



ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEAR ENDING 12.31.2024

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ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the fiscal year ending
December 31, 2024

PREPARED BY
The Finance Department of the
Municipal Employees' Retirement System of Michigan
1134 Municipal Way
Lansing, MI 48917

Contact MERS of Michigan
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Kerrie Vanden Bosch
Chief Executive Officer

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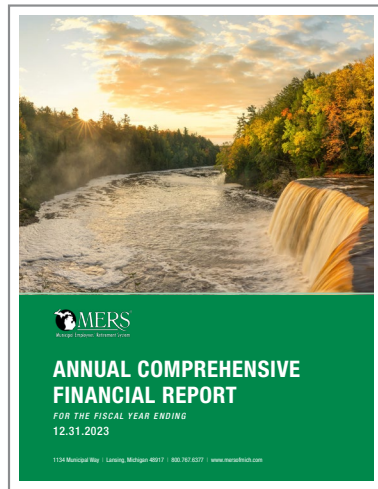
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INTRODUCTION

2024 ACHIEVEMENTS



Certificate of Achievement for Excellence in Financial Reporting

The Municipal Employees' Retirement System of Michigan (MERS) received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the December 31, 2023 Annual Comprehensive Financial Report. This marks the 36th consecutive year MERS has received this honor.



Public Pension Standards Award

MERS also received the Public Pension Standards Award for 2024 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 Public Pension Coordinating Council (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).



INTRODUCTION

2024 annual comprehensive financial report

Municipal Employees' Retirement System



LETTER OF TRANSMITTAL, MAY 20, 2025

Dear MERS Customers and Board Members:

We are pleased to submit the Annual Comprehensive Financial Report for the Municipal Employees' Retirement System of Michigan (MERS) for the fiscal year ending December 31, 2024. In 2024, MERS continued momentum along a strategic plan that began in 2022 and reaches out to 2030, aiming at several stages of progress along the way and concluding the "Foundational" phase of an ambitious strategic plan.

Our vision is:

Through exceptional service and comprehensive solutions, MERS will deliver a seamless experience that engages and enables customers to achieve their financial goals.

In order to accomplish this vision, the MERS 2022-2030 Strategic Plan focuses on the following objectives:

- Transform the customer experience through SEAMLESS SERVICE DELIVERY.
- Evolve our suite of products and services to help customers ESTABLISH and ACHIEVE FINANCIAL GOALS.
- POSITION OUR WORKFORCE to achieve business results.
- MAKE IT EASY to work with MERS.
- INCREASE OUR MARKET SHARE and diversify our customer base.

Some highlights of accomplishments made in 2024 include:

- Developed a new "Employer Toolkit" launched at the Annual Conference, which includes essential guides and resources for retirement preparation, enhancing employers' ability to support their employees' financial well-being and bolstering efforts in talent attraction and retention.
- Completed major system upgrades to internal pension administration software that enhance reliability, streamline transactions, and reduce risks.
- Increased cybersecurity efforts by updating standards and expanding multi-factor authentication requirements.
- Achieved 106% of our targets on our 2024 Balanced Scorecard (BSC).

MERS Profile

MERS is an organization that administers retirement plans for Michigan's local units of government on a not-for-profit basis. Our approach to efficiently managing retirement and other post-employment plans allows local governments to focus on their core services, leaving day-to-day plan administration and long-term management to us. Because of our size and scale, MERS can pool assets for investment purposes, resulting in lower overall administrative cost of services. Our services include plan governance, internal auditing, legal counsel, actuarial services, financial management, fiduciary responsibility, information technology support, legislative advocacy, and a one-stop shop for administration of benefits and investments. MERS is governed by the member-elected MERS Retirement Board (Board) which serves as the fiduciary. We are committed to accountability and transparency, holding the line on costs, and watching out for the best interest of our members.

Report Structure and Contents

MCL 38.1536 requires the Board to prepare this annual report in accordance with U.S. Generally Accepted Accounting Principles (GAAP). The financial information shown throughout this report meets that requirement. The MERS management team, under the oversight of the Board, is responsible for the preparation, integrity, and fairness of the financial statements and other information presented in this report.

Section 38.1536 also requires the Board to arrange for an annual audit of the MERS financial statements. Plante Moran, PLLC, MERS external auditor, conducted an independent audit of the financial statements in accordance with Generally Accepted Auditing Standards. This audit is described in the Independent Auditor's Report in the Financial Section following

this letter. MERS management provides the external auditors with unrestricted access to records and staff. This external audit is conducted annually to ensure our financial statements are fairly stated.

As a part of our financial statement process, we have identified necessary internal controls and have them in place to ensure that transactions are authorized, assets are safeguarded, and all supporting records are properly retained and managed. The cost of a control should not exceed the benefits to be derived. The internal control objective is to provide reasonable assurance that the financial statements are free of any material misstatements. We have an internal auditor on staff to help ensure we meet high standards for internal control. As part of continually strengthening internal controls, MERS completed a Service Organizational Control Audit (SOC 1, Type II audit) that disclosed no deficiencies in MERS internal control.

This Annual Comprehensive Financial Report is divided into five sections:

- Introduction – Achievements and structure of MERS
- Financial – Financial statements, notes, required supplemental information, Management's Discussion and Analysis (MD&A), which is the MERS management team's narrative and overview of the financial statements
- Investment – Investment activities and performance information
- Actuarial – Actuarial assumptions and methods as well as the actuary's certification letter
- Statistical – Various schedules on member data and ten-year trends

Financial Summary

The MERS Total Market Portfolio returned 8.07% gross of fees for the year, outperforming the actuarial assumption for investment return as well as its benchmark at the 5- and 10-year time periods. More information regarding our investment management performance, policies and processes are found with the Schedule of Fees and Commissions in the Investments Section.

MERS ended the year with a net position of \$17.3 billion for all plan types, up \$1.2 billion from 2023. The increase in asset size occurred primarily due to the investment gains for the year. Employer contributions added to the overall growth, seeing increases in Health Care Savings Program and Defined Benefit Plan extra voluntary payments. One measure of a defined benefit retirement system's financial health is the percentage of its actuarial liabilities owed that is covered by its available actuarial assets. Using this ratio, 95% of MERS' municipalities were funded at 60% or higher (711 municipalities).

More detail on these financial metrics is included in the MD&A document. A complete copy of the Annual Comprehensive Financial Report is provided to the Governor, the members of both the State House and Senate, and the Office of the State Treasurer, as required by law. The Annual Comprehensive Financial Report is available on our website.

Acknowledgements

We are honored that for the 36th consecutive year, the Government Finance Officers Association (GFOA) awarded MERS its Certificate of Achievement for Excellence in Financial Reporting for our 2023 Annual Comprehensive Financial Report.

We are very grateful to our Board members for their time and dedication. Their diligence and conscientious oversight of our well-run system is greatly appreciated.

We also express our deep gratitude to the entire staff for their hard work and attention to detail in ensuring successful MERS operations. Our staff applies their energy, innovation, skill and a commitment to excellent service every day to deliver the security of a retirement plan for all of our participants.

Respectfully submitted,



Kerrie Vanden Bosch
Chief Executive Officer

INTRODUCTION

2024 annual comprehensive financial report

MERS RETIREMENT BOARD

Officer Members



Keith Van Beek
(Chairperson)
City of Holland



Lesley Foxx
Saginaw Housing
Commission



Kirk Harrier
Otsego County
Road Commission

Employee Members



Jason Sarata
Delta Charter
Township



Lisa Rauch
Gerald R. Ford
International
Airport Authority



Kyle Lewis
Northville Charter
Township

Expert Members



Michael Gilmore
The 4100 Group,
Inc., Lansing



James Wiersma
Family Investment
& Resource
Management, LLC,
Holland



John Ogden
City of Port Huron
(Retired)

