January through mid-July, was really a continuation of the equity rally that started in July of 2010. Optimism was cautiously high and the MERS Total Market Fund (DB) was up 22.28% for the rolling 1-year period ending June 30, 2011.

The second half of 2011 was much different and surprised on the downside — the S&P lost 226 points (approximately 20%) in just 12 trading days (see chart 1) and market turmoil eventually erased some $6 trillion of value in the global stock market. Although, if one reflects on the massive amount of deleveraging still left to be done, the markets negative view in the later part of the year was not that surprising.

By the end of the year, it was clear that the U.S. Treasury market and U.S. high grade fixed income - large, liquid, and still relatively safe — became the true winner as it continued its 25 year bull market run. And lest we forget, this run continued despite a generational low rate environment in which most prognosticators believed that rates could not go lower.

**MERS Fund**

Regardless of economic and financial turmoil, 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 desires better performance but feels confident about MERS performance relative to our benchmarks.

**MERS 2011 highlights:**

- The MERS Total Market Fund (DB) return for 2011 was 2.30% gross of investment fees which underperformed the actuarially assumed rate of 8.00% by 5.7%.
- The MERS Total Market Fund (DB) outperformed its custom policy benchmark gross of investment fees by 1.33%. This outperformance is a testament of MERS portfolio asset allocation, active management, and tactical decision making. The fund generated $63 million above what would have been earned if it had been invested passively. 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 were as follows:

| | |
|---|---|
| Total Equity | -5.33 |
| Real Estate | 5.98 |
| Fixed Income | 7.83 |
| High Yield | 7.64 |
| Commodities | -1.15 |
| Private Equity | 15.70 |
| Cash | 1.64 |

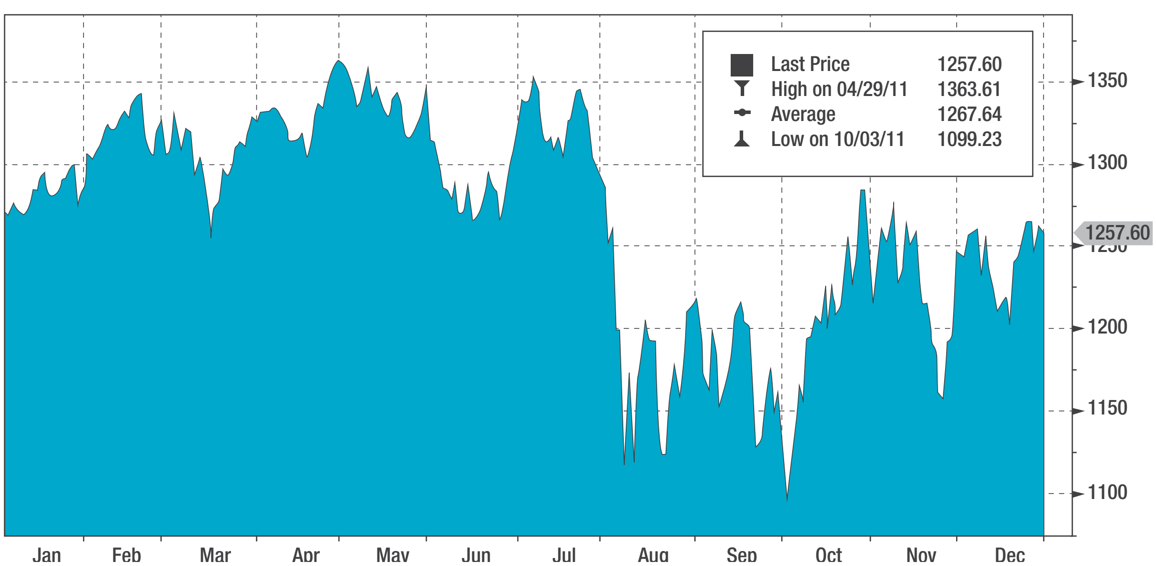
- A $10,000 Total Market Fund (DB) investment made in 1988 would have been worth $73,864 at the end of 2011.This is $19,706 above what would have been earned if the Total Market Fund (DB) had been invested passively, and $12,846 above MERS actuarial assumption rate of 8.00%.

In conclusion, I would like to thank the Retirement Board, the fiduciaries of the MERS Plan, for their enthusiasm in creating a structure that provides the Office of Investments the ability to be flexible and innovative. Our structure is continually praised by investment professionals and peers. This relationship makes for a more efficient decision making process, and ultimately leads to a better risk/return performance for our membership.

**Respectfully,**

**Jeb Burns, CIO**

## Chart 1



## REPORT ON INVESTMENT ACTIVITY

MERS was established under PA 135 of 1945, and granted independence from the State of Michigan pursuant to PA 220 of 1996, effective August 15, 1996. MERS is organized for the express purpose of using its collective resources to ensure that 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 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, Health Care Saving Program, Retiree Health Funding Vehicle, Investment Services Program, and a 457 Program. The 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 MERS Investment Management Plan outlines how the policy objectives described in the MERS Plan Document, Investment Guidelines, and the Asset Allocation Policy are to be achieved. The investment activity goals are designed to provide the highest quality investment management and administrative support. These goals are measured against established industry benchmarks and peer groups. The objective is to ensure that the investment activities are carried out within the framework established by MERS policy and administrative documents. The Investment Management Plan offers a model to assist the Board and staff in making prudent and informed investment decisions.

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 investments typically have a quarter lag in reporting, which is an industry standard.

# A. Defined Benefit Plan

## INVESTMENT OBJECTIVES AND ACTIVITY

In conformity with PERSIA, the primary objective is to maximize the long-term total rate of return on investments. This should be done with a high degree of prudence to reduce risk. In addition, the Board and the Office of Investments have established Investment Guidelines that are updated annually. These Guidelines communicate long-term objectives, goals, and performance expectations to the staff, investment managers, consultants, and any other interested parties. The Board strives to add incremental returns relative to the market by employing active management strategies when needed. Every effort is made to minimize costs to the portfolio with the use of internal and external resources.

The defined fund objective, based upon actuarial valuations, is to grow assets at a rate which, when coupled with contributions, satisfies promised benefits to MERS members. The Office of Investments strives to achieve a real rate of return of at least 3.5% annually over the rate of inflation, and exceed the actuarial assumption rate of 8% annually.

## FUND OBJECTIVE CONSIDERATIONS

- Adopt a strategic asset allocation plan that reflects future liabilities and incorporates risk parameters
- Structure investment goals over a long-term horizon (five years)
- Use actuarial methods that decrease the impact of volatility
- Concentrate on asset classes that have added value over the rate of inflation
- Measure comparability with other plans to stay within industry standards
- Use beta strategies to form a core base in the portfolio and reduce costs
- Use commission recapture to reduce transaction costs and increase earnings to the total fund
- Employ a manager (i.e. custodian bank) to lend held securities of the total portfolio to add incremental income
- Use all asset classes to capitalize on global economic growth
- Allow investment managers increased flexibility so they can tactically exploit broad market trends
- Take advantage of short and long-term market inefficiencies, trends and dislocations which can add moderate returns above the policy benchmark

# PORTFOLIO HIGHLIGHTS

## Asset Allocation

Determining the System's asset allocation is regarded as one of the most important decisions in the investment management process. With this in mind, the Office of Investments conducts a full asset allocation study every five years to assess portfolio construction and strategy. Factors considered are: expected rate of return for each asset class, expected risk of each asset class, the correlation between the rates of return and the investment objectives and risk constraints.

The Office of Investments uses risk management software to perform a strategic analysis of asset allocation levels on an ongoing basis. This process establishes a formal risk budget and quantifies asset allocation decisions.

The Board adopted the most recent asset allocation study in July 2010. The current plan is: Domestic Equity – 34.5%, International Equity 10%, Fixed Income – 30%, High Yield – 5%, Real Estate – 7%, Private Equity – 7%, Commodities – 5%, and Cash – 1.5%.

## Dynamic Asset Allocation

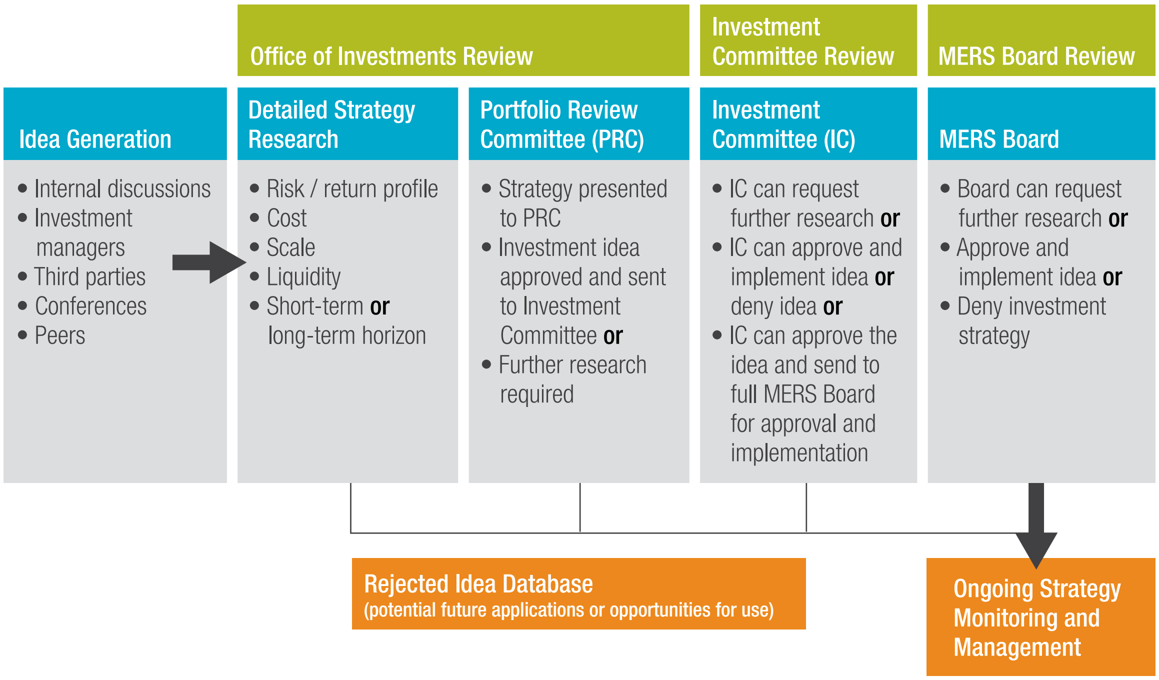
As the financial markets and economic conditions change, certain asset classes become more favorable than others. Therefore, it is necessary to engage in short and medium term tactical deviations from the strategic allocation in order to capitalize on unusual or exceptional investment opportunities. 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. The Office of Investments feels that engaging in such tactical deviations is necessary to produce superior investment returns from a risk/return perspective.

The team is well-positioned to identify appealing investment opportunities through the use of countless quantitative and qualitative tools. These tools include insight from existing investment managers, research databases, third-party research, financial publications and numerous others. There is no timetable for these tactical deviations, but they typically have a duration of less than one year and not more than three years. Once the short-term opportunities have run their course, the portfolio will be rebalanced to the overall strategic asset allocation.

## Emerging Manager Program

Separating ourselves from a herd mentality is sometimes challenging and requires foresight. The MERS Emerging Manager Program seeks to do just that. The objective is to create additional alpha by establishing a "bullpen" of up and coming managers to replace probationary managers. Additionally, this program provides: access to a wider universe of talented investment managers, enhances internal manager searches and replacement processes, and creates a "think tank" or testing mechanism for new appealing investment strategies to determine if they should be included in the overall portfolio.

## Investment Strategy Implementation Process



# INVESTMENT THEMES

As the Fund continues to evolve, several prevalent themes have emerged as guiding philosophies. These broad-based themes will continue to be strongly considered in our decision-making process as we look for opportunities in the future.

## Global Growth

Rapid economic growth in emerging markets such as China and India has created tremendous investment opportunities. Over the last few years, MERS has made numerous investments in an effort to diversify the portfolio and take advantage of global economic growth. MERS has made investments in commodities, emerging markets, frontier markets, and infrastructure bearing this theme in mind. Going forward, we expect to increase our allocation to these asset classes in addition to investing in new ones. We will make a shift toward global equity mandates rather than differentiating between international or domestic equity.

## Active/Passive Mix

Historically, the Fund has tried to maintain an active/passive mix of 2/3 active and 1/3 passive. However, in light of recent market events and unique investment opportunities, the Fund will exhibit a more passive approach. The new allocation will likely be a minimum 50/50 split between active and passive management within the equity allocation. A more passive approach will allow for greater flexibility to invest in unique investment opportunities. Additionally, active managers have struggled in recent years to beat passive benchmarks, and during the recent market turmoil they have offered little downside protection. A more passive allocation will also drastically decrease management fees without sacrificing returns. Active management will continue to be used but targeted to the less efficient areas of the portfolio. The focus of MERS fixed income allocation will be primarily active management.

## Opportunistic Investing

The recent turmoil in the financial markets and push for alternative energy and green technology has resulted in tremendous investment opportunities. In an effort to further diversify the portfolio and capture additional alpha, the Office of Investments will continue to seek out these opportunistic investments. This may result in the portfolio maintaining higher cash balances during certain time periods.

## Expanded Mandates

In an effort to give skilled managers a better opportunity to deploy their skills, the Fund will move toward expanded mandates such as TAA Programs, all cap and core strategies, among several others.

# TOTAL MARKET FUND REVIEW

MERS investments generated a gross return of 2.30% for calendar year 2011 using a time weighted rate of return based on the market rate of return of the portfolio. The Total Market Fund return exceeded its custom policy benchmark of 0.98%. Performance across all asset classes varied during the year with fixed income and high yield generating some of the highest returns, 7.83% and 7.64%, respectively. They were only exceeded by MERS private equity, returning 15.70%.

## Asset Class Performance for 2011 (gross of fees) and Contribution to Total Return

| Type | 2011 Gross Returns | Contribution to Total Return |
|---|---|---|
| Domestic Stocks | -1.62% | -0.95 |
| International Stocks | -17.46% | -0.18 |
| Fixed Income | 7.83% | -0.08 |
| High Yield | 7.64% | 0.32 |
| Real Estate | 5.98% | 0.00 |
| Private Equity | 15.70% | 1.54 |
| Commodities | -1.15% | 0.28 |

## Portfolio Rebalance Policy

It is the responsibility of the Office of Investments to ensure that the portfolio remains within the asset allocation parameters established by the Board, and adheres to the System's rebalancing policy. The policy is designed to minimize drift within the portfolio, allow tactical shifts to take advantage of market conditions, and ensure adequate cash levels are maintained within the cash account to meet ongoing pension fund expenses.

## Daily Review and Optional Rebalance

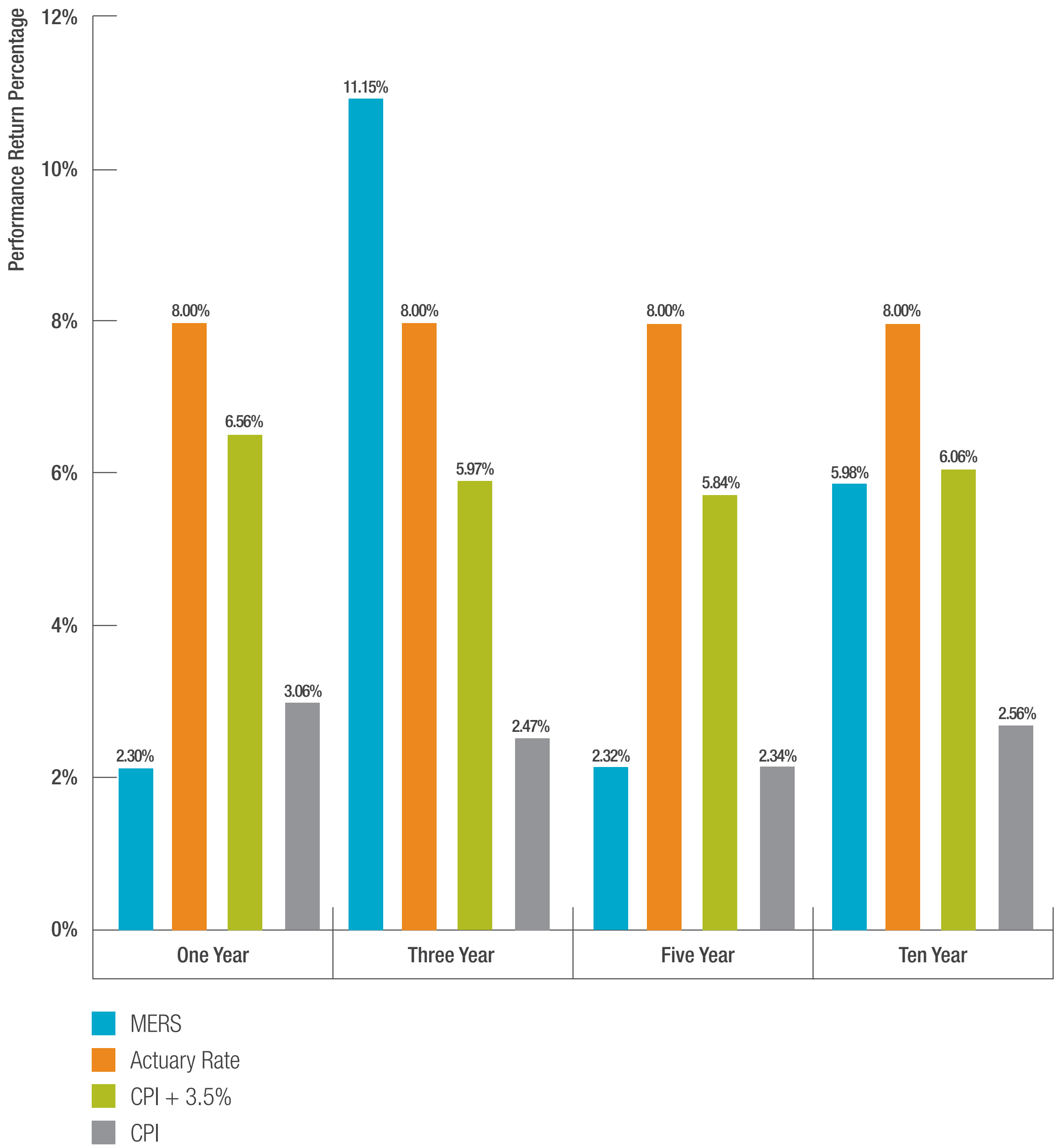
In an effort to minimize tracking errors at the total portfolio level, the Office of Investments works with the Clifton Group to implement a policy overlay using index futures.

Asset allocation levels for the various asset classes are monitored daily in relation to the predetermined variation bands, and rebalanced using appropriate index futures. Adequate cash to cover the initial and variation margins for the futures exposure, are made available and placed in accounts set up specifically for this purpose.

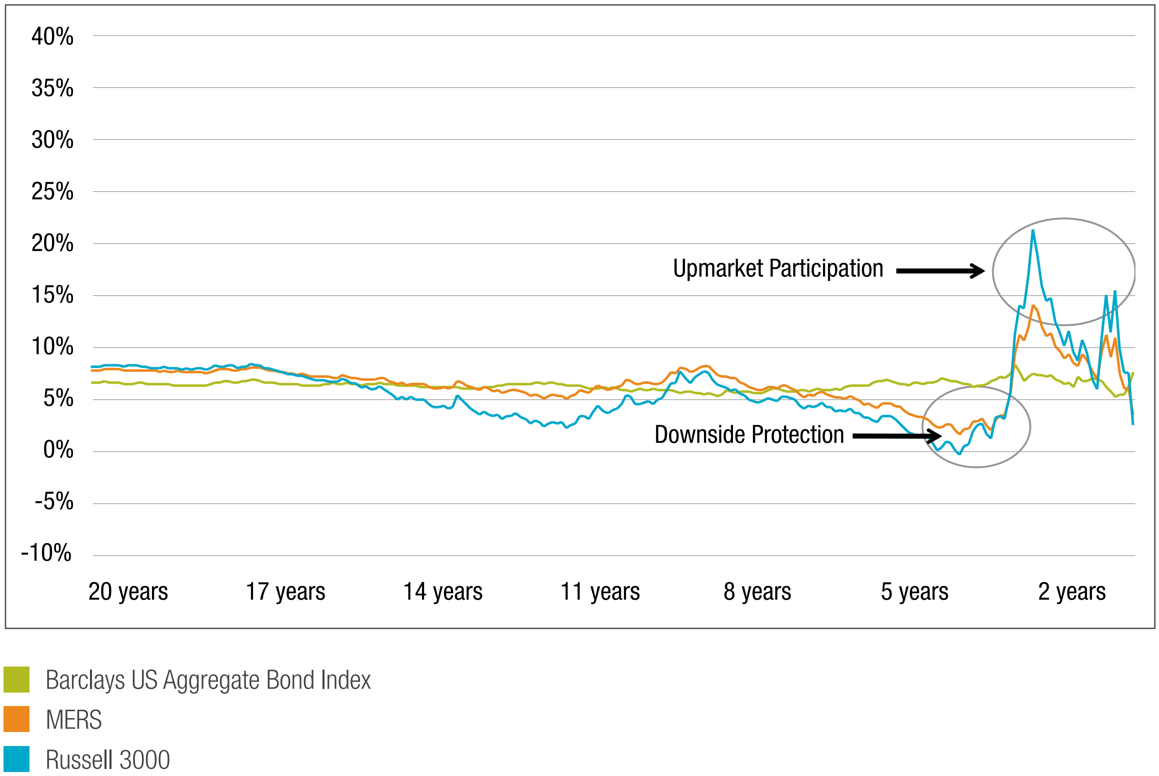
## Annual Portfolio Rebalance

The Office of Investments performs an asset allocation analysis of the entire portfolio during the first quarter of every year. The Office of Investments has developed a rebalance plan based on this analysis.

## Performance Versus Custom Benchmarks as of December 31, 2011 (gross of fees)



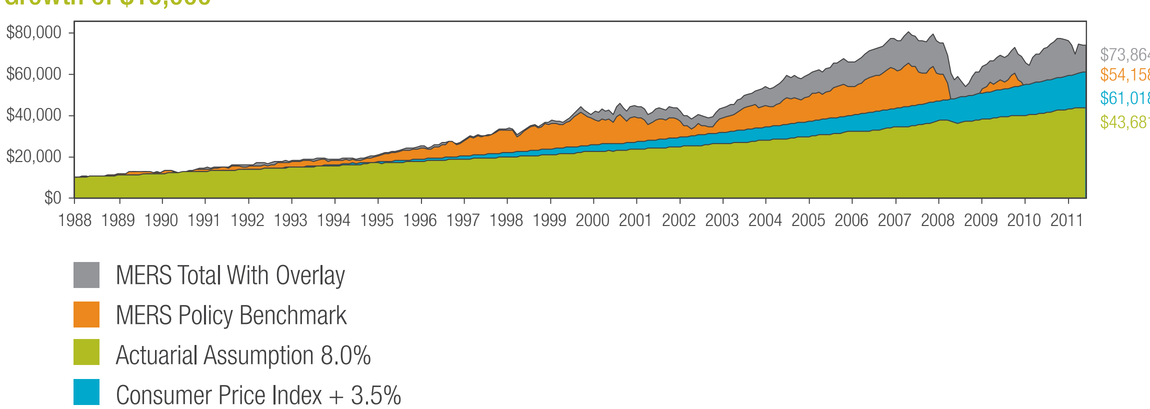
## Downside Protection Upside Participation as of December 31, 2011



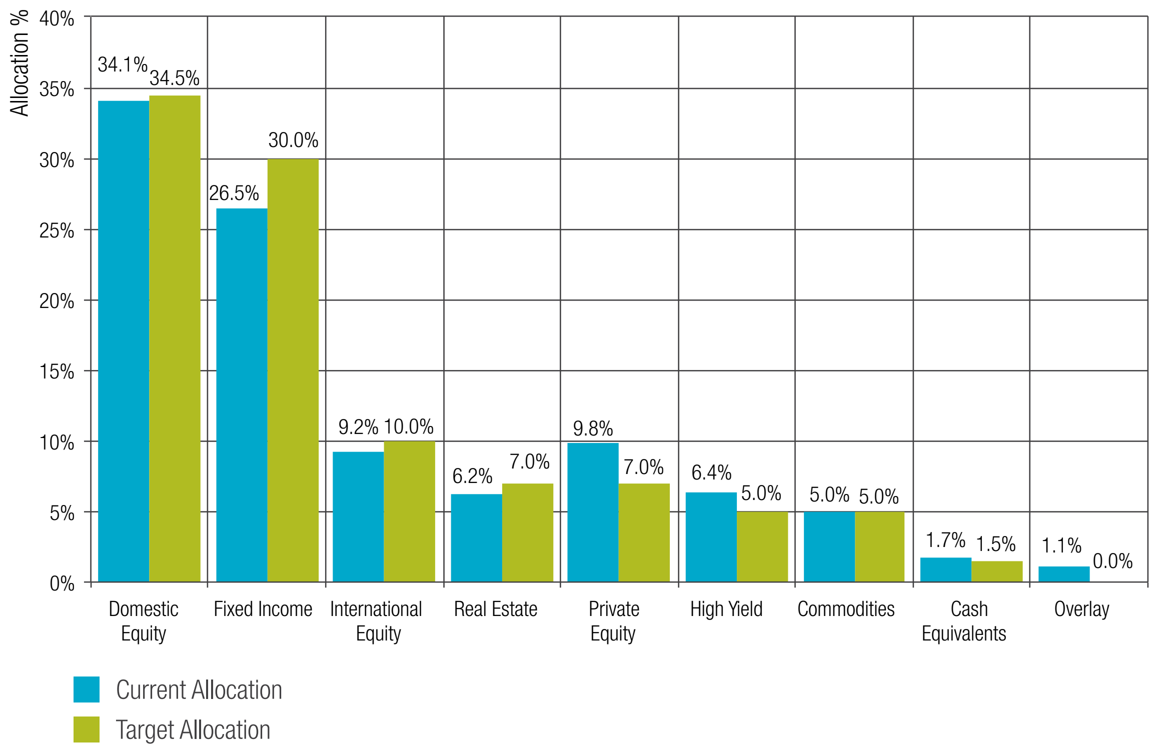

Diversification is a portfolio strategy designed to reduce exposure to the volatility of returns by combining a variety of investments (such as stocks, bonds, real estate, and commodities) which are unlikely to all move in the same direction. The goal of diversification is to reduce the risk in a portfolio.