Retiree Member

MERS OFFICERS



Kerrie Vanden Bosch
Chief Executive Officer



Erin Boertman
Chief Strategic and
External Affairs Officer

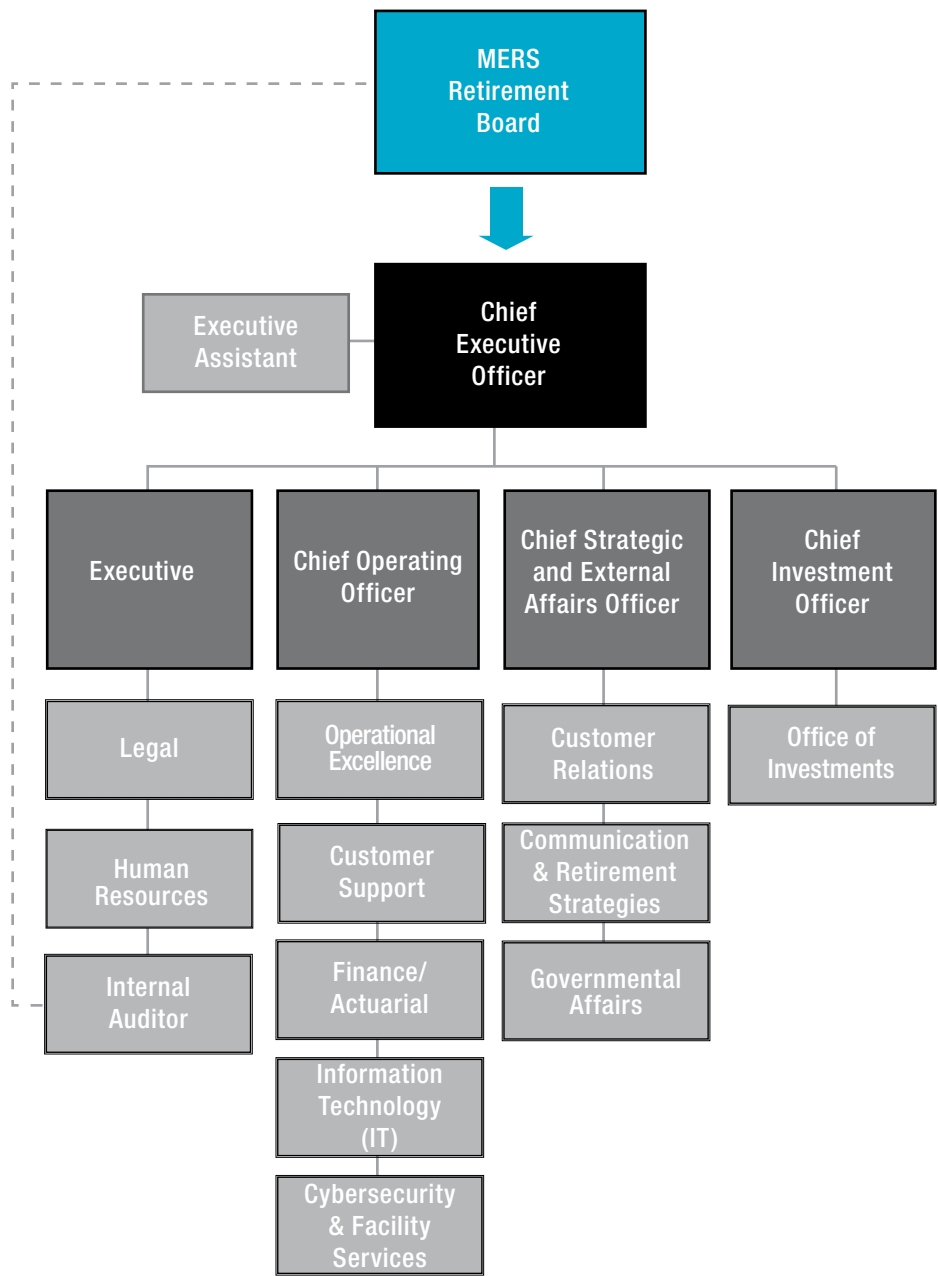


Jeb Burns
Chief Investment Officer



Brom Stibitz
Chief Operating Officer

MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN
ORGANIZATIONAL STRUCTURE – 2024



The Schedule of Fees and Commissions is found in the Investment Section on pages 62-63.

INTRODUCTION

2024 annual comprehensive financial report

OUTSIDE PROFESSIONAL SERVICES

Actuarial

Gabriel, Roeder, Smith & Company

Auditing

Plante & Moran, PLLC

Banking

Commerce

JP Morgan Chase

Mercantile

Business Consulting

Byrum & Fisk Advocacy

Callan, LLC

LexisNexis

Martin Commercial Properties, Inc.

Pension Benefit Information

Custodial Banking and Securities Lending

BNY

Human Resource Consulting

Advisa

Arbinger

American Society of Employers

Arthur J. Gallagher & Co.

Droste Group

McLagan Partners, Inc.

Salary.com

Wendell Rhoads Consulting

Insurance

Marsh USA Inc.

Investment Consulting/Research

Backstop Solutions

BCA Research

BDO USA, LLC

Bloomberg Finance LP

CSC Delaware Trust Company

Gavekal Capital

Global Financial Data, Inc.

Morningstar

MSCI

Nasdaq eVestment

Ned Davis Research

NEPC LLC

NYSE Market (DE) Inc

Russell Napier

Siddhi Services LLC

Stratfor

Investment Management

10T Capital

Acadian Asset Management Inc.

ACP Peru

Alliance Bernstein

Barings LLC

AlpInvest Partners

Altaris Capital Partners

Angelo Gordon & Co.

Appian Natural Resources

Arlington Capital Partners

Asterion Industrial Partners

Bentall GreenOak

BlackRock

Blackstone Real Estate Partners

Blackstone Alternative Asset

Blue Owl Capital

Brookwood U.S. Real Estate

Burford Capital

Carnelian Energy

Colony Capital, LLC

Comvest Partners

Consilium Investment Management

Domain Capital Advisors

Electrum Group, LLC

Exeter Property Group, LLC

Fortress Investment Group, LLC

Frontier Market Asset Management

Goldman Sachs

GMO LLC

Grosvenor Capital Management, LP

H/2 Capital Partners

Hancock Natural Resource Group

Harbert Management Corporation

Hunter Point Capital

IL&FS Capital Advisors Limited

Influence Media Partners

Invictus Growth Partners

J.P. Morgan Asset Management

Keen Growth Capital

Kennedy Capital Management

LaSalle Investment Management

Lead Edge Capital Management

Lumira Capital

MC Credit Partners, LP

Mellon Investments

MemtyX

Merrowie Property Trust

MetaVC

Metropolitan Real Estate
 Michigan eLab Capital Partners, LP
 MiddleGround Capital
 Miravast Asset Management, LLC
 Mubadala Capital
 MUFG
 Napier Park Global Capital
 Oak Hill Advisors, LP
 Oberland Capital Management, LLC
 Orchard Global Asset Management
 Ospraie Management
 Parametric Portfolio Associates
 Pelican Energy Partners
 Petrichor Healthcare Capital Mgt, LP
 Pioneer Asset Management SA
 Polunin Capital Partners
 Punch & Associates
 Rialto Capital Management
 Sculptor Real Estate
 Sentinel Capital Partners
 Silver Hill Energy Partners III, LP
 SK Capital Partners
 Starwood Capital Group
 Ten Coves Capital
 Terra Partners Asset Management
 Townsend Group
 Trace Energy Resources
 Trice Medical Inc.
 Vanbarton Group
 Valar Ventures
 Veritas Capital
 Walden International
 Wellington

Legal Consulting

Bar and Karrer AG
 Bernstein, Litowitz, Berger and Grossmann, LLP
 Ice Miller, LLP
 Hengeler Mueller
 Kessler Topaz Meltzer and Check, LLP
 Labaton Keller Sucharow, LLP
 Marsh McLennan
 Miller, Canfield, Paddock and Stone, PLC
 Perez-Llorca
 Rabaza, Alcazar and De Las Casas
 Robbins Geller Rudman and Dowd, LLP
 Seyfarth Shaw, LLP
 Woodsford Group Limited

Legislative Consulting

Karoub Associates
 Michigan Legislative Consultants

Medical Advising

Managed Medical Review Organization

Systems Implementation

Cobalt Labs
 Databank IMX LLC
 Dewpoint Inc.
 Five9, Inc.
 Gartner Inc.
 GovInvest Inc.
 InfoLock
 Innova Solutions, Inc
 Maner Costerisan Consulting LLC
 Presidio Networked Solutions
 Process Renewal Consulting Group (2015) Inc.
 Rapid7 LLC
 Tegrit Software Ventures, Inc.
 TTEC Digital, LLC
 Winklevoss Technologies LLC

Third-Party Administration

Alerus Retirement Solutions

INTRODUCTION

2024 annual comprehensive financial report

ACKNOWLEDGEMENTS

The Office of Finance and Actuarial Services prepared the MERS Annual Comprehensive Financial Report for the year ended December 31, 2024. Special thanks to the individuals who contributed significant amounts of time and energy to help complete this report.

Office of Internal Operations

Betsy Waldofsky, Finance Director

Danielle Williams, Senior Accountant

Courtney Allen, Senior Accountant

Britney Rosier, Accounting Analyst

Office of Investments

Peter Wujkowski, Investment and Administrative Officer

Cameron Holmes, Investment Analyst

Office of Strategic and External Affairs

Betsy Schaeffer, Digital Print and Mail Services Supervisor

James Scofield, Creative Design Manager

Janie Olivarez, Office Administrator

Jennifer Mausolf, Communications & Retirement Strategies Director

Diana Borders, Design Coordinator

Executive Office

Brian LaVictoire, Deputy General Counsel for Investments and Compliance

Carri Simon, Internal Auditor

Special thanks are also extended to Plante & Moran PLLC, Alerus Retirement Solutions, Gabriel Roeder Smith & Company, Bank of New York Mellon, and Tegrit Software Ventures, Inc.