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.

## Growth of $10,000



## Current Asset Allocation versus Target Allocation as of December 31, 2011



## Statistical Performance (gross of fees)

| Portfolio Characteristics | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|
| Annualized Return | 2.30% | 11.15% | 2.32% | 5.98% |
| Annualized Standard Deviation | 10.58 | 10.70 | 11.87 | 9.93 |
| Sharpe Ratio | 0.21 | 1.03 | 0.08 | 0.42 |
| Excess Return | 1.33 | -0.98 | -0.06 | 0.37 |
| Beta | 0.93 | 0.80 | 0.85 | 0.88 |
| Correlation to Policy Benchmark | 0.99 | 0.98 | 0.99 | 0.99 |

## Commission Recapture

MERS requests that all domestic equity managers direct a target of 25% of commission trades with the State Street Global Markets LLC (SSGM) for the purpose of commission recapture. Brokerage transactions in the normal course of business should only be directed to this broker. By doing this, the obligation to achieve the best execution is fulfilled. The SSGM program provides a network of brokers where trades can be executed. The recaptured commissions are shared based on a contractual negotiated split of 90/10% MERS/broker. Recapture dollars are used to offset the administrative, custodial, accounting and performance measurement costs incurred by the Fund. For 2011, $313,091 was directed by equity managers to SSGM of which $173,759 was rebated to MERS.

## Investment Summary for Defined Benefit Plan, Defined Contribution Plan, Retiree Health Funding Vehicle, Health Care Savings, and Investment Services Program as of December 31, 2011

| Type of Investment | Market Value |
|---|---|
| **Fixed Income** | |
| Domestic and International Fixed Income | $2,158,709,915 |
| **Total Fixed Income** | **2,158,709,915** |
| **Equities** | |
| Domestic and International Stock | 2,742,721,846 |
| **Total Equities** | **2,742,721,846** |
| **Commodities & Private Equity** | |
| Commodities | 319,396,486 |
| Private Equity | 622,187,023 |
| **Total Private Equity & Commodities** | **941,583,509** |
| **Real Estate** | |
| Real Estate | 390,516,332 |
| **Total Real Estate** | **390,516,332** |
| **Subtotal Investments** | **6,233,531,602** |
| **Cash Equivalents** | |
| Cash Equivalents | 108,560,260 |
| **Total Cash Equivalents** | **108,560,260** |
| **Total Investments & Cash** | **$6,342,091,862** |

## Reconciliation of Investments to Financial Statements

| | |
|---|---|
| **Total Investments from above** | **$6,342,091,862** |
| Receivables - Sale of Investments & Interest | (309,983,580) |
| Total market portfolio in 457 portfolio not included in general ledger | (4,264,188) |
| Bonds in default | (3,579,122) |
| Small unit adjustments | (497) |
| Defined Contribution investments not in MERS State Street portfolio | 237,529,028 |
| Cash at State Street | (98,929,396) |
| Payables - Purchases of Investments | 370,788,064 |
| **Investments on Financial Statements** | **$6,533,652,171** |

*Note: Includes receivables and payables for sales and purchases of securities with settlement dates after December 31, 2011.*

# EQUITY ASSET CLASS SUMMARY

As of December 31, 2011, the public equity portfolio had a market value of $2.74 billion, representing 43.2% of the Total Market Fund. Performance for the total equity portfolio was -5.33% gross of fees.

## Highlights

Fiscal year 2011 was relatively calm in terms of activity within the public equity portfolio. The only large allocation shift within the portfolio was the funding of the micro cap allocation. We made several incremental asset allocation shifts throughout the year, but the portfolio remained relatively unchanged from the prior year. Here are a few of the highlights:

- Funded four micro cap equity managers in February with $50M each – 3% of the portfolio at the time of funding
- Took our first equity stake in April as a part owner in manager Irving Magee
- Hired Mellon Capital Management and funded their Tangent Added Tactical Asset Allocation strategy in July. This strategy represents the value portion of our domestic large cap equity portfolio.
- In general, active management continued to struggle as economic headlines and government intervention drove the markets rather than fundamentals.
- Throughout the year we maintained a strategic overweight to U.S. equities since we felt the economic growth of the U.S. economy would continue to surprise on the upside and exceed other developed countries.
- Continued to underweight developed European equities as the ongoing European debt crisis weighed on economic growth and investor confidence.
- During the year, five managers were hired and one manager was terminated.

## Summary of Portfolio

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 public equity portfolio has a target allocation of 44.5% of the total Fund. As of December 31, 2011, the portfolio includes domestic equity, international developed equity, and emerging and frontier markets 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.

## Market Overview

The world's equity markets experienced extreme volatility in 2011 and returns were mostly negative across the board. Fiscal year 2011 was a tale of two halves as equity markets posted strong returns in the first half but sold off sharply in late summer. When fears of a European sovereign debt crisis and a double dip in the U.S. reemerged, government support in the form of central bank liquidity programs set the stage for an impressive year-end rally. Domestic equity markets posted negative returns for the year but fared much better than international equities. The Russell 2000 finished the year down 4.18% while the S&P was up 2.11%. The defensive sectors within the Russell 3000 posted the strongest returns for the year with utilities leading the way at 19.0%. The consumer staples sector returned 13.9% and health care returned 10.6%. Returns for other developed market countries were weak across the board as the MSCI EAFE Index returned -11.7% for the year. Returns trailed U.S. indices as a result of European debt fears and slower economic growth. Following the strong performance of 2010, emerging market equities underperformed developed markets, returning -18.2% for the year. This underperformance was the result of higher levels of inflation forcing central banks to tighten monetary policy. Across all geographic regions, growth stocks outpaced their value counterparts, and large cap equities outperformed small cap equities.

It is tough to find consensus on what lies ahead for the markets but one thing is certain – market volatility is likely to persist as a sustainable economic recovery struggles to take hold. Fears of a Chinese hard landing, rising oil prices, and the ongoing European debt crisis remain in the back of investor's minds, but economic data out of the U.S. provides hope for a continued recovery. Although economic growth in the U.S. remains sluggish, corporate profitability is at an all time high, and corporate balance sheets are in the best shape they have been in decades. The housing market is showing signs of bottoming and the unemployment rate continues to improve. Barring a global recession, U.S. equities appear to offer a favorable risk/reward at this point, especially in relation to fixed income.

## Public Equity Performance as of December 31, 2011 (gross of fees)

| Portfolio Characteristics | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|
| Total Equity | -5.33% | 14.25% | -1.23% | 4.89% |
| MSCI World Index Net Daily | -5.54 | 11.12 | -2.37 | 3.62 |
| **Excess** | **0.21** | **3.12** | **1.14** | **1.28** |
| Domestic Equity | -1.62 | 16.16 | 0.00 | 4.65 |
| Russell 3000 (Daily) | 1.03 | 14.88 | -0.01 | 3.51 |
| **Excess** | **-2.65** | **1.29** | **0.01** | **1.14** |
| International Equity | -17.46 | 8.40 | -4.88 | 5.40 |
| MSCI ACWI EX US Gross (Daily) | -13.33 | 11.20 | -2.48 | 6.76 |
| **Excess** | **-4.13** | **-2.80** | **-2.39** | **-1.36** |

## Top Ten Equity Holdings as of December 31, 2011

| Asset Description | Market Value | Percentage of Total Market Value |
|---|---|---|
| Apple, Incorporated | $39,097,485 | 0.62% |
| Qualcomm, Incorporated | 13,600,334 | 0.21 |
| Oracle Corporation | 13,245,044 | 0.21 |
| Chart Industries, Incorporated | 12,910,780 | 0.20 |
| Exxon Mobil Corporation | 12,561,432 | 0.20 |
| Altera Corporation | 11,949,724 | 0.19 |
| Google, Incorporated | 10,474,560 | 0.17 |
| eBay, Incorporated | 10,063,221 | 0.16 |
| The Toro Company | 10,033,164 | 0.16 |
| Atwood Oceanics, Incorporated | 9,216,955 | 0.15 |

*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 | $ 71,356,959 |
| Acadian | International Small Cap | 140,997,244 |
| Driehaus | All-Cap Global Growth | 275,069,764 |
| Hexam | Emerging Markets | 93,184,484 |
| Wellington | Large Cap U.S. Growth | 223,962,482 |
| Mellon Tangent Added TAA | Large Cap Core/Value | 324,595,331 |
| BRC Investment Management | Large Cap U.S. 130/30 | 60,643,969 |
| AMBS Investment | Large Cap U.S. Value | 26,598,914 |
| Punch Investments | Micro Cap | 66,466,783 |
| Morgan Dempsey | Micro Cap | 68,532,652 |
| Eudaimonia | Micro Cap | 65,968,727 |
| Kennedy Capital | Micro Cap | 65,968,309 |
| C.S. McKee | Small Cap U.S. Core | 170,966,772 |
| Irving Magee | Small Cap U.S. Value | 145,351,047 |
| Kennedy Capital | Small Cap U.S. Value | 169,301,281 |
| Hellman Jordan | All-Cap U.S. Core | 25,082,700 |
| Seizert Capital | SMID Cap U.S. Value | 24,092,151 |
| Wellington | Mid Cap U.S. Core | 214,079,488 |
| **Internal Investment Manager** | | |
| MERS S&P 400 | S&P 400 Index | 159,404,247 |
| MERS S&P 500 | S&P 500 Index | 351,038,363 |

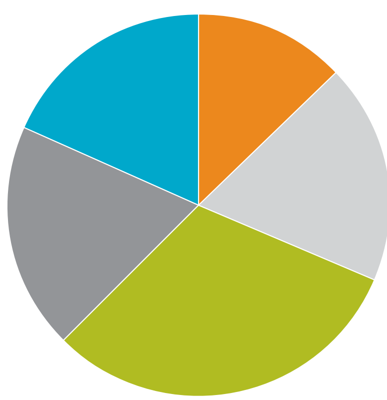
# FIXED INCOME & HIGH YIELD ASSET CLASS SUMMARY

As of December 31, 2011, the Total Fixed Income portfolio had a market value of $2.088 billion representing 32.90% (fixed income of 26.50% and high yield of 6.40%) of the Total Market Fund. Performance for fixed income and high yield was 7.83% and 7.64% gross of investment fees, respectively.

## Fixed Income

Fixed Income is the bedrock of the MERS Total Market Fund providing exposure to high quality fixed income instruments that create stable cash flow and liquidity to the overall portfolio. Total fixed income assets, excluding high yield, were $1.681 billion as of December 31, 2011, and were allocated into five strategies (see pie chart below). 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 growth and stable inflation providing critical downside protection to the portfolio.

### Fixed Income Allocation as of December 31, 2011



| | |
|---|---|
| Enhanced Index (passive) | 12.93% |
| Infrastructure (active) | 18.66% |
| Core (active) | 31.15% |
| Global (active) | 19.07% |
| Emerging Market Debt (active) | 18.19% |

## Market Commentary

At the beginning of 2011, most investors were no longer worried about another “Great Depression,” but instead, were focused on whether a perceived global recovery had legs that would lead us back to a sense of market normalcy. This is how it felt for the first half of 2011. Unfortunately, economic headwinds (high unemployment, a U.S. deficit, a struggling housing market, a European debt crisis, etc.) created numerous challenges for world leaders, the Federal Reserve, and other policy makers.

The U.S. Treasury yield curve remained steep in 2011. Short-term rates remained anchored near historic lows in response to the Feds zero interest rate policy. However, yields on longer dated maturities declined (prices rose) from a high of 4.766% to a low of 2.726% due to global uncertainty, Fed policies, and a deep concern over the Eurozone. Even in the midst of a U.S. credit downgrade, the U.S Treasury market continued its rein as the world’s “safe haven” during global uncertainty.

The U.S. credit markets had another solid year as corporate profits rebounded, leading to improved fundamentals and credit quality. Global fixed income markets, including emerging markets, were largely driven by the search for yield, creating a divergence of performance between developed and emerging market countries. Generally speaking, the largest developed markets maintained low interest rate policies as a means to stimulate their respective domestic economies. These policies pushed fixed income investors toward higher interest rates offered by developing economies.

## Fixed Income Performance as of December 31, 2011 (gross of fees)

| | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|
| Fixed Income | 7.83% | 9.48% | 6.84% | 6.41% |
| BC Aggregate (Daily) | 7.84 | 6.77 | 6.50 | 5.78 |
| Excess | -0.01 | 2.71 | 0.34 | 0.63 |

## Top Ten Fixed Income Holdings as of December 31, 2011

| Asset Description | Market Value | Percentage of Total Market Value |
|---|---|---|
| United States Treasury 4.0% 12/01/2099 | $39,057,213 | 0.62% |
| Fannie Mae 3.5% 12/01/2099 | 30,235,425 | 0.48 |
| United States Treasury 0.01% 6/28/2012 | 18,794,454 | 0.30 |
| United States Treasury 0.625% 4/15/2013 | 16,331,958 | 0.26 |
| United States Treasury 2.125% 2/15/2041 | 15,031,895 | 0.24 |
| Japanese Government Bond 2.0% 9/20/2041 | 12,768,124 | 0.20 |
| United States Treasury 1.25% 7/15/2020 | 12,419,318 | 0.20 |
| United States Treasury 0.625% 12/31/2012 | 11,568,982 | 0.18 |
| Fannie Mae 1.0% 7/26/2012 | 10,946,126 | 0.17 |
| United States Treasury 2.0% 4/15/2012 | 10,650,601 | 0.17 |

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

## Fixed Income – Investment Managers

| Investment Manager | Style | Portfolio Market Value |
|---|---|---|
| **External Investment Manager** | | |
| BGI | Core Enhanced Index | $217,461,132 |
| Credit Suisse | Infrastructure | 313,807,880 |
| C.S McKee | Core Fixed Income | 263,504,120 |
| First International Advisors | Global Bonds | 320,543,715 |
| Reams Asset Management | Core Fixed Income | 260,174,523 |
| TCW | Emerging Market Debt | 305,772,660 |

## High Yield

The MERS high yield allocation provides additional diversification to the Total Market Fund through allocations to domestic and global high yield, emerging markets, and inflation protected securities. Total high yield assets as of December 31, 2011, were $406,584,830 and were allocated into two strategies (see pie chart below). The strategy employs opportunistic mandates that allow for duration bets versus benchmarks. A blended approach is expected to deliver returns in excess of U.S. high yield benchmarks with less volatility.

### High Yield Allocation

| | |
|---|---|
| Global High Yield (active) | 52.49% |
| Loan Credit Fund (active) | 47.51% |

## Market Commentary

The year 2011 was marked with high volatility, disappointing both bears and bulls as the year ended with a sideways market. Sentiment was manic and rarely traded on fundamentals but more on European rumors and intended solutions. Trading volatility was amplified by a lack of intermediaries (primary banks) on Wall Street, largely due to forced deleveraging by regulators. Dealer inventories decreased more than 50% in the last year. As with high yield bonds, leveraged loans and equities were not immune to the volatility, and an opaque outcome in Europe drove correlations across markets sharply closer. While overall spreads ended 2011 at its median trading range (+500 to +900 bps), the CCC/B or "distressed premium" ended the year near its wides at +568 bps, and clearly trended higher from the early 2011 lows. Given the extreme volatility of prices, as well as fund flows, the compensation required to underwrite these less liquid bonds with a higher probability of default understandably rose despite low 2011 default rates.

Nearly $230 billion of new issues were priced in the high yield bond market during 2011, ranking second to 2010 for the largest total in history. The bulk of new issue proceeds were used to refinance existing debt (56%) while M&A transactions (22%) rose, albeit with reasonable transaction Debt/EBITDA multiples of about 4.5x.

## High Yield Performance as of December 31, 2011 (gross of fees)

| | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|
| High Yield | 7.64% | 22.90% | 4.28% | 6.5% |
| BofAML High Yield Master II (Daily) | 4.38 | 23.72 | 7.33 | 8.59 |
| Excess | 3.26 | -0.82 | -3.06 | -2.10 |

## High Yield – Investment Managers

| Investment Manager | Style | Portfolio Market Value |
|---|---|---|
| **External Investment Manager** | | |
| Stone Tower | Loan Credit Fund | $193,160,789 |
| Stone Harbor | High Yield/EMD/Tips | 213,424,041 |

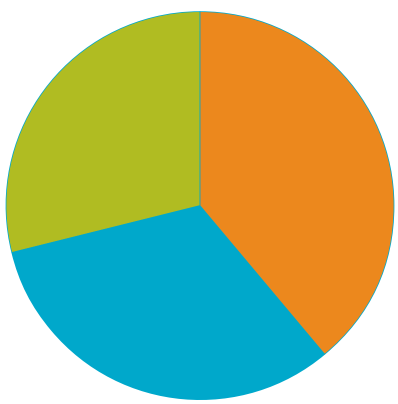
# ALTERNATIVE ASSET CLASS SUMMARY

As of December 31, 2011, the alternative portfolio had a market value of $1.33 billion representing 21.0% (real estate of 6.20%, commodities of 5.00%, and private equity of 9.80%) of the Total Market Fund. Performance for real estate, commodities, and private equity was 5.98%, -1.15% and 15.70%, respectively.

## 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, consistent income, and uncorrelated returns to the Total Market Fund.

### MERS Real Estate Allocation



| | |
|---|---|
| Private Property Partnership | 38.96% |
| Global REITs | 32.29% |
| Timber | 28.75% |

## 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. A dedicated collateral pool is set aside to provide 100% coverage for the commodity allocation and maintain a credit rating of AAA.

## Private Equity

MERS private equity target allocation represents 7% of the total plan, and adds diversification to the overall equity allocation of the Total Market Fund. Investments in private equity include U.S and international, venture capital, buyout, and special situation funds.

## Alternative Performance as of December, 31, 2011 (gross of fees)

| | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|
| **MERS Real Estate** | **5.98%** | **-1.21%** | **-1.84%** | **6.35%** |
| MERS Custom Real Estate Benchmark | 5.50 | 4.52 | 2.56 | 8.29 |
| Excess Return | 0.48 | -5.73 | -4.40 | -1.94 |
| **MERS Commodities** | **(1.15)** | **10.80** | **1.42** | **-** |
| Goldman Sachs Commodity Index | (1.18) | 6.93 | (2.79) | 5.64 |
| Excess Return | 0.03 | 3.87 | 4.21 | (5.64) |
| **MERS Private Equity** | **15.70** | **5.00** | **6.83** | **4.04** |
| Russell 2000 | (4.18) | 15.63 | 0.15 | 5.62 |
| Excess Return | 19.88 | (10.63) | 6.68 | (1.58) |

## Alternatives – External Investment Managers

| Investment Manager | Style | Portfolio Market Value |
|---|---|---|
| **Real Estate** | | |
| Townsend | Private Real Estate | $152,146,825 |
| Urdang | Global REIT | 126,105,487 |
| Hancock | Timber | 112,264,020 |
| **Commodities** | | |
| Cargill | Enhanced Index | 296,931,511 |
| Mt. Lucas | Commodity Hedge Fund | 22,464,975 |
| **Private Equity** | | |
| Credit Suisse | Fund of Funds & Co Investments | 585,926,927 |
| Mesirow Capital Partners | Fund of Funds | 36,260,096 |

## Schedule of Investment Fees – as of December 31, 2011

| Investment Managers | Average Assets Under Management | Annual Fee | Average Basis Points |
|---|---|---|---|
| Acadian Asset Management | $140,999,320 | $784,662 | 55.65 |
| AMBS Investment | 26,598,913 | 53,904 | 20.27 |
| Barclays Global Investors- Core Active | 217,461,132 | 239,911 | 11.03 |
| Barclays Global Investors- Frontier Markets | 71,356,959 | 402,425 | 56.40 |
| BRC Investment Management | 60,645,215 | 126,413 | 20.84 |
| Credit Suisse Customized Infrastructure | 313,807,880 | 1,939,035 | 61.79 |
| Credit Suisse Private Equity Fund | 622,187,023 | 3,261,771 | 52.42 |
| C.S. McKee | 170,966,772 | 894,223 | 52.30 |
| C.S. McKee- Fixed Income | 263,494,102 | 421,187 | 15.98 |
| Driehaus Global Growth | 275,069,764 | 903,613 | 32.85 |
| First International Advisors | 320,543,715 | 821,974 | 25.64 |
| Hellman Jordan | 25,082,700 | 104,877 | 41.81 |
| Hexam | 93,184,484 | 585,778 | 62.86 |
| Irving Magee | 145,351,047 | 686,258 | 47.21 |
| Kennedy Capital Management | 169,301,280 | 792,663 | 46.82 |
| Mount Lucas | 22,464,975 | 50,000 | 22.26 |
| Reams Asset Management | 260,150,167 | 316,898 | 12.18 |
| Seizert Capital | 24,092,151 | 72,449 | 30.07 |
| Stone Harbor | 206,257,275 | 522,468 | 25.33 |
| Urdang Investment Management | 126,105,487 | 715,154 | 56.71 |
| Wellington Management | 223,962,482 | 791,759 | 35.35 |
| Wellington Management- Mid Cap | 214,079,488 | 1,190,859 | 55.63 |
| The Townsend Group | 152,146,826 | 225,139 | 14.80 |
| **Total Investment Manager Fees** | **$4,145,309,157** | **$15,903,420** | **38.36** |
| **Investment Custodian** | | | |
| State Street Bank and Trust | | $1,072,485 | |
| **Investment Performance Measurement Consultant** | | | |
| State Street Bank and Trust | | 102,000 | |
| **Securities Lending Agent** | | | |
| State Street Bank and Trust | | 724,501 | |
| **Total Investment Fees** | | **$17,802,406** | |

## Schedule of Investment Commissions as of December 31, 2011

| Brokerage Firm | Shares Traded | Total Dollars | Commission/Share |
|---|---|---|---|
| State Street Bank and Trust | 28,780,855 | $178,006 | 0.0062 |
| Instinet | 27,163,497 | 328,508 | 0.0121 |
| Citi Group Global Markets | 21,567,961 | 168,225 | 0.0078 |
| Merrill Lynch, Pierce, Fenner, and Smith Inc | 17,809,453 | 183,719 | 0.0103 |
| Credit Suisse Securities | 12,821,901 | 120,551 | 0.0094 |
| Morgan Stanley and Company Incorporated | 12,214,537 | 69,448 | 0.0057 |
| Knight Equity Markets, LP | 9,782,869 | 153,698 | 0.0157 |
| Cantor Fitzgerald & Company | 8,854,921 | 217,335. | 0.0245 |
| Knight Direct LLC | 8,775,070 | 131,805 | 0.0150 |
| Bloomberg Tradebook, LLC | 7,325,310 | 74,595 | 0.0102 |
| Instinet Pacific Limited | 6,881,165 | 1,485 | 0.0002 |
| Macquarie Securities Incorporated | 6,864,951 | 36,890 | 0.0054 |
| Barclays Capital | 6,513,019 | 67,225 | 0.0103 |
| Capital Institutional Services, Incorporated | 5,668,243 | 152,558 | 0.0269 |
| Daiwa Securities Limited | 5,279,896 | 7,200 | 0.0014 |
| BNY ConvergEx Group | 4,924,252 | 66,160 | 0.0134 |
| The Royal Bank of Scotland | 4,593,333 | 3 | 0.0000 |
| Nomura Securities International, Incorporated | 4,274,813 | 9,028 | 0.0021 |
| Credit Suisse Securities, Incorporated | 4,159,543 | 49,949 | 0.0120 |
| Broadcort Capital Corporation | 3,782,416 | 117,091 | 0.0310 |
| Goldman Sachs & Company | 3,375,897 | 106,872 | 0.0317 |
| Instinet Singapore Services | 3,103,000 | 394 | 0.0001 |
| Pershing LLC | 2,965,267 | 37,677 | 0.0127 |
| Goldman Sachs International | 2,522,372 | 35,039 | 0.0139 |
| UBS Securities LLC | 2,401,319 | 46,513 | 0.0194 |
| Subtotal (25 Largest) | 222,405,862 | 2,359,985 | 0.0106 |
| Remaining Total | 92,980,841 | 1,941,698 | 0.0209 |
| **Total Commissions** | **315,386,703** | **$4,301,683** | **0.0136** |

## Securities Lending

| | Gross Earnings | Rebates | Agent Manager Fees | Net Earnings |
|---|---|---|---|---|
| First Quarter | $994,598 | $281,113 | $142,626 | $570,859 |
| Second Quarter | 1,022,547 | 97,314 | 184,956 | 740,277 |
| Third Quarter | 1,010,676 | 104,343 | 181,053 | 725,280 |
| Fourth Quarter | 1,123,522 | 43,661 | 215,866 | 863,995 |
| Totals | $4,151,343 | $526,431 | $724,502 | $2,900,411 |

*In 2011, MERS earned $2,900,411 through its securities lending program managed by State Street.*

# 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 the 457 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 Summary, which is updated on a quarterly basis and available on the MERS website at *www.mersofmich.com/investments*.