FINANCIAL

INTRODUCTION

2024 annual comprehensive financial report

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INDEPENDENT AUDITOR'S REPORT



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Independent Auditor's Report

To the Retirement Board
Municipal Employees' Retirement System
of Michigan

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Municipal Employees' Retirement System of Michigan (MERS) as of and for the year ended December 31, 2024 and the related notes to the financial statements, which collectively comprise MERS' basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of Municipal Employees' Retirement System of Michigan as of December 31, 2024 and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of MERS and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about MERS' ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of MERS' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about MERS' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

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

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Municipal Employees' Retirement System of Michigan's basic financial statements. The schedule of administrative expenses, schedule of investment expenses, and schedule of payments to consultants are presented for the purpose of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of administrative expenses, schedule of investment expenses, and schedule of payments to consultants are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the Annual Comprehensive Financial Report. The other information comprises the introductory, investments, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements or whether the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on Summarized Comparative Information

We have previously audited Municipal Employees' Retirement System of Michigan's December 31, 2023 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated May 17, 2024. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2023 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated May 21, 2025 on our consideration of Municipal Employees' Retirement System of Michigan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Municipal Employees' Retirement System of Michigan's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Municipal Employees' Retirement System of Michigan's internal control over financial reporting and compliance.

Plante & Moran, PLLC

May 21, 2025

MANAGEMENT'S DISCUSSION AND ANALYSIS

This narrative overview and analysis of Municipal Employees' Retirement System of Michigan's (MERS or System) financial condition for the year ended December 31, 2024, is presented in conjunction with the Chief Executive Officer's Letter of Transmittal. The Financial Section is comprised of the Independent Auditor's Report, Management's Discussion and Analysis, 2 basic financial statements with explanatory notes, 3 required supplementary schedules with explanatory notes, and 3 supplementary expense schedules.

Financial Highlights

The following financial highlights occurred during the year ended December 31, 2024:

- Total fiduciary net position for the Defined Benefit Plan, Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle, 457 Program, Investment Services Program, and Individual Retirement Account Program increased by 7.7%, primarily due to market gains for the year. MERS finished the year with over \$17.3 billion in net fiduciary position.
- The portfolio investment returns saw a money-weighted return of 7.55% net of investment expenses for the year. The 10-year return was 6.62% net of investment expenses, below the long-term target of MERS' expected investment rate of return of 6.93%. The portfolio investment income was \$1.3 billion in 2024.
- Revenue from contributions and transfers-in decreased by 19.1% in 2024 due to fewer grant funds being received from the State of Michigan.
- Total annual benefits, transfers, and withdrawals increased by 7.2% for a total of \$1.3 billion. A majority of the increase was due to expected increases in defined benefit pension payments increasing by \$65.5 million. In addition, the Defined Benefit Plan experienced an employer withdrawal of \$25.3 million.
- Administrative expenses increased by 5.4% in 2024, going to \$35.6 million from \$33.7 million. Major drivers of this include personnel services, third party administrator costs, and depreciation.
- Investment expenses increased slightly from \$11.1 million in 2023 to \$11.4 million in 2024 due to increases in investment manager costs.
- The most recent MERS actuarial valuation, dated December 31, 2023, showed 711 of 748 defined benefit municipalities were funded 60% or better, with 96 municipalities over 100% funded.
- The difference between the MERS actuarial and fair value assets decreased, as the actuarial calculation for 2023 is 109.96% of the fair value of assets as calculated by the actuaries (the ratio was 115.77% as of December 31, 2022). Total Defined Benefit Plan actuarial assets and fair value of assets were valued at \$12.7 billion and \$11.0 billion respectively on December 31, 2023.
- MERS invested \$5.4 million in capital projects for 2024 with a large portion dedicated to upgrading the pension administration system. The MERS investment in all capital assets is \$25.7 million, net of accumulated depreciation.

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

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

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

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

Required Supplementary Information

1. Schedule of Annual Money Weighted Rates of Return
2. Schedule of Employer Contributions
3. Schedule of Changes in Employer Net Pension Liability/(Asset) and Related Ratios

Supplementary Expense Schedules

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

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

Comparison Statement of Fiduciary Net Position (Dollars in Thousands)

	December 31, 2024	December 31, 2023	\$ Increase (Decrease)	% Increase (Decrease)
Assets				
Cash and Short-Term Investments	\$40,580	\$44,073	\$(3,493)	-8%
Receivables	67,014	61,314	5,700	9%
Loans	11,508	9,518	1,990	21%
Investments, at fair value	17,241,244	15,985,532	1,255,712	8%
Invested Securities Lending Collateral	909,601	642,118	267,483	42%
Prepays/Other Assets	523	629	(106)	-17%
Net Capital Assets	25,717	26,431	(714)	-3%
Total Assets	18,296,187	16,769,615	1,526,572	9%
Deferred Outflow of Resources				
Outflows Related to Pension	12,272	13,892	(1,620)	-12%
Liabilities				
Purchase of Investments	19,550	2,581	16,969	657%
Securities Lending Collateral	909,601	642,118	267,482	42%
Administrative/Investment Costs	15,831	10,667	5,164	48%
Total Liabilities	944,982	655,366	289,615	44%
Deferred Inflow of Resources				
Inflows Related to Pension	-	-	-	0%
Net Position - Restricted for:				
Pensions	14,579,563	13,693,353	886,210	6%
Postemployment Benefits Other than Pensions	2,728,935	2,380,022	348,913	15%
Pool Participants	54,979	54,766	213	0%
	\$17,363,476	\$16,128,141	\$1,235,336	8%

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

	December 31, 2024	December 31, 2023	\$ Increase (Decrease)	% Increase (Decrease)
Additions				
Contributions/Transfers-In	\$1,292,197	\$1,596,643	\$(304,446)	-19%
Investment Net Income (Loss) Investing Activities	1,303,726	1,704,629	(400,903)	-24%
Investment Net Income-Securities Lending	4,562	2,689	1,873	70%
Miscellaneous Income	12,781	9,783	2,998	31%
Total Additions	2,613,266	3,313,744	(700,478)	-21%
Deductions				
Benefits/Transfers and Withdrawals	1,342,277	1,252,691	89,586	7%
Forfeitures, Miscellaneous	9	3	6	186%
Administrative Expense	35,643	33,745	1,898	6%
Total Deductions	1,377,930	1,286,439	91,491	7%
Net Increase/Decrease	1,235,334	2,027,305	(791,971)	-39%
Net Position - Beginning of Fiscal Period	16,128,142	14,100,837	2,027,305	14%
Net Position - End of Fiscal Period	\$17,363,476	\$16,128,142	\$1,235,334	8%

Analysis of Fiduciary Net Position

The fiduciary net position increased by \$1.2 billion over the previous fiscal year primarily due to investment gains. The MERS receivables consist chiefly of investment and employer contribution billings that settled in early 2025.

Additions to the plan primarily consisted of investment gains and contributions. Investment Total net gains amounted to \$1.3 billion compared to a gain in 2023 of \$1.7 billion. Combined employer and employee contributions decreased by \$304.4 million compared to 2023 due to the prior year receiving \$464.4 million from the state of Michigan through the Protecting MI Pension Grant. In September of 2024, MERS employers received \$23.5 million in grant funds through the MI Local Retirement Grant Program. Grant funds aside, traditional contributions were up for 2024, compared to 2023, due to an increase in extra voluntary employer contributions.

Deductions from the plan for 2024 are primarily due to retirement benefit payments. Benefit payments paid out to participants and employers totaled \$1.3 billion, which is up 7.2% from December 31, 2023. Most of the increase is attributed to the Defined Benefit Plan increases in retirees and their payments. In addition, the Defined Benefit Plan experienced an employer withdrawal, taking \$25 million out of the plan.

MERS had capital assets, net of accumulated depreciation, of \$25.7 million. Of the total, \$19.6 million is the software needed to run the pension administration and financial programs, \$541 thousand is office furniture and equipment, and \$5.6 million is in buildings and land. A gain of \$216 thousand due to the building sale in 2024 that had been leased was realized this year.

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 2025, accrued administrative and investment expenses and securities' lending collateral.

Investment Activities

The performance of the Defined Benefit Portfolio was up for the year and surpassed the investment benchmark. The money-weighted return (net of investment expenses) of 7.55% was above the 6.93% actuarial return assumption target for the year. By comparison, for 3-, 5-, and 10-year periods, the net returns were 2.52%, 6.91%, and 6.62%, respectively. Net investment income (net appreciation in fair value less investment expenses plus securities lending income) totaled \$1.3 billion. A further detailed analysis of investment returns is in the Investments Section.

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

MERS is an investment fiduciary under the Public Employee Retirement System Investment Act, PA 314 of 1965, MCL 38.1132 et seq., as amended, and, as such, is subject to the "prudent person" standard of care with respect to the management and investment of the System's assets. This standard requires that MERS discharge its duties solely in the interest of the System's participants and beneficiaries, and with the diligence, care, and skill that a prudent person would ordinarily exercise under similar circumstances.