## Retirement Strategies

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.

## Diversified Portfolios

Diversified Portfolios are professionally managed by MERS, and allow access to some of MERS investments. Each fund is a fully diversified portfolio with a target allocation mix 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 gives experienced investors a variety of available funds to choose from. 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, and 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.

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

“MERS makes it easy to plan for the future. To be honest, you don’t have to think twice about it. It’s there for you.

I am MERS because I like a plan.”

Jennifer Seman

# actuarial section

Jennifer Seman is a Human Resources Director for Grand Traverse County.

She’s been a MERS member since 2009.

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# Actuary Certification Letter

Municipal Employees' Retirement System MERS

September 16, 2011

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 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 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, 2010 annual actuarial valuations was to (i) measure MERS' funding progress, (ii) establish contribution requirements for fiscal years beginning in 2012 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 28 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, 2010.

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.

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 were adopted by the Retirement Board and were based upon actual experience of MERS during the years 2004 to 2008.

# Actuary Certification Letter

Retirement Board
September 16, 2011
Page 2 of 3

The economic assumptions were adopted by the Board in 1998. 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 (Annual Required Contribution)

Actuarial Section

- Summary of Actuarial Assumptions and Methods
- Annual Percentage Increase in Salary
- Rates of Withdrawal (Excluding Death or Disability)
- Rates of Retirement
- 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 Retired Members by Type of Benefit – Defined Benefit Plan
- Schedule of Retired Members by Type of Option Selected – Defined Benefit Plan
- Active Members Per Pension Recipient
- Benefits as Percent of Active Member Pay

The dramatic price declines across the world financial markets in 2008 led to volatility unlike any experienced in decades. The following two years, 2009 and 2010, were more stable and MERS' portfolio recovered with investment returns of over 17% and 14%, respectively. While economic worries continue to haunt investors world-wide, equity markets have rebounded, particularly in the United States. MERS maintains the 8% annual return assumption on investments in the belief that over the long term this is achievable.

The actuarial value of assets (funding value), used to determine both MERS' funded status and the required employer contributions, is based on a 10-year smoothed value of assets. Only a portion (three-tenths, for 2008, 2009, and 2010) of the 2008 investment market losses were recognized in the 2010 actuarial valuation reports.

# Actuary Certification Letter

Retirement Board
September 16, 2011
Page 3 of 3

This reduces the volatility of the valuation results, which affects the required employer contribution and actuarial funded percentage.

As of December 31, 2010 the actuarial value of assets was 116% of market value (down from 125% in 2009). This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 8% investment return assumption.

If the investment markets do not fully make up for the 2008 losses, employer contribution requirements may rise. MERS' investment strategy employs diversification using various asset categories (stocks, bonds, and to a smaller extent real estate and private equity) to capture as much of the upside return as possible while managing acceptable risk. If contribution increases do become necessary, MERS would work to impose them incrementally.

The signing actuaries were employees of Gabriel, Roeder, Smith and Company at the time the December 31, 2010 actuarial valuations were completed, and were thus independent of the plan sponsor. Effective January 1, 2012, the signing actuaries will become employees of MERS.

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. **Based upon the valuation results, it is our opinion that the Municipal Employees' Retirement System of Michigan is meeting its basic financial objective and continues in sound condition in accordance with actuarial principles of advanced funding.**

Respectfully submitted,

Alan E. Sonnanstine

Alan E. Sonnanstine, MAAA, ASA

Cathy Nagy

Cathy Nagy, MAAA, FSA

Jim Koss

W. James Koss, MAAA, ASA

# SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

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

In addition to using current membership and financial data, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events. The assumptions and methods used in the December 31, 2010, actuarial valuations are those adopted by the Retirement Board. The actuarial assumptions were last revised as of December 31, 2010, due to the results of the plan experience study covering the period from December 31, 2003, 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 individual entry age actuarial cost method was used to determine actuarial accrued liabilities and normal cost. (Adopted 1994) The standard amortization periods used in the 2009 valuation are 28 years for positive unfunded liabilities, and 10 years for negative unfunded liabilities. At the March 11, 2009, Board meeting, the MERS Board voted to hold the 28-year amortization period for unfunded accrued liabilities in effect for the 2007 valuations, constant for the 2008 and 2009 valuations; then to let it decline by one year each year with the 2010 and beyond valuations until it reaches 20 years with the December 31, 2017 valuation. For divisions that are closed to new hires, the amortization period for positive unfunded liabilities is decreased annually by two years until the period reaches five years.

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.)

The most recent experience study for the System was completed in March 2010 and covered the period January 1, 2004, through December 31, 2008.

The Accelerated Funding Credit (AFC) program has been replaced with a new, less complicated program of contribution credits for overfunded employee divisions. The new program eliminates the complexities of the AFC, simplifies the calculation of the required employer contribution rates, removes much of the variability, and satisfies the requirement of the Governmental Accounting Standards Board. (Board adopted in 2002.)

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). The Retirement Board adopted the assumptions used in the actuarial valuations after consulting with the actuary.

## ASSUMPTIONS AND METHOD CHANGES

The December 31, 2010, actuarial valuation reflects the following changes in the actuarial assumptions:

- Temporary lower wage inflation assumption
- New assumption related to increases in final average compensation for some municipalities
- The standard amortization period for positive unfunded accrued liabilities is maintained at 28 years.

### 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 work force 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 2010 actuarial valuation, the net long-term investment yield 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 16% higher than the market value, meeting the actuarial assumption in the next few years will require average annual market returns that substantially exceed the 8% investment return assumption.

## Pay Increase

Because benefits are based on a member's final average compensation, 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% (1% for calendar years 2010-2013), 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% 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, 2004, actuarial valuation.

## Annual Percentage Increase in Salary

| Sample Ages | Base Inflation | Merit and Longevity | Total Percentage Increase in Salary |
|---|---|---|---|
| 20 | 4.50% | 8.40% | 12.90% |
| 25 | 4.50 | 5.33 | 9.83 |
| 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 |

## Inflation

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

## Increase in Final Average Compensation

The 1999-2003 and 2004-2008 experience studies determined that for a number of retirees from various 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.

The Retirement Board adopted a new FAC assumption to be first used for the December 31, 2010, annual actuarial valuation. These assumptions reflect an FAC load of 0% to 4% for each municipality, based on the municipality's experience. The FAC increase assumption(s) for each division is reported in each municipality's annual actuarial report.

## Withdrawal Rates

The withdrawal rates are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation due to 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.

The scaling factor is reported in each municipality's annual actuarial report.

The base withdrawal rates are multiplied by a scaling factor to obtain the assumed withdrawal rates.

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.

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

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

## Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. The 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 ÷ 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, 2004, actuarial valuations.

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

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

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

### Early Retirement - Reduced Benefit

| Retirement Ages | Percent of Eligible Active Members Retiring Within Next Year |
|---|---|
| 50 | 2% |
| 51 | 2 |
| 52 | 3 |
| 53 | 5 |
| 54 | 8 |
| 55 | 4 |
| 56 | 4 |
| 57 | 4 |
| 58 | 6 |
| 59 | 8 |

## 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, 2004, actuarial valuations.

### Rates of Withdrawal Due To Disability*
### Percent Becoming Disabled Within Next Year

| 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 | 0.41 |
| 60 | 0.41 |
| 65 | 0.41 |

** 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, 70% of the disabilities are assumed to be non-duty, and 30% are assumed to be duty related.*

## Mortality Tables

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

The mortality table used to project the mortality experience of plan members is a 50% male -50% female blend of the 1994 Group Annuity Mortality table. For disabled retirees, the regular mortality table is used with a 10-year set forward in ages to reflect the higher expected mortality rates of disabled members. These mortality tables were first used for the December 31, 2004, actuarial valuations.

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

The life expectancies and mortality rates projected by the 1994 Group Annuity Mortality table for non-disabled and disabled members are shown on the following page for sample ages.

## Mortality Tables (Non – Disabled)

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

## Mortality Tables (Disabled)

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

## Schedule of Active Member Valuation Data

| Valuation Dec. 31 | Participating Municipalities | Active Members | Active Members Annual Payroll | Annual Average Pay | Percent Increase in Average Pay | Persons on Deferred Status |
|---|---|---|---|---|---|---|
| 2000 | 560 | 36,573 | $1,225,992,204 | $33,522 | 3.7% | 5,303 |
| 2001 | 561 | 36,583 | 1,271,563,960 | 34,758 | 3.7 | 5,799 |
| 2002 | 575 | 37,043 | 1,327,360,448 | 35,833 | 3.1 | 5,510 |
| 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 |

## 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 |
| 2000 | 1,319 | $23,588,044 | 369 | $2,810,133 |
| 2001 | 1,238 | 22,971,336 | 608 | 4,735,312 |
| 2002 | 1,275 | 25,079,342 | 642 | 5,882,066 |
| 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 |

| | End-of-Year Rolls | | | |
|---|---|---|---|---|
| Valuation Dec. 31 | Retirees/ Beneficiaries Number | Annual Allowance | % Increase in Annual Allowance | Average Annual Allowance |
| 2000 | 16,275 | $173,549,622 | 13.6% | $10,664 |
| 2001 | 16,905 | 191,785,646 | 10.5 | 11,345 |
| 2002 | 17,538 | 210,982,922 | 10.0 | 12,030 |
| 2003 | 18,443 | 236,588,632 | 12.1 | 12,828 |
| 2004 | 19,271 | 262,221,987 | 10.8 | 13,607 |
| 2005 | 20,155 | 288,061,637 | 9.9 | 14,292 |
| 2006 | 21,464 | 322,522,645 | 12.0 | 15,026 |
| 2007 | 22,600 | 353,541,830 | 9.6 | 15,643 |
| 2008 | 23,832 | 391,959,046 | 10.9 | 16,447 |
| 2009 | 24,930 | 423,577,691 | 8.1 | 16,991 |
| 2010 | 26,930 | 481,476,493 | 13.7 | 17,879 |

## Solvency Test

The Solvency Test is another means of checking the Retirement System's progress under the funding program, based on the aggregate accrued liability. In this test, the Plan's present assets (actuarial value) are compared with obligations in order of priority: (1) active member contributions on deposit; (2) the present value of future benefits to present retired lives; (3) the aggregate accrued liability for present active members.

In a System that has been following the discipline of level percent of payroll financing, the obligation for active member contributions on deposit (present value 1) and the present value of future benefits to present retired lives (present value 2) will be fully covered by present assets (except in rare circumstances).

In addition, the aggregate accrued liability for present active members (present value 3) will be partially covered by the remainder of present assets. Generally, if a retirement system has been using level cost financing, in the absence of benefit provision increases, the funded portion (of present value 3) will increase over time.

The Solvency Test illustrates the history of the obligation and reflects the MERS policy of following the discipline of level percent payroll financing. The solvency of the System remains sound. However, many municipalities have adopted richer benefits in recent years that have dampened the funding level. The System as a whole remains on track for meeting its obligations.

### Solvency Test – (Dollars In Millions)

| | Aggregate Accrued Liabilities | | | | Portion of Accrued Liabilities Covered by Valuation Assets | | |
|---|---|---|---|---|---|---|---|
| Valuation Date Dec. 31 | (1) Active Member Contributions | (2) Retirees and Beneficiaries | (3) Active Members (Employer-Financed Portion) | Valuation Assets | (1) | (2) | (3) |
| 2000 | $318.4 | $1,744.6 | $2,334.0 | $3,787.2 | 100% | 100% | 73.9% |
| 2001 | 336.5 | 1,944.6 | 2,502.8 | 4,034.4 | 100 | 100 | 70.1 |
| 2002 | 359.2 | 2,159.1 | 2,662.8 | 4,133.0 | 100 | 100 | 60.6 |
| 2003 | 396.7 | 2,435.2 | 2,835.8 | 4,459.5 | 100 | 100 | 57.4 |
| 2004 | 422.5 | 2,696.6 | 3,045.7 | 4,732.2 | 100 | 100 | 53.0 |
| 2005 | 463.0 | 2,966.2 | 3,179.9 | 5,026.1 | 100 | 100 | 50.2 |
| 2006 | 518.0 | 3,314.5 | 3,355.2 | 5,493.8 | 100 | 100 | 49.5 |
| 2007 | 565.9 | 3,627.6 | 3,530.4 | 5,973.0 | 100 | 100 | 50.4 |
| 2008 | 591.9 | 4,029.2 | 3,700.7 | 6,245.5 | 100 | 100 | 43.9 |
| 2009 | 604.2 | 4,342.0 | 3,588.5 | 6,443.1 | 100 | 100 | 41.7 |
| 2010 | 652.1 | 4,950.7 | 3,714.4 | 6,945.4 | 100 | 100 | 36.1 |

# 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, 2010. 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, 2010, 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, 2010, 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. There is no mandatory retirement age.