In accordance with its fiduciary duties, the Board has adopted an investment policy that outlines the investment goals, objectives, and policies of the System's pension fund. The investment policy guides the Board, Investment Committee, and Office of Investments in effectively and prudently monitoring and administering MERS investments. A summary of the total assets is found in the Investments section of the Annual Comprehensive Financial Report.

Funding Status

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

The Board has adopted a funding policy for MERS to achieve the following major objectives:

- Adequacy
- Inter-Period Equity (in particular intergenerational equity) and Transparency
- Contribution Stability and Governance

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

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

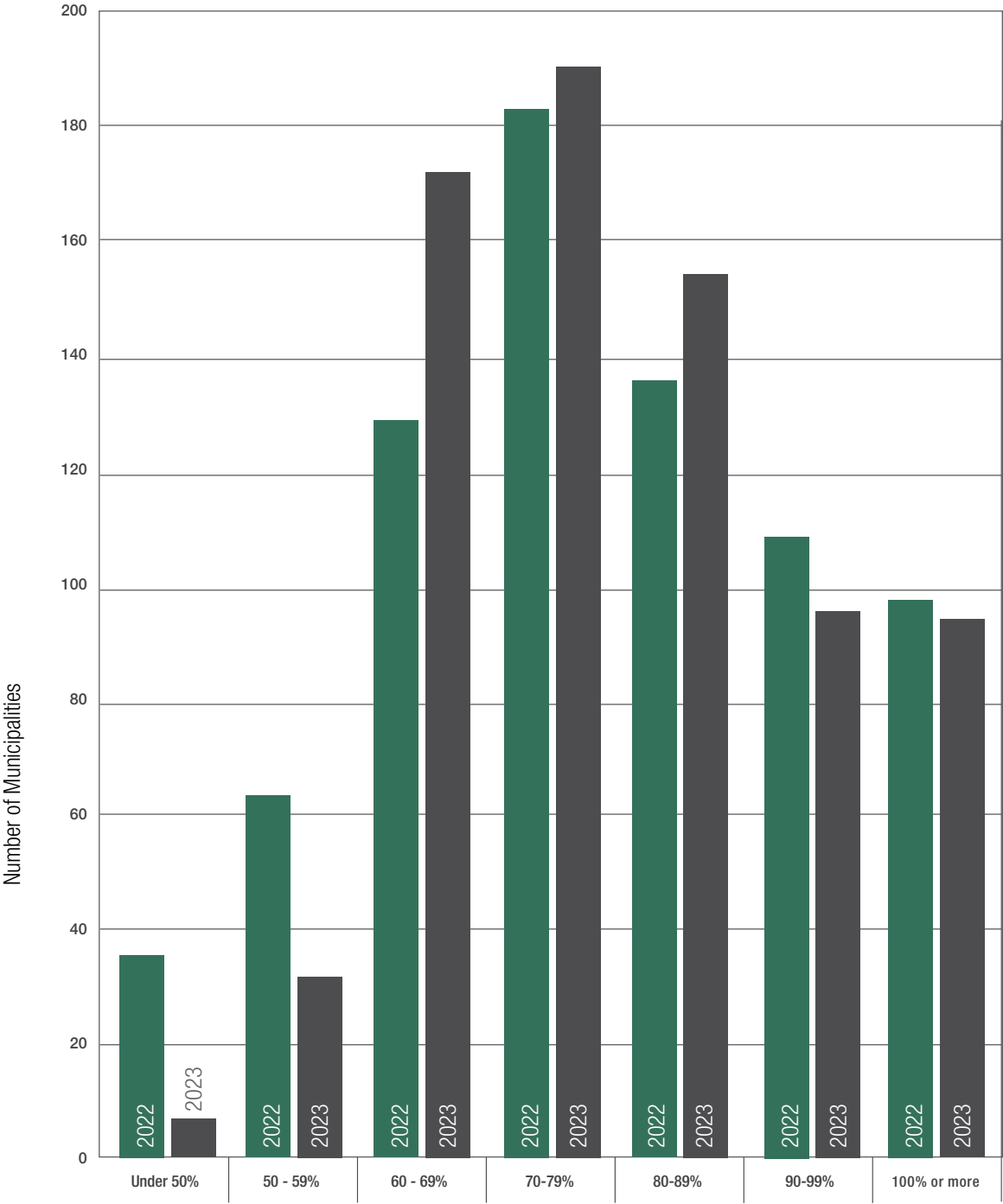
The most recent MERS actuarial valuation is as of December 31, 2023. On that date, of all 748 Defined Benefit and Hybrid municipalities, 711 municipalities in MERS were funded at 60% or higher (95% of all Defined Benefit and Hybrid municipalities) and 96 municipalities (12.8% of all Defined Benefit and Hybrid municipalities) are funded over 100%. The median funded percentage based on actuarial assets was 78% in both 2023 and 2022.

MERS partners with our local governments to achieve the following:

- Determine the best retirement fit for each municipality
- Offer cost-reducing strategies
- Provide fiscal best practices

For the December 31, 2023 valuation, the actuarial value of assets is equal to 109.96% of fair value (compared to 115.77, 99.85%, 97.24%, and 101.32% in 2022, 2021, 2020, and 2019, respectively).

Distribution of Funded Percentage of Actuarial Accrued Liability among the 748 participating municipalities as of December 31, 2023, and the 746 participating municipalities as of December 31, 2022



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Statement of Fiduciary Net Position as of December 31, 2024 (Dollars in Thousands)

	Pension (and Other Employee Benefits) Trust Funds		
	Defined Benefit	Defined Contribution	Health Care Savings Program
Assets			
Cash and Short-Term Investments	\$40,017	\$20	\$9
Receivables			
Employer and Member Contributions	51,496		
Sale of Investments	1,517	8	3
Investment Income	5,583	28	12
Loans		9,606	
Intercompany Receivables		782	196
Other	1,813		
Total Receivables/Loans/Other	60,409	10,424	211
Investments			
Global Equities	6,170,655	30,540	13,658
Global Fixed Income	2,969,890	14,698	6,573
Private Investments	3,294,785	16,306	7,293
Short Term Interest Fund	485,533	2,403	17,167
Land	1,402		
Mutual Funds		1,465,350	547,413
Self Directed Accounts		11,637	
Investments, at Fair Value	12,922,265	1,540,934	592,104
Invested Securities Lending Collateral	798,658	3,953	1,768
Prepaid Expenses/Other Assets	523		
Capital Assets, at cost, net of accumulated depreciation	25,717		
Total Assets	13,847,588	1,555,330	594,093
Deferred Outflow of Resources			
Outflows related to pension	12,272		
Liabilities			
Purchase of Investments	17,166	85	38
Securities Lending Collateral	798,658	3,953	1,768
Intercompany Payables	5,553		
Administrative and Investment Costs	10,212		
Total Liabilities	831,589	4,038	1,806
Deferred Inflow of Resources			
Inflows Related to Pension			
Net Position - Restricted for:			
Pensions	13,028,271	1,551,292	
Postemployment Benefits Other Than Pensions			592,286
Pool Participants			
Balance End of Fiscal Period	\$13,028,271	\$1,551,292	\$592,286

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

Pension (and Other Employee Benefits) Trust Funds			Investment Trust Funds		
457 Program	Individual Retirement Account	Retiree Health Funding Vehicle	Investment Services Program	As of December 31, 2024	As of December 31, 2023
\$8	\$1	\$508	\$17	\$40,580	\$44,073
				51,496	51,133
3	0	190	6	1,727	2,211
11	1	700	24	6,358	4,651
1,902				11,508	9,518
836		3,675	130	5,620	2,572
				1,813	748
2,752	1	4,565	160	78,522	70,833
12,343	891	773,541	26,206	7,027,834	7,201,992
5,940	429	372,299	12,613	3,382,443	3,154,822
6,590	476	413,027	13,993	3,752,470	3,706,675
972	70	60,865	2,062	569,071	163,101
				1,402	1,402
459,613	18,993	978		2,492,346	1,746,335
4,041				15,678	11,205
489,499	20,859	1,620,710	54,874	17,241,244	15,985,532
1,597	115	100,118	3,392	909,601	642,118
				523	629
				25,717	26,431
493,857	20,976	1,725,901	58,443	18,296,187	16,769,616
				12,272	13,892
34	2	2,152	73	19,550	2,581
1,597	115	100,118	3,392	909,601	642,118
	67			5,620	2,571
				10,212	8,095
1,631	184	102,270	3,465	944,982	655,366
				-	-
				14,579,563	13,693,353
492,225	20,792	1,623,632		2,728,935	2,380,022
			54,979	54,979	54,766
\$492,225	\$20,792	\$1,623,632	\$54,979	\$17,363,476	\$16,128,141