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 from 1.3% to 2.5%, 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, a FAC-5 is over a 60-month period. The compensation used in calculating the final average compensation cannot exceed the limit set by Internal Revenue Code Section 401(a)(17).

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

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

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

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

### Death Allowance – Duty or Non-Duty

If a member or vested former member with the minimum years of service required to be vested dies before retirement, a monthly survivor allowance may be made payable.

If the member is married, the spouse is the automatic beneficiary unless the spouse, in writing, declines a benefit in favor of another named beneficiary.

A contingent survivor beneficiary will receive a retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at death, but reduced to reflect an Option II election. The reduction for retirement before age 60 is not applied. Payment to the contingent survivor beneficiary of a deceased member commences immediately. Payment to the contingent survivor beneficiary of a deceased vested former member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance.

If there is no named beneficiary and the member leaves a spouse, the spouse will receive an Option II survivor allowance. The amount shall be 85% of the deceased member's or the deceased former vested member's accrued retirement allowance computed in the same manner as a service retirement allowance, based on service and final average compensation at the time of death. Payment to the surviving spouse of a deceased member commences immediately. Payment to the contingent surviving spouse of a deceased former vested member commences on the date the member would have first satisfied eligibility for retirement with an unreduced service retirement allowance. The amount of a surviving spouse's benefit is always the larger of (1): the benefit computed as a contingent survivor beneficiary, and (2) the 85%

of accrued retirement allowance benefit described above.

If there is no named beneficiary and no retirement allowance being paid to a surviving spouse, unmarried children under 21 will be paid an equal share of 50% of the deceased member's or the deceased former vested member's accrued retirement allowance. The reduction for retirement before age 60 is not applied.

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

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

### Member Contributions

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

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

### Post-Retirement Adjustments

Each municipality may elect to provide post-retirement adjustments to retirees and their beneficiaries. The municipality can choose a one-time adjustment, an annual adjustment for all retirees or, an adjustment for future retirees only. This cost-of-living adjustment (COLA)-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 at actual retirement. 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%.

## 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, 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

There are no member contributions.

### Post-Retirement Adjustments

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

### Forms of Benefit Payment

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

The payment options include:

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

### 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.


"I'm confident in the security that MERS provides me. They're well-established, well-managed and they take care of their members, each individually, just like me.

I am MERS because I am confident."

Kayo Zimmerman

## statistical section

Kayo Zimmerman is a Maintenance Manager for Bay City Housing Commission.

He's been a MERS member since 2000.

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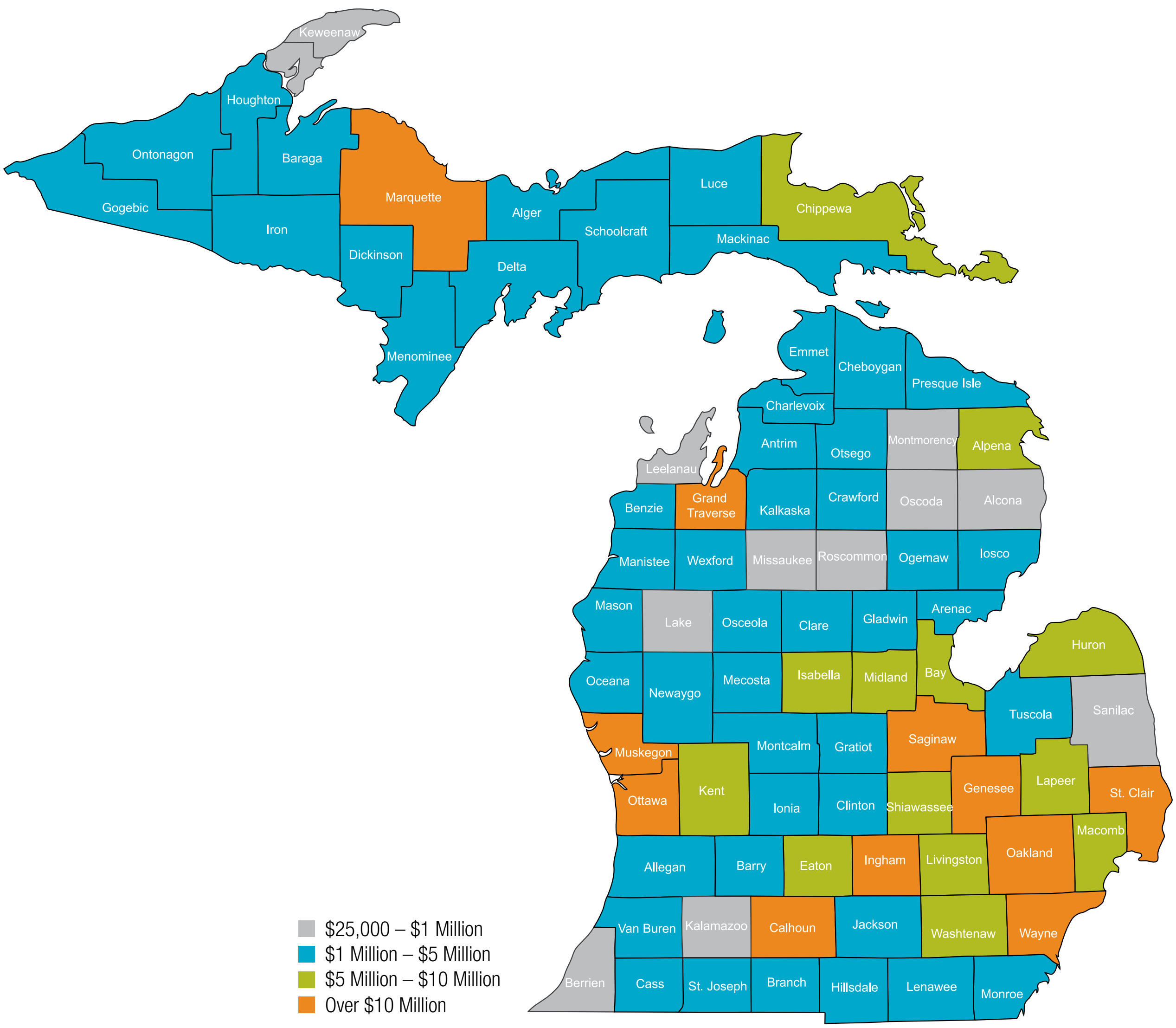
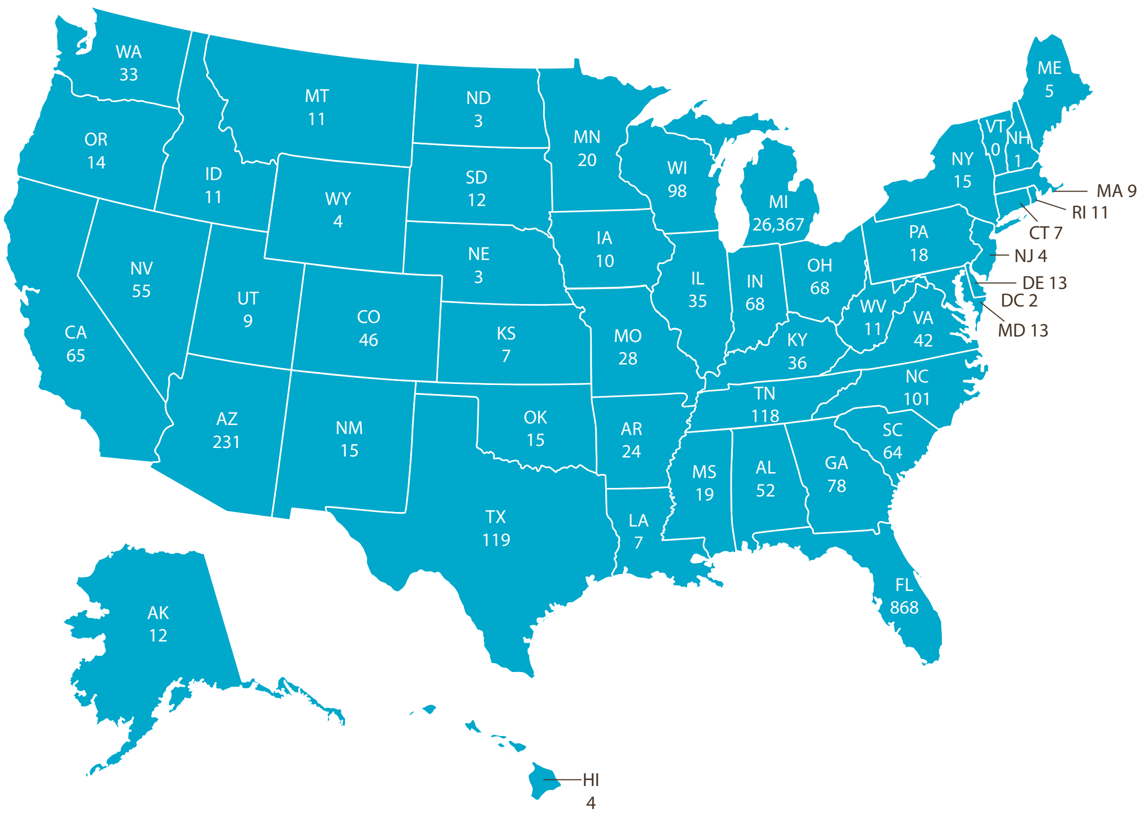
## Defined Benefit Payments Distributed in Michigan

Of the MERS Defined Benefit retirees, 91% remain Michigan residents, keeping pension payments in our local economies. Benefit payments amounting to $498 million were distributed throughout the state's communities and businesses, representing MERS impact on the state's economy.



## Distribution of Defined Benefit Recipients by Location – U.S. Map




## Recipients Outside United States

| | |
|---|---|
| Canada | 8 |
| China | 1 |
| Costa Rica | 2 |
| Greece | 1 |
| Israel | 1 |
| Philippines | 1 |
| Switzerland | 1 |
| United Kingdom | 1 |

## Schedule of Average Benefit Payments - Defined Benefit Plan

| Valuation Date December 31 | Number of Retirees and Beneficiaries | Average Yearly Benefit |
|---|---|---|
| 2001 | 16,905 | $11,345 |
| 2002 | 17,538 | 12,030 |
| 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 |
| 2010 | 26,930 | 17,879 |

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

## Schedule of Benefit Expenses by Type - Defined Benefit Plan

(Dollars in Thousands)

| Fiscal Year Ended | Regular Benefits | Disability Benefits | Employee Refunds | Total |
|---|---|---|---|---|
| 2002 | $192,540 | $8,254 | $3,366 | $204,160 |
| 2003 | 212,612 | 8,526 | 3,542 | 224,680 |
| 2004 | 237,916 | 9,538 | 3,525 | 250,979 |
| 2005 | 263,839 | 10,308 | 4,158 | 278,305 |
| 2006 | 293,138 | 11,035 | 4,711 | 308,884 |
| 2007 | 326,666 | 12,791 | 5,058 | 344,515 |
| 2008 | 355,626 | 16,729 | 5,580 | 377,935 |
| 2009 | 391,613 | 18,254 | 9,510 | 419,377 |
| 2010 | 433,778 | 19,415 | 7,006 | 460,199 |
| 2011 | 476,993 | 20,812 | 7,915 | 505,720 |

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.