Statement of Changes in Fiduciary Net Position for the Year Ended December 31, 2024 (Dollars in Thousands)

	Pension (and Other Employee Benefits) Trust Funds		
	Defined Benefit	Defined Contribution	Health Care Savings Program
Additions			
Contributions and Transfers-In			
Employer Contributions and Other	\$808,591	\$97,597	\$68,224
Nonemployer Contributing Entity Contributions	23,531		
Plan Member Contributions	91,136	61,664	19,406
Total Contributions and Transfers-In	923,258	159,261	87,630
Net Appreciation/Depreciation in Fair Value	682,396	165,668	55,557
Interest and Dividend Income	243,333	1,204	539
Subtotal of Investment Income/(Loss)	925,729	166,872	56,095
Less Investment Expense	10,338	122	46
Net Investment Income/(Loss) Before Securities Lending Activities	915,390	166,750	56,049
Securities Lending Activities			
Securities Lending Income	32,153	159	71
Securities Lending Expenses			
Borrower Rebates (Income)	28,088	139	62
Management Fees	59	0	0
Total Securities Lending Expenses	28,147	139	62
Net Income from Securities Lending	4,006	20	9
Total Net Investment Income/(Loss)	919,396	166,770	56,058
Miscellaneous Income	338	4,852	1,728
Total Additions	1,842,992	330,883	145,416
Deductions			
Benefits/Transfers and Withdrawals	1,169,356	87,780	19,293
Forfeitures and Other Miscellaneous	9		
Administrative Expenses	26,564	3,957	1,456
Total Deductions	1,195,929	91,737	20,748
Net Increase/(Decrease)	647,062	239,146	124,668
Net Position - Beginning of Fiscal Period	12,381,209	1,312,145	467,618
Net Position - End of Fiscal Period	\$13,028,271	\$1,551,292	\$592,286

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

Pension (and Other Employee Benefits) Trust Funds			Investment Trust Funds		
457 Program	Individual Retirement Account	Retiree Health Funding Vehicle	Investment Services Program	For the Year Ended December 31, 2024	For the Year Ended December 31, 2023
\$4,430	\$-	\$32,585	\$91	\$1,011,518	\$900,503
		2,652		26,183	464,446
77,237	5,053			254,496	231,694
81,667	5,053	35,237	91	1,292,197	1,596,643
46,470	1,815	83,101	2,987	1,037,994	1,469,879
487	35	30,504	1,033	277,134	245,868
46,956	1,850	113,605	4,020	1,315,128	1,715,747
40	2	826	28	11,402	11,118
46,916	1,848	112,779	3,992	1,303,726	1,704,629
64	5	4,031	137	36,619	36,399
56	4	3,521	119	31,990	33,642
	0	7	0	67	68
56	4	3,529	120	32,057	33,710
8	1	502	17	4,562	2,689
46,924	1,849	113,281	4,009	1,308,288	1,707,318
1,499	62	4,159	143	12,781	9,783
130,090	6,964	152,678	4,243	2,613,266	3,313,744
35,077	867	25,969	3,936	1,342,277	1,252,691
				9	3
981	75	2,518	94	35,644	33,745
36,058	941	28,487	4,030	1,377,930	1,286,439
94,032	6,023	124,191	214	1,235,334	2,027,305
398,193	14,769	1,499,441	54,766	16,128,142	14,100,837
\$492,225	\$20,792	\$1,623,632	\$54,979	\$17,363,476	\$16,128,142

NOTES TO BASIC FINANCIAL STATEMENTS

Year ended December 31, 2024

1. REPORTING ENTITY AND PLAN DESCRIPTION

MERS is a statutory public corporation and governmental retirement plan qualified under Section 401(a) of the Internal Revenue Code, independent from the State of Michigan, which was established to provide a pooled program for retirement benefits on a voluntary basis to the State of Michigan's municipal and court employees. MERS has helped provide retirement plans for municipal and court employees for over 70 years.

MERS was established by the Michigan Legislature under Public Act 135 of 1945. This act was repealed and replaced by the successor Municipal Employees' Retirement Act of 1984 (PA 427) (MERS Act). On August 15, 1996, pursuant to 1996 PA 220, MERS became independent from the State of Michigan.

Since 1996, MERS is solely administered by a 9-member retirement board (Board). The Board consists of the following members, each of whom, except for the Retiree Member and the Board Appointees, shall be from a different county at the time of election:

- Expert Members: 2 members, appointed by the Board, who have knowledge or experience in retirement systems, administration of retirement systems, investment management, or advisory services
- Retiree Member: 1 member, a retiree of the System, is appointed by the Board
- Officer Members: 3 officers of participating municipalities or courts, who are elected by the delegates at the MERS Annual Conference
- Employee Members: 3 employees who are not officers of a participating municipalities or courts, who are elected by the delegates at the MERS Annual Conference

The regular term of office for members of the Board is 3 years. Members of the Board serve without compensation with respect to their duties but are reimbursed by the System for their actual and necessary expenses incurred in the performance of their duties.

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

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

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

The Internal Revenue Service (IRS) has determined that MERS' Defined Benefit, Defined Contribution and Hybrid Plans are governmental plans that are tax-qualified trusts under Internal Revenue Code (the Code or IRC) Section 401(a) and tax-exempt under Section 501(a). The IRS issued the most recent Letter of Favorable Determination for MERS on October 18, 2016. 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 retiree's pension becomes subject to taxation upon periodic distribution unless the Distribution is "rolled over" if permitted by law. 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).

IRC Section 401(a) (17) limits the amount of compensation that can be taken into account for benefit calculation purposes and, correspondingly, limits the amount of employer and employee contributions. Compensation in excess of the limit (\$330,000 and \$345,000 for 2023 and 2024 respectively) will not be included by MERS in any

benefit determination. Employee contributions in excess of the limit will not be collected or accepted, nor included in 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 the Michigan Public Employee Benefit Protection Act, MCL 38.1686 (2002 PA 100). The QEBA is a separate plan and is annually cash-funded by the affected participating municipality or court. The Board established the MERS QEBA in 2003 solely for the purpose of providing retirees and beneficiaries that portion of the retirement allowance exceeding the Section 415 limits, which is otherwise not payable by the trust under the terms of the MERS qualified plan. The IRS approval of the QEBA was pursuant to a Private Letter Ruling issued on 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 IRC. On this date, the MERS Plan Document of 1996 was first determined by the IRS 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 participants with an account they manage. At retirement, benefits are based solely on the amount contributed by the participant and employer and the performance of investments. IRC Section 415(c) imposes certain limitations on the annual additions that can be accepted by the MERS qualified trust (for 2024, the limit was the lesser of \$69,000 or 100% of compensation). The plan has several strategic investment categories designed to help participants meet their retirement goals. All participants have access to the MERS streamlined investment menu that allows for simple and strategic investing.

The MERS Hybrid Plan is an option for municipalities that includes both a defined benefit and a defined contribution component. The defined benefit component (Part I) is employer-funded, with various benefit multipliers. The defined contribution component (Part II) is a combination of employer and participant contributions that are invested in mutual funds selected by the individual participant. On the financial statements, the Hybrid Plan is reflected in both Defined Benefit and Defined Contribution columns.

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

The MERS Health Care Savings Program became operational in June 2004 and was made available to all municipalities in Michigan. The employer-sponsored program provides medical reimbursement accounts to participants. Medical expenses are reimbursed, as defined in Code Section 213, once participants terminate employment, are on medical leave for 6 months or longer, or are on disability from any public pension plan.

There are 4 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 and Code Sections 106 and 213, reimbursements for medical expenses are tax-exempt for the participant, their spouse, and/or Code Section 152 dependent(s). The Health Care Savings Program accounts are invested in the MERS Investment Menu, and earnings are tax-exempt as a result of the MERS Private Letter Ruling. Plan provisions and requirements are specified in the MERS Health Care Savings Program and Retiree Health Funding Vehicle Plan Document and Trust.

The MERS Retiree Health Funding Vehicle became operational in the fall of 2004 and was made available to all municipalities in Michigan. Participating municipalities can contribute monies to the Trust as desired and no contribution method is imposed. These funds constitute a health care fund, which enables municipalities to accumulate monies to provide or subsidize health benefits for retirees and beneficiaries. MERS does not provide benefits, only the funding vehicle for local governments. The Retiree Health Funding Vehicle accounts are invested in the MERS portfolio choices and earnings are tax-exempt as a result of the MERS Private Letter Ruling. Plan

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provisions and requirements are specified in the MERS Health Care Savings Program and Retiree Health Funding Vehicle Plan Document and Trust.

The MERS 457(b) Deferred Compensation Program was established as a deferred compensation plan and trust and became operational on November 8, 2011. Its purpose is to provide benefits under the Program to participants and beneficiaries upon retirement, termination, disability, or death, upon the terms and conditions, and subject to the limitations contained in the Program. The Program was created for the exclusive benefit of eligible participants and their beneficiaries of any employer electing to participate in the Program. The Program is intended to comply with Code Section 457(b). All assets held in connection with the Program, including all contributions and amounts of compensation deferred pursuant to the Program, all property and rights acquired or purchased with such amounts, and all income attributable to such amounts, property, or rights shall be held in trust for the exclusive benefit of participants and their beneficiaries under the Program. No part of the assets and income shall be used for, or diverted to, purposes other than for the exclusive benefit of participants and their beneficiaries and for defraying reasonable expenses of the Program.

The Investment Services Program is an investment trust fund that is available to all municipalities in Michigan to invest IRC 401(a) funds through the MERS portfolio while maintaining administrative functions at the municipal level. The program was established by the Board in March 2006 and began operations in June 2006. The Investment Services Program trust fund complies with all the requirements imposed by the Public Employee Retirement System Investment Act, 1965 PA 314. Like the other non-retirement plans, participation in the Investment Services Program alone does not qualify as membership in MERS, and the participating employer that does not otherwise participate in MERS' 401(a) plan, does not have a vote at the MERS Annual Conference.

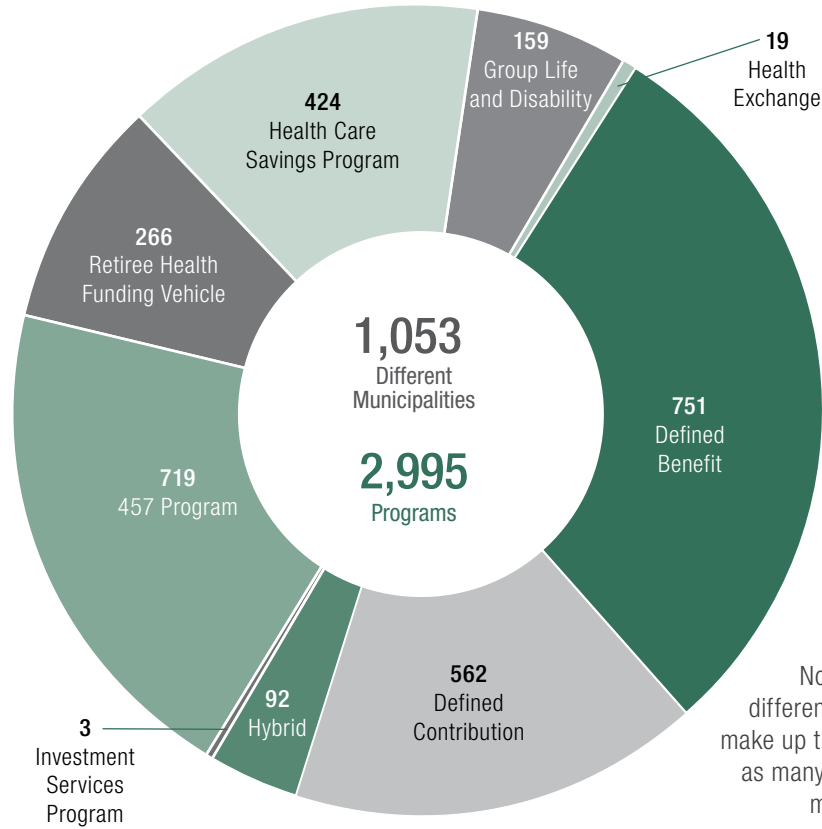
The MERS-deemed Individual Retirement Account (IRA) was established in 2018 and is a tax-advantaged retirement account for the exclusive benefit of current and former employees of MERS-partnered municipalities and their spouses. MERS offers 2 types of IRAs: A Roth IRA that provides tax-free income in retirement and a traditional IRA that allows tax-deductible contributions now. Both allow the participant to withdraw money at any time, without penalty, for qualified expenses including education expenses, buying a first home, and some medical expenses.

Through The Standard Insurance Company, MERS offers quality group life and disability insurance to Michigan municipalities. This group buying program offers comprehensive benefit features, a variety of plan designs, and family-friendly provisions at an affordable cost. The Standard Insurance Company fully administers the plan and MERS does not have any financial liability for the arrangement. In exchange for offering the insurance, MERS receives a small reimbursement that is reported in the service fee line item of the defined benefit administrative expenses.

MERS partners with the Mercer Marketplace 365 to offer a private healthcare exchange for eligible members. A private exchange is a marketplace where retirees can purchase benefits from the carrier of their choice with a wide variety of coverage options for pre-65 and Medicare-eligible retirees. Participants may use their MERS Health Care Savings Program funds for insurance premiums, co-payments, deductibles, etc., paid to providers available on the Exchange. The individual Health Care Savings Program account would reflect any reimbursement for eligible expenses as a distribution. As part of its collaboration agreement, MERS receives a quarterly reimbursement from Mercer to promote this partnership, which is reported in the service fee line item of the defined benefit administrative expenses. Employers who partner with Mercer to manage their retiree group health plan receive a reimbursement for their retiree member list.

Any "municipality" (a term defined by Section 2b(2) of the MERS Act, MCL 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 subject to approval by a majority vote of the municipality's governing body.

MERS Participating Municipalities



MERS Participants

	Defined Benefit	Defined Contribution	Hybrid	Health Care Savings Program	457	Health Exchange	IRA
Active	25,138	22,924	4,758	27,895	12,243	642	1,258
Deferred	7,748	NA	852	NA	NA	NA	NA
Retired	47,050	NA	362	NA	NA	NA	NA
Contributions not Vested	15,895	NA	636	NA	NA	NA	NA
Terminated	NA	12,194	NA	18,286	4,329	NA	NA
Product Totals	95,831	35,118	6,608	46,181	16,572	642	1,258
Total MERS Accounts*							202,210

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

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

MERS' financial statements are not included in the financial statements of any other organization.

Blended Component Units

MERS Real Estate Corporation (MREC) is governed by a 3-member board appointed by MERS as the sole member. Although it is legally separate from MERS, MREC is reported as if it were part of MERS because it is solely owned by MERS to function as a real estate holding company for the properties owned by MERS.

Cost Allocation

The costs of administering the MERS Defined Benefit Plan are allocated proportionally based on the average daily balance asset size to the municipalities along with investment gains/losses on a quarterly basis.

The costs of administering the MERS Defined Contribution Plan, Health Care Savings Program, Retiree Health Funding Vehicle, Investment Services Program and IRAs are allocated out to the employers and participants based on an administrative expense percentage for each employer and participant as well as their investment expenses based on fund choices.

Basis of Accounting

The financial statements for MERS are prepared on an economic resource measurement focus and accrual basis in accordance with Generally Accepted Accounting Principles (GAAP) as applicable to government organizations in the U.S. The preparation of financial statements, in conformity with GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

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

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

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

Post-Employment Benefits

MERS offers pension benefits to its retirees through the MERS Defined Benefit Plan. MERS records a net pension asset or liability for the difference between the total pension liability calculated by the actuary and the pension Plan's fiduciary net position. To measure the net pension asset or liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the pension plan and additions to/deductions from the pension plan's fiduciary net position have been determined on the same basis as they are reported by the pension plan. For this purpose, benefit payments including refunds of employee contributions, are recognized when due and payable in accordance with the benefit terms. Investments, which are part of the plan assets credited to MERS, are reported at fair value.

MERS does not provide other post-employment benefits to its employees and accordingly does not have any expense or liabilities for these benefits.

Fair Value of Investments

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. Other investments that do not have established markets are recorded at an estimated fair value. Real estate and private equity investments typically have a quarter lag in reporting, but the values as of December 31 are estimated based on the third-quarter capital statements plus fourth-quarter cash flows, adjusted for any other known events.

Investment Act Disclosures

The Public Employee Retirement System Investment Act, MCL 38.1132, et seq. 1965 PA 314 requires MERS to follow certain financial management practices and provide related disclosures, as defined by Act 314. Compliance with these requirements is achieved in this Annual Comprehensive Financial Report found at mersofmich.com. MERS limits board member professional training, education and travel expenses in compliance with MCL 38.1133(6) and is reported in the Schedule of Administrative Expenses.

Capital Assets

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

Capital Assets

Capital Assets	Buildings	Land	Leasehold Improvements	Office Furniture and Equipment	Software	Total Capital Assets
Balances Dec 31, 2023	\$8,193,812	\$1,266,516	\$357,715	\$3,752,170	\$42,962,965	\$56,533,178
Additions	101,059			131,131	5,196,745	5,428,935
Deletions and Transfers	(1,344,209)		(357,715)	(599,699)	(9,439,899)	(11,741,523)
Balances Dec 31, 2024	6,950,661	1,266,516	-	3,283,602	38,719,812	50,220,590
Accumulated Depreciation						
Balances Dec 31, 2023	2,702,058		306,982	3,193,933	23,899,197	30,102,171
Depreciation Expense	394,869		20,614	147,919	4,380,696	4,944,098
Deletions and Transfers	(483,194)		(327,597)	(599,699)	(9,132,219)	(10,542,710)
Balances Dec 31, 2024	2,613,732		(0)	2,742,153	19,147,674	24,503,559
Net Capital Assets Dec 31, 2024	\$4,336,929	\$1,266,516	\$0	\$541,448	\$19,572,138	\$25,717,031

Total Columns on Statements

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

The basic financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the government's financial statements for the year ended December 31, 2023, from which the summarized information was derived.