## Changes in Plan Net Assets - Last 10 Years Ended December 31, 2011

| | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|
| **Defined Benefit Plan** | | | | |
| **Additions:** | | | | |
| Plan Member Contributions | $39,625,328 | $62,421,750 | $55,408,705 | $71,324,903 |
| Employer Contributions | 127,802,230 | 161,028,643 | 167,942,936 | 207,123,552 |
| Net Investment Gain (Loss) | (319,009,400) | 799,367,113 | 586,700,343 | 293,760,014 |
| Miscellaneous Income | 1,085,887 | 822,347 | 819,466 | 6,020,448 |
| **Total Additions to Plan Net Assets** | **(150,495,955)** | **1,023,639,853** | **810,871,450** | **578,228,917** |
| **Deductions:** | | | | |
| Benefits | 200,793,802 | 221,137,612 | 247,454,263 | 274,146,709 |
| Plan Member Refunds | 3,366,464 | 3,542,264 | 3,525,082 | 4,157,567 |
| Employer Refunds | - | - | 1,727,570 | - |
| Administrative Expenses | 7,002,946 | 8,049,500 | 9,957,057 | 11,557,044 |
| Special Expenses & Fees | 366,273 | 378,334 | 387,031 | 398,690 |
| Plan Member Transfers to Defined Contribution | 53,056 | 106,727 | 1,284 | 964 |
| Employer Transfers to Defined Contribution | 438,040 | 3,732,569 | 320,682 | 21,609 |
| **Total Deductions from Plan Net Assets** | **212,020,581** | **236,947,006** | **263,372,969** | **290,282,583** |
| Net Increase (Decrease) | (362,516,536) | 786,692,847 | 547,498,481 | 287,946,334 |
| Net Assets Held in Trust | | | | |
| Balance Beginning of Fiscal Period | 3,647,820,869 | 3,285,304,333 | 4,071,997,180 | 4,619,495,661 |
| **Balance End of Fiscal Period** | **$3,285,304,333** | **$4,071,997,180** | **$4,619,495,661** | **$4,907,441,995** |
| **Defined Contribution Plan** | | | | |
| **Additions:** | | | | |
| Plan Member Contributions | $3,509,260 | $3,842,038 | $4,301,952 | $4,732,864 |
| Employer Contributions | 10,241,672 | 11,358,936 | 12,664,264 | 14,244,769 |
| Plan Member Transfers from Defined Benefit | 53,056 | 106,727 | 1,284 | 964 |
| Employer Transfers from Defined Benefit | 438,040 | 3,732,569 | 320,682 | 21,609 |
| Transfers from Other Plans | 3,557,813 | 199,702 | 5,356,930 | 2,084,281 |
| Defined Contribution Income | (10,798,653) | 17,570,152 | 10,410,317 | 8,427,281 |
| **Total Additions to Plan Net Assets** | **7,001,188** | **36,810,124** | **33,055,429** | **29,511,768** |
| **Deductions:** | | | | |
| Benefits | 5,547,637 | 4,089,817 | 6,453,035 | 9,482,481 |
| Administrative Expenses | | | | |
| **Total Deductions from Plan Net Assets** | **5,547,637** | **4,089,817** | **6,453,035** | **9,482,481** |
| Net Increase (Decrease) | 1,453,551 | 32,720,307 | 26,602,394 | 20,029,287 |
| Net Assets Held in Trust | | | | |
| Balance Beginning of Fiscal Period | 83,307,319 | 84,760,870 | 117,481,177 | 144,083,571 |
| **Balance End of Fiscal Period** | **$84,760,870** | **$117,481,177** | **$144,083,571** | **$164,112,858** |

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| $84,124,396 | $61,771,740 | $64,870,909 | $62,677,056 | $83,573,046 | $64,789,695 |
| 286,227,456 | 320,203,718 | 310,716,723 | 350,737,219 | 341,354,194 | 298,328,514 |
| 634,158,937 | 455,213,391 | (1,533,383,713) | 788,728,701 | 753,548,112 | 129,668,687 |
| 790,789 | 1,067,367 | 56,587 | 1,070,596 | 462,612 | 446,219 |
| **1,005,301,578** | **838,256,216** | **(1,157,739,494)** | **1,203,213,572** | **1,178,937,964** | **493,233,115** |
| 304,172,625 | 339,456,920 | 372,354,833 | 409,867,136 | 453,186,778 | 497,763,955 |
| 4,711,038 | 5,057,942 | 5,580,350 | 9,510,224 | 7,005,859 | 7,914,782 |
| - | 1,230,274 | 1,364,491 | - | 5,823 | 41,554 |
| 12,540,010 | 13,903,553 | 16,364,800 | 18,792,644 | 20,951,372 | 22,069,613 |
| 526,047 | 587,685 | 570,520 | 460,455 | 389,025 | 444,000 |
| 104,407 | 685,478 | 16,723 | 23,483 | 28,259 | 8,313 |
| 646,754 | 1,040,071 | 84,819 | 175,246 | 977,346 | 125,479 |
| **322,700,881** | **361,961,923** | **396,336,536** | **438,829,189** | **482,544,462** | **528,367,696** |
| 682,600,697 | 476,294,293 | (1,554,076,030) | 764,384,383 | 696,393,502 | (35,134,581) |
| 4,907,441,995 | 5,590,042,692 | 6,066,336,985 | 4,512,260,955 | 5,276,645,338 | 5,973,038,840 |
| **$5,590,042,692** | **$6,066,336,985** | **$4,512,260,955** | **$5,276,645,338** | **$5,973,038,840** | **$5,937,904,259** |

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| $5,527,984 | $6,309,939 | $6,961,409 | $8,062,442 | $8,666,000 | $10,368,042 |
| 15,911,238 | 17,590,799 | 18,939,820 | 20,263,212 | 21,699,621 | 21,953,373 |
| 104,407 | 685,478 | 16,723 | 23,483 | 28,259 | 8,313 |
| 646,754 | 1,040,071 | 84,819 | 175,246 | 977,346 | 125,479 |
| 8,207,389 | 1,184,321 | 1,122,171 | 1,555,390 | 3,696,142 | - |
| 19,195,848 | 13,411,117 | (61,678,689) | 39,951,479 | 28,971,482 | 1,862,434 |
| **49,593,620** | **40,221,725** | **(34,553,747)** | **70,031,252** | **64,038,851** | **34,317,641** |
| 10,591,376 | 12,764,282 | 12,406,025 | 8,867,576 | 10,902,604 | 19,900,614 |
| | | | | | 826,538 |
| **10,591,376** | **12,764,282** | **12,406,025** | **8,867,576** | **10,902,604** | **20,727,152** |
| 39,002,244 | 27,457,443 | (46,959,772) | 61,163,676 | 53,136,247 | 13,590,489 |
| 164,112,858 | 203,115,105 | 230,572,548 | 183,612,776 | 244,776,452 | 297,912,699 |
| **$203,115,102** | **$230,572,548** | **$183,612,776** | **$244,776,452** | **$297,912,699** | **$311,503,188** |

## Changes in Plan Net Assets - Last 10 Years Ended December 31, 2011

| | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|
| **Health Care Savings Program*** | | | | |
| **Additions:** | | | | |
| Plan member Contributions | $- | $- | $88,884 | $14,995 |
| Employer Contributions | - | - | 1,300,103 | 2,856,908 |
| Net Investment Gain (Loss) | - | - | 130,020 | 165,081 |
| Miscellaneous Income | - | - | 0 | 8,078 |
| **Total Additions to Plan Net Assets** | - | - | 1,519,007 | 3,045,062 |
| **Deductions:** | | | | |
| Special Expenses & Fees | - | - | - | - |
| Medical Disbursements Paid to Members | - | - | 11,484 | 51,832 |
| Forfeited Employer Contributions | - | - | - | - |
| Administrative Expenses | - | - | 184,404 | 250,436 |
| **Total Deductions from Plan Net Assets** | - | - | 195,888 | 302,268 |
| Net Increase (Decrease) | - | - | 1,323,119 | 2,742,794 |
| Net Assets Held in Trust | | | | |
| Balance Beginning of Fiscal Period | - | - | - | 1,323,119 |
| **Balance End of Fiscal Period** | $- | $- | $1,323,119 | $4,065,913 |
| **Retiree Health Funding Vehicle*** | | | | |
| **Additions:** | | | | |
| Employer Contributions | $- | $- | $1,312,526 | $11,947,714 |
| Net Investment Gain (Loss) | - | - | 108,716 | 448,190 |
| Miscellaneous Income | - | - | - | - |
| | | | | |
| **Deductions:** | | | | |
| Special Expenses & Fees | - | - | - | 225 |
| Disbursements Paid to Municipalities | - | - | - | 95,470 |
| Administrative Expenses | - | - | 2,590 | 25,925 |
| **Total Deductions from Plan Net Assets** | - | - | 2,590 | 121,620 |
| Net Increase (Decrease) | - | - | 1,418,652 | 12,274,284 |
| Net Assets Held in Trust | | | | |
| Balance Beginning of Fiscal Period | - | - | - | 1,418,652 |
| **Balance End of Fiscal Period** | $- | $- | $1,418,652 | $13,692,936 |
| **Investment Services Program**** | | | | |
| **Additions:** | | | | |
| Employer Contributions | $- | $- | $- | $- |
| Net Investment Gain (Loss) | - | - | - | - |
| Miscellaneous Income | - | - | - | - |
| **Total Additions to Plan Net Assets** | - | - | | |
| **Deductions:** | | | | |
| Disbursements Paid to Municipalities | - | - | - | - |
| Administrative Expenses | - | - | - | - |
| **Total Deductions from Plan Net Assets** | - | - | | |
| Net Increase (Decrease) | - | - | - | - |
| Net Assets Held in Trust | | | | |
| Balance Beginning of Fiscal Period | - | - | - | - |
| **Balance End of Fiscal Period** | $- | $- | $- | $- |

** Health Care Savings Program and Retiree Health Funding Vehicle commenced operations in 2004.*
***Investment Services Program commenced operations in 2006.*

| 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| | | | | | |
| $2,301,297 | $2,927,102 | $10,127,358 | $16,963,863 | $11,650,740 | $7,306,567 |
| 752,559 | 719,462 | (4,603,920) | 2,978,138 | 4,055,298 | 918,372 |
| 91,818 | 96,313 | 161,587 | 263,366 | 377,183 | - |
| 3,145,674 | 3,742,877 | 5,685,025 | 20,205,367 | 16,083,221 | 8,224,939 |
| 59,046 | 89,102 | 153,775 | 258,013 | 373,441 | - |
| 144,699 | 328,172 | 462,448 | 511,902 | 889,941 | 1,473,832 |
| 44,723 | 29,295 | 57,716 | 64,171 | 85,142 | 16,106 |
| 197,200 | 243,953 | 360,573 | 159,157 | (439,689) | 717,472 |
| 445,668 | 690,522 | 1,034,512 | 993,243 | 908,835 | 2,207,410 |
| 2,700,006 | 3,052,355 | 4,650,513 | 19,212,124 | 15,174,385 | 6,017,529 |
| 4,065,913 | 6,765,919 | 9,818,274 | 14,468,787 | 33,680,911 | 48,855,296 |
| **$6,765,919** | **$9,818,274** | **$14,468,787** | **$33,680,911** | **$48,855,296** | **$54,872,825** |
| | | | | | |
| $29,366,165 | $67,013,503 | $42,376,883 | $48,028,651 | $52,613,370 | $48,643,625 |
| 4,359,685 | 6,144,495 | (33,136,301) | 23,472,134 | 28,418,987 | 6,820,323 |
| 103,298 | 341,804 | 494,705 | 53,497 | 858,769 | - |
| | | | | | |
| 89,055 | 332,016 | 486,939 | 622,880 | 858,770 | - |
| 1,109,386 | 5,827,116 | 3,857,234 | 6,087,719 | 5,564,350 | 9,073,910 |
| 136,376 | 185,108 | 319,161 | 53,497 | 1,039,649 | 1,647,556 |
| 1,334,817 | 6,344,240 | 4,663,334 | 6,764,096 | 7,462,769 | 10,721,466 |
| 32,494,331 | 67,155,562 | 5,071,953 | 64,790,186 | 74,428,357 | 44,742,482 |
| 13,692,936 | 46,187,267 | 113,342,829 | 118,414,782 | 183,204,968 | 257,633,325 |
| **$46,187,267** | **$113,342,829** | **$118,414,782** | **$183,204,968** | **$257,633,325** | **$302,375,807** |
| | | | | | |
| $15,527,136 | $26,680,199 | $2,968,755 | $999,440 | $- | $- |
| 726,136 | 2,177,009 | (11,607,125) | 3,375,567 | 839,094 | 161,694 |
| - | - | - | - | 27,625 | - |
| 16,253,272 | 28,857,208 | (8,638,370) | 4,375,007 | 866,718 | 161,694 |
| - | - | 750,000 | 33,593,463 | - | - |
| 16,895 | 238,322 | 153,529 | 4,000 | 249,504 | 28,101 |
| 16,895 | 238,322 | 903,529 | 33,597,463 | 249,504 | 28,101 |
| 16,236,376 | 28,618,886 | (9,541,899) | (29,222,456) | 617,214 | 133,593 |
| - | 16,236,376 | 44,855,262 | 35,313,363 | 6,090,907 | 6,708,122 |
| **$16,236,376** | **$44,855,262** | **$35,313,363** | **$6,090,907** | **$6,708,122** | **$6,841,715** |