New Accounting Pronouncements

In December 2023, the Governmental Accounting Standards Board issues GASB Statement No. 102, Certain Risk Disclosures. This Statement requires a government to assess whether a concentration or constraint makes the primary government reporting unit or other reporting units that report a liability for revenue debt vulnerable to the risk of a substantial impact. Additionally, this Statement requires a government to assess whether an event or events associated with a concentration or constraint that could cause the substantial impact have occurred, have begun to occur, or are more likely than not to begin to occur within 12 months of the date the financial statements are issued. If a government determines that those criteria for disclosure have been met for a concentration or constraint, it should disclose information in notes to financial statements in sufficient detail to enable users of financial statements to understand the nature of the circumstances disclosed and the government's vulnerability to the risk of a substantial impact. The requirements of this Statement are effective for fiscal years beginning after June 15, 2024, and all reporting periods thereafter. MERS will implement this standard in the 2025 fiscal year.

In April 2024, the Governmental Accounting Standards Board issues GASB Statement No. 103, Financial Reporting Model Improvements. This Statement is to improve key components of the financial reporting model to enhance its effectiveness in providing information that is essential for decision making and assessing a government's accountability. The requirements of this Statement are effective for fiscal years beginning after June 15, 2025, and all reporting periods thereafter. MERS will implement this standard in the 2026 fiscal year.

In September 2024, the Governmental Accounting Standards Board issues GASB Statement No. 104, Disclosure of Certain Capital Assets. This Statement requires certain types of capital assets to be disclosed separately in the capital assets note disclosures required by Statement 34 and also requires additional disclosures for capital assets held for sale. The requirements of this Statement are effective for fiscal years beginning after June 15, 2025, and all reporting periods thereafter. MERS will implement this standard in the 2026 fiscal year.

3. CONTRIBUTIONS AND RESERVES

Contributions

The Defined Benefit Plan contribution funding requirements are actuarially determined using the entry age normal actuarial cost method and are based upon the benefit plan adopted by the municipality. Some municipalities fund their entire pension obligations solely from employer contributions. Most municipalities jointly fund pension obligations from employee and employer contributions. Monthly employee contributions are based upon a percentage of actual compensation as determined by the employer. Employer contributions are based upon projected or accrued compensation as determined by an annual actuarial valuation. For details about normal cost and total employer contributions by employer, please see the MERS Summary Actuarial Report found on our website at www.mersofmich.com. Employee contributions are held in individual member accounts that are credited with interest annually. Pursuant to the Board resolution adopted November 9, 2005, the interest rate for each year beginning in 2005 is the 1-year T-bill rate as of December 31 each year for the ensuing December 31 employee interest calculation. It is also used for interest calculations the subsequent year for those employees requesting a refund of their contributions.

The Michigan Department of Treasury (Treasury) was appropriated funds for the Protecting MI Pension and MI Local Retirement Grant Programs. MERS, as the plan sponsor, received payments directly from Treasury through these grants totaling \$26.2 million that were applied to qualified employer accounts within the MERS Defined Benefit Plan and Retiree Health Funding Vehicle. The funds were recorded as nonemployer contributing entity contributions for 2024.

Contributions to the Defined Contribution Plan are reported directly to the 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 IRC. Municipalities may elect to have mandatory employee contributions where the participant pays a fixed dollar or percentage. If the municipality has a match contribution type, the participant will elect the amount of contribution at the time of enrollment and will not be allowed to make any changes to that contribution amount. Municipalities may also choose to allow additional voluntary after-tax contributions through payroll deduction. Municipalities may also choose to offer matching contributions into the Defined Contribution Plan based on elective deferrals made by participants to the MERS 457(b) Program.

Participating municipalities may, upon adoption of a Defined Contribution Plan resolution for new hires, offer current defined benefit employees an opportunity to opt into the Defined Contribution Plan. MERS transfers the actuarial present value of the employee's accrued benefit in the Defined Benefit Plan into the employee's Defined Contribution Plan account (at a stipulated funded ratio between 80%-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.

Contributions to the 457 Program are made pre-tax and can be either a flat dollar amount or a percentage of payroll. An employer may also adopt a Roth provision allowing for after-tax contributions. Participation in the program is voluntary, so contributions can start and stop at any time, as well as increase or decrease.

Participants can make contributions to the MERS IRAs at any frequency and work directly with the MERS third-party administrator to set this up. It is the participant's responsibility to ensure they do not exceed the IRA limits. Contributions are made post-tax to the Roth IRA, and participants may be able to deduct the contributions on their federal income tax returns for the traditional IRA.

Contributions to the Health Care Savings Program can come in many different forms based on the election of the employer. Mandatory pre-tax salary reductions can be elected based on a fixed dollar or required percentage that is mandatory for the entire group of participants or through a leave conversion election where vacation, personal time, sick time, or severance can be deposited into a Health Care Savings Program upon termination. In addition, post-tax voluntary employee contributions can be elected and can start or stop at any time.

Contributions to the Retiree Health Funding Vehicle and Investment Services Program can be made at any frequency for any amount the employer wishes.

Defined Benefit Plan Reserves

Pursuant to the MERS Plan Document, three reserves have been established. See “Schedule of Changes in Reserves” in the Statistical Section.

- **Reserve for Employee Contributions**
All additions to and deductions from this reserve are for the Defined Benefit Plan and the Defined Benefit portion of the Hybrid Plan. Employee contributions and interest are credited to this reserve. Also credited are monies received from the purchase of service credit and monies received in repayment of previously refunded contributions. The reserve is reduced by amounts paid to employees who terminate employment and request refunds, and by amounts transferred into the “Reserve for Employer Contributions and Benefit Payments” upon an employee’s retirement. Interest is credited to each employee’s account, as provided in the Board’s November 9, 2005 resolution. December 31, 2024, the balance was \$1.0 billion.
- **Reserve for Employer Contributions and Benefit Payments**
All additions to and deductions from this reserve are for the Defined Benefit Plan and the Defined Benefit portion of the Hybrid Plan. All employer contributions are credited to this reserve. Net income is allocated to this reserve from the “Reserve for Expenses and Undistributed Investment Income.” At retirement, the employee’s accumulated contributions, if any, and interest are transferred into this reserve from the “Reserve for Employee Contributions.” Monthly benefits paid to retirees reduce this reserve. December 31, 2024, the balance was \$12.0 billion.
- **Reserve for Expenses and Undistributed Investment Income**
All additions to and deductions from this reserve are for the Defined Benefit Plan and the Defined Benefit portion of the Hybrid Plan. All investment earnings and other monies received that are not dedicated to other areas are credited to this reserve. All administrative and investment expenses are paid from this reserve. Transfers from this reserve to the “Reserve for Employer Contributions and Benefit Payments” are at allocation rates determined by the Board. The unallocated reserve at the end of December 31, 2024, was \$27.7 million.

Other Reserves

Each of the products outside of the Defined Benefit Plan has its own reserve for additions and deductions to be recorded. MERS maintains separate employer account records for each municipality within the products. The December 31, 2024 reserve balances were as follows: Defined Contribution Plan \$1.6 billion, Health Care Savings Program \$592.2 million, Retiree Health Funding Vehicle \$1.6 billion, Investment Services Program \$55.9 million, 457(b) Program \$492.2 million and Individual Retirement accounts \$20.8 million. A more detailed analysis of the reserves can be found in the Statistical Section.

4. DEFERRED RETIREMENT OPTION PROGRAM (DROP)

Deferred Retirement Option Program (DROP): Traditional

If a municipality has added a DROP benefit to its plan, a participant covered by the Benefit Program DROP may, when eligible for retirement, choose a specified DROP period in which s/he will cease to accrue any additional retirement benefits, but remain employed by the participating municipality or court. The participant must elect a DROP end date at least 6 months after the beginning date, but no more than 60 months after the beginning date, in 1-month increments.

Upon the participant's election of DROP and the receipt of an application to enroll in DROP, MERS will calculate the participant's service retirement and benefit payment as of the beginning date. The System shall also calculate any age differential between the participant and the participant's beneficiary as of the calendar year of the DROP exit date in accordance with Treasury Regulation 26 CFR § 1.401(a)(9)-6. Upon the beginning date of the DROP period, the participant shall be responsible to continue paying participant contributions, if any.