## Schedule of Changes in Reserves – Fiscal Year Ended December 31, 2011

| | Reserve for Employee Contributions | Reserve for Employer Contributions and Benefit Payments | Reserve for Expenses and Undistributed Investment Income |
|---|---|---|---|
| **Additions** | | | |
| Member Contributions | | | |
| Regular | $59,061,341 | | |
| Purchase of Service Credit | 5,728,354 | | |
| Employer Contributions | | | |
| Regular | | $297,754,630 | |
| Purchase of Service Credit | | 573,884 | |
| Net Investment Income | | | $129,668,687 |
| Miscellaneous Income | | | 446,219 |
| Transfers from Defined Benefit Plan | | | |
| Transfers from Other Plans | | | |
| **Total Additions** | **64,789,695** | **298,328,514** | **130,114,906** |
| **Deductions** | | | |
| Retirement Benefits | | 497,763,955 | |
| Medical Disbursements Paid to Members | | | |
| Disbursements Paid to Municipalities | | | |
| Forfeited Employer Contributions | | | |
| Refund of Contributions | 7,914,782 | 41,554 | |
| Administrative Expense | | | 22,069,613 |
| Special Expenses and Fees | | 444,000 | |
| Transfers to DC Plan | 8,313 | 125,479 | |
| **Total Deductions** | **7,923,095** | **498,374,988** | **22,069,613** |
| Net Increase (Decrease) | 56,866,600 | (200,046,474) | 108,045,293 |
| Other Changes in Reserves | | | |
| Investment Income Allocations | 706,669 | 107,338,624 | (108,045,293) |
| Retirement and Unclaimed Transfers | (46,218,251) | 46,218,251 | |
| **Total Other Changes in Reserves** | **(45,511,582)** | **153,556,875** | **(108,045,293)** |
| Net Increase in Reserves After Other Changes | 11,355,018 | (46,489,599) | - |
| Reserve Balance Beginning of Year | 658,189,773 | 5,314,849,068 | |
| **Reserve Balance End of Year** | **$669,544,791** | **$5,268,359,468** | **$-** |

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. The Reserve for Expenses and Undistributed Investments Income has a zero balance reflecting the allocation out of all investment income for the year to the municipalities based on their average daily balance.

| Total Reserve for 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 | Total Reserve for Pension Trust Funds |
|---|---|---|---|---|---|
| | | | | | |
| $59,061,341 | $10,368,042 | | | | $69,429,384 |
| 5,728,354 | | | | | 5,728,354 |
| | | | | | |
| 297,754,630 | 21,953,373 | $7,306,567 | $48,643,625 | | 375,658,195 |
| 573,884 | | | | | 573,884 |
| 129,668,687 | 1,862,434 | 918,372 | 6,820,323 | $161,694 | 139,431,510 |
| 446,219 | | | | | 446,219 |
| | 133,792 | | | | 133,792 |
| | | | | | - |
| **493,233,115** | **34,317,641** | **8,224,939** | **55,463,948** | **161,694** | **591,401,337** |
| | | | | | |
| 497,763,955 | 19,900,614 | | | | 517,664,569 |
| | | 1,473,830 | | | 1,473,832 |
| | | | 9,073,910 | | 9,073,910 |
| | | 16,106 | | | 16,106 |
| 7,956,336 | | | | | 7,956,336 |
| 22,069,613 | 826,538 | 717,472 | 1,647,556 | 28,101 | 25,289,280 |
| 444,000 | | | | | 444,000 |
| 133,792 | | | | | 133,792 |
| **528,367,696** | **20,727,152** | **2,207,410** | **10,721,466** | **28,101** | **562,051,825** |
| (35,134,581) | 13,590,489 | 6,017,529 | 44,742,482 | 133,593 | 29,349,512 |
| | | | | | |
| - | | | | | - |
| - | | | | | - |
| **-** | **-** | **-** | **-** | **-** | **-** |
| | | | | | |
| (35,134,581) | 13,590,489 | 6,017,529 | 44,742,482 | 133,593 | 29,349,512 |
| 5,973,038,840 | 297,912,699 | 48,855,296 | 257,633,325 | 6,708,122 | 6,584,148,282 |
| **$5,937,904,259** | **$311,503,188** | **$54,872,825** | **$302,375,809** | **$6,841,715** | **$6,613,497,794** |

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

December 31, 2010, Tabulated by Optional Form of Benefit Being Paid

| Monthly Benefit | All Retired Members | Form of Annuity 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| $ 0 - 199 | 1,639 | 545 | 24 | 1 | 194 |
| 200 - 399 | 3,088 | 869 | 38 | 0 | 343 |
| 400 - 599 | 2,939 | 835 | 82 | 5 | 360 |
| 600 - 799 | 2,469 | 712 | 73 | 4 | 311 |
| 800 - 999 | 2,165 | 600 | 79 | 5 | 312 |
| 1,000 - 1,199 | 1,762 | 564 | 96 | 13 | 269 |
| 1,200 - 1,399 | 1,575 | 472 | 86 | 7 | 257 |
| 1,400 - 1,599 | 1,427 | 459 | 89 | 3 | 270 |
| 1,600 - 1,799 | 1,281 | 407 | 98 | 5 | 250 |
| 1,800 - 1,999 | 1,140 | 344 | 85 | 9 | 215 |
| 2,000 & over | 7,445 | 2,440 | 825 | 70 | 1,573 |
| **Totals** | **26,930** | **8,247** | **1,575** | **122** | **4,354** |
| **Total Monthly Benefit** | **$40,123,041** | **$12,738,123** | **$3,588,056** | **$301,636** | **$7,736,396** |

### Type of Annuity

1. Beneficiary draws 100% of retirees' benefit
2. Beneficiary draws 75% of retirees' benefit
3. Beneficiary draws 60% of retirees' benefit
4. Beneficiary draws 50% of retirees' benefit
5. Equated option (changing at Social Security age)
6. 5 year certain and life
7. 10 year certain and life
8. 15 year certain and life
9. 20 year certain and life
10. Straight Life allowance

| 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|
| 45 | 13 | 14 | 12 | 17 | 774 |
| 91 | 22 | 44 | 27 | 27 | 1,627 |
| 52 | 24 | 32 | 25 | 41 | 1,483 |
| 51 | 27 | 48 | 11 | 24 | 1,208 |
| 26 | 43 | 49 | 13 | 24 | 1,014 |
| 24 | 16 | 31 | 14 | 18 | 717 |
| 13 | 13 | 19 | 4 | 21 | 683 |
| 3 | 23 | 13 | 6 | 16 | 545 |
| 5 | 9 | 21 | 6 | 15 | 465 |
| 4 | 9 | 18 | 2 | 11 | 443 |
| 22 | 68 | 102 | 40 | 70 | 2,235 |
| **336** | **267** | **391** | **160** | **284** | **11,194** |
| **$241,508** | **$382,226** | **$568,135** | **$217,363** | **$383,985** | **$13,965,613** |

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

December 31, 2011, Tabulated by Optional Form of Benefit Being Paid

| Monthly Benefit | All Retired Members | Type of Annuity 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| $ 0-199 | 1,639 | 1,077 | 28 | 22 | 433 | 79 | 0 |
| 200-399 | 3,088 | 2,109 | 96 | 62 | 672 | 140 | 9 |
| 400-599 | 2,939 | 2,026 | 143 | 50 | 595 | 111 | 14 |
| 600-799 | 2,469 | 1,796 | 121 | 46 | 402 | 97 | 7 |
| 800-999 | 2,165 | 1,671 | 124 | 44 | 243 | 74 | 9 |
| 1,000-1,199 | 1,762 | 1,357 | 99 | 35 | 206 | 62 | 3 |
| 1,200-1,399 | 1,575 | 1,236 | 99 | 32 | 164 | 39 | 5 |
| 1,400-1,599 | 1,427 | 1,194 | 55 | 20 | 131 | 26 | 1 |
| 1,600-1,799 | 1,281 | 1,100 | 45 | 21 | 91 | 23 | 1 |
| 1,800-1,999 | 1,140 | 989 | 28 | 13 | 90 | 17 | 3 |
| 2,000 & over | 7,445 | 7,060 | 83 | 41 | 187 | 68 | 6 |
| **Totals** | **26,930** | **21,615** | **921** | **386** | **3,214** | **736** | **58** |
| **Total Monthly Benefit** | **$40,123,041** | **$35,512,635** | **$962,167** | **$400,480** | **$2,532,088** | **$657,105** | **$58,566** |

### Type of Annuity

1. Normal retirement for age and service
2. Non-duty disability*
3. Duty disability*
4. Beneficiaries
5. Non-duty death
6. Duty death

** At age 60, these annuity types are converted to Type 1, normal retirement for age and service.*

## Defined Contribution Plan Participants and Total MERS Participants

| Fiscal Year | Number of Participants Total | Defined Benefit | % of Total | Defined Contribution | % of Total | Hybrid | % of Total |
|---|---|---|---|---|---|---|---|
| 2002 | 64,086 | 59,343 | 92.6% | 4,743 | 7.4% | N/A | 0.0% |
| 2003 | 65,756 | 60,569 | 92.1% | 5,187 | 7.9% | N/A | 0.0% |
| 2004 | 67,140 | 61,841 | 92.1% | 5,299 | 7.9% | N/A | 0.0% |
| 2005 | 68,915 | 62,748 | 91.1% | 6,167 | 8.9% | N/A | 0.0% |
| 2006 | 71,572 | 64,545 | 90.2% | 7,027 | 9.8% | N/A | 0.0% |
| 2007 | 72,932 | 65,556 | 89.9% | 7,376 | 10.1% | N/A | 0.0% |
| 2008 | 74,400 | 66,586 | 89.5% | 7,814 | 10.5% | N/A | 0.0% |
| 2009 | 75,605 | 67,254 | 89.0% | 8,351 | 11.0% | N/A | 0.0% |
| 2010 | 78,343 | 69,707 | 89.0% | 8,636 | 11.0% | N/A | 0.0% |
| 2011 | 83,658 | 74,113 | 88.6% | 9,193 | 11.0% | 352 | 0.4% |

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 P lan participation and overall MERS participants.

## MERS Member Benefit Changes

We continue to see an increase of requests from groups to reduce costs versus improve benefits. Groups are looking at merging divisions, exploring municipality consolidations and other MERS solutions. These charts show the number of divisions that have made changes in 2010 and 2011.

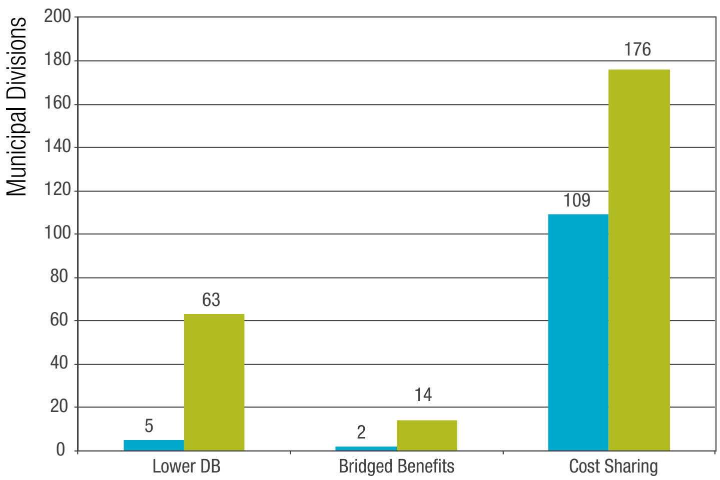
## Cost Controlling Solutions

**Cost Sharing:** Include changes to employee rate changes without any other benefit changes

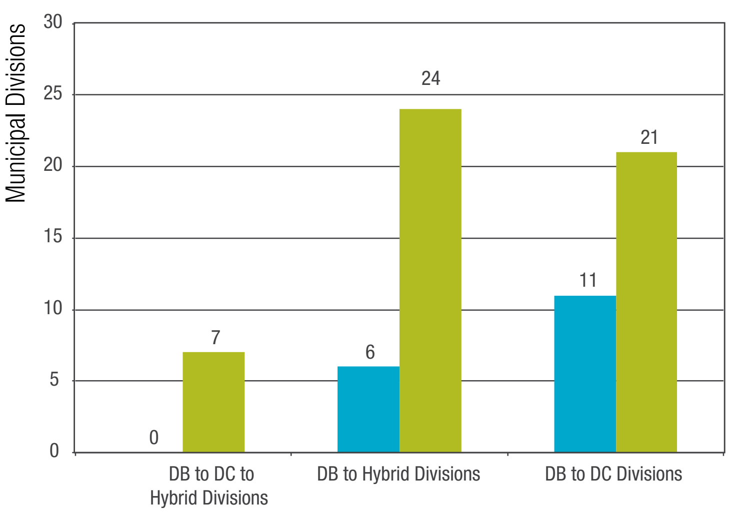
**Bridged Benefits:** Allows groups to lower long-term liability on a going forward basis, leaving earned benefits unchanged

**Lower Defined Benefit:** New division with lower benefits is adopted for new hires

### Cost Controlling Solutions




### Retirement Plan Changes




The retirement plan changes show the number of municipal divisions which have shifted from Befined Benefit to Cefined Contribution or Hybrid in their plan design. Many of these changes have been done to prospectively lower costs to the local government.

MERS
Municipal Employees' Retirement System

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