On the next available benefit payment date after processing is complete, and monthly thereafter, an amount equal to 100% of the monthly service retirement benefit payment the participant would have received if he or she had retired as of the DROP beginning date will be credited to a notional account for the benefit of the participant.

Funds in the DROP account are credited with interest in the amount of 3% annually or prorated in the event of a DROP period that is less than 12 months.

Upon the end date, the participant shall receive a lump-sum distribution of the participant's DROP account and on the first day of the calendar month following the end date, the participant will begin receiving monthly service retirement benefit payments.

Deferred Retirement Option Program (DROP+) Partial Lump Sum

If a participant is covered by the Benefit Program DROP+ and retires at least 12 months after first becoming eligible for unreduced benefits, they have the option to receive a partial lump sum and a reduced monthly benefit. The participant can elect a lump sum equal to 12, 24, 36, 48, or 60 times their monthly accrued benefit.

For each 12 months included in the lump sum, the participant's lifetime benefit is reduced by the DROP+ percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: 6, 7, 8, 9, or 10%.

As of June 30, 2013, Benefit Program DROP+ may no longer be adopted; 2 employers adopted the program prior to it ending.

The balance for the DROP accounts was \$1,572,183 for the year ending December 31, 2024.

5. INVESTMENTS AND DEPOSITS

The Board has the fiduciary responsibility and authority to oversee the investment portfolio. Various professional investment managers are contracted to manage the System's assets. All investment decisions are subject to the Michigan Public Employee Retirement System Investment Act (PERSIA), 1965 PA 314, MCL 38.1132, et seq., and the investment policy established by the Board. Michigan law allows diverse investment in stocks, corporate and government bonds, mortgages, real estate, and other investments. PERSIA requires that the System invest its assets prudently and solely in the interest of the participants and beneficiaries. Under Plan Document Section 87(6), PERSIA, and Internal Revenue Code Section 401(a)(2), the investments shall be made for the exclusive purpose of providing benefits to the participants and their beneficiaries and defraying reasonable expenses of the System.

The 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, 2024, all securities held met the required statutory provisions and Board policy.

MERS' asset allocation policy is an important determinant of achieving the investment goals of the Plan. MERS follows a Valuation Based Allocation (VBA) approach to allocate the Plan's assets. A proprietary model is utilized to evaluate market opportunities across investable asset classes and determine appropriate allocations. The VBA model is updated on a real-time basis, resulting in ongoing asset allocation and portfolio rebalancing within established risk parameters and Board approved asset class allocation ranges. Factors influencing the Plan's asset allocation include projected actuarial liabilities, historical and expected long-term asset class returns and risk, future economic conditions, inflation and interest rate risks, and liquidity requirements.

Investment manager selection is an important decision involving complex due diligence. Managers are selected after a lengthy process involving a review of quantitative and qualitative components. Policy objectives include focusing on stable, long-term, financially secure, experienced, and disciplined investment managers in the selection decision. Once selected, managers are monitored and reviewed for investment returns, asset allocation compliance, and market-related factors. Other investment processes and procedures include capital calls, cash flow reconciliations, trade settlements, regular portfolio reviews, monthly account reconciliation, performance reporting and review, periodic manager conference calls, and asset allocation reviews.

The annual money-weighted rate of return on pension plan investments is calculated as the internal rate of return on pension plan investments, net of investment expenses. This expresses investment performance adjusted for the changing amounts invested throughout the year, measured on monthly inputs with expenses measured on an accrual basis. For the year 2024, the annual money-weighted rate of return, net of investment expenses, measured on monthly inputs was 7.55% for the Defined Benefit Plan. (See Required Supplemental Information).

The MERS Investment Policy is adopted by the Board with the Chief Executive Officer (CEO) being responsible for all activities and duties of the System. The CEO has delegated to the Office of Investments authority to manage MERS pension funds, and other trust funds, and direct all investment management activities not reserved by the Board.

The Board is the System's sole fiduciary and sets general investment policy, including the Plan's asset allocation and Investment Policy Statements. The Board's investment authority and fiduciary responsibility are found in 1984 PA 427 and 1965 PA 314.

The Board has appointed an Investment Committee (IC) delegated with authority to make certain investment decisions and assist in investment policy development. The IC monitors investment management activity and policy recommendations developed by the MERS Office of Investments. The IC is composed of 3 voting Board members, including 2 public members with investment experience. The CEO and Chief Investment Officer also serve on the committee as non-voting members. The IC approves recommendations to hire and terminate managers. The IC also appoints 1 additional non-voting Board member to observe meetings.

The Office of Investments carries out investment activity for the System, provides a quarterly report on investment activities and performance, monitors external investment managers, and reports any material changes to the IC and the Board.

The base allocation was as follows:

- Global Equity 60.0%
- Global Fixed Income 20.0%
- Private Investments 20.0%

One investment manager, Blackrock, exceeded 5% of the pension plan's net position. They have many individual diversified investments under their control, so that no one specific position exceeds the investment guideline or PERSIA limits.

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

- The Defined Benefit Plan invests in the whole portfolio of MERS including global equities, global bonds, and private investments.
- The Defined Contribution Plan, Health Care Savings Program, 457 Program, and IRAs have several investment options. One is a Life Path option whereby a participant can choose a target date fund that adjusts their investment allocation automatically over time as they approach retirement. Another choice is the Premium Select Option whereby a participant can select from various pre-built select funds. A third option for only the Defined Contribution and 457 participants is the self-directed brokerage account for those investors who understand the risks of selecting their own investment choices.
- The Retirement Health Funding Vehicle and Investment Services Program have several investment options available under the Premium Select Options of various pre-built select funds of which employers may choose. The Net Asset Value (NAV) per unit for each investment option as of December 31, 2024, is as follows:

Name	Fund Identifier	Net Asset Value Price per Unit
MERS Total Market Portfolio	99VVB0842	31.088
Emerging Market Stock	06427W705	13.133
International Stock Index	58551R853	13.508
Large Cap Stock Index	58551R200	33.616
MERS Diversified Bond Portfolio (0/100)	99VVB08T7	16.849
MERS Est Market Portfolio (60/40)	99VVB08U4	10.859
Mid Cap Stock Index	58551R507	24.453
Short Term Income	99VVB08V2	47.333
Small Cap Stock Index	06428R499	19.108

Cash Deposits

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

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. MERS investments in fixed income are primarily in Exchange Traded Funds (ETFs) that are not individually rated for credit risk. There are a few fixed-income investments that are not in ETFs.

As of December 31, 2024, the domestic fixed income portfolio consisted of fixed-income investments with respective quality ratings, excluding those obligations of the U.S. government.

Credit Ratings Summary

Investment Type	Fair Value	Credit Ratings
Exchange Traded Funds	\$3,123,867,483	Not Rated
Emerging Country Debt	257,463,616	Not Rated
Corporate (Residual Account)	83,414	Not Rated
Corporate (Residual Account)	1,184	A+
Corporate (Residual Account)	1,027,145	A-
Total Fair Value of Debt Securities	\$3,382,442,841	

Concentration of Credit Risk Debt Securities

The concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The MERS investment policy states securities representing the debt and equity of any one company shall not exceed 5% of the fair value of the portfolio. MERS did not hold any organization's securities that exceeded 5% of the investment portfolio other than investments in mutual funds, external investment pools, ETFs, and those issued or explicitly guaranteed by the U.S. government as of December 31, 2024.

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. MERS investments in fixed income are primarily in ETFs that are invested in numerous individual investments with various ranges of durations. There are a few fixed-income investments that are not in ETFs. Sensitivity to changing interest rates may derive from prepayment options embedded in an investment.

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

Effective Duration

Investment Type	Fair Value	Weighted Effective Duration
Exchange Traded Funds	\$3,123,867,483	Not available
Emerging Country Debt	257,463,616	Not available
Corporate (Residual Account)	1,111,743	1-15 years
Total Fair Value of Debt Securities	\$3,382,442,841	

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. MERS currency risk exposure, or exchange rate risk, is primarily derived from its holdings in foreign currency-denominated equities and fixed-income investments. The 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 MERS exposure to foreign currency risk in U.S. dollars is summarized below as of December 31, 2024.

Foreign Currency Risk in U.S. Dollar Denominations

Currency	Equities	Cash	Private Equity	Real Estate	Total
Australian Dollar			\$93,743,906		\$93,743,906
Canadian Dollar		\$19,279			19,279
Danish Krone		27,424			27,424
Euro		2,848,657	297,611,661	\$41,710,489	342,170,806
Japanese Yen	\$196,323,321	3,456,725			199,780,046
New Taiwan Dollar		14,225			14,225
Norwegian Krone			26,146,467		26,146,467
Pound Sterling		254			254
Singapore Dollar		149,792			149,792
Total Investment Securities	\$196,323,321	\$6,516,356	\$417,502,034	\$41,710,489	\$662,052,200

Custodial Credit Risk of Deposits

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, 2024, the \$27.9 million carrying amount of deposits of the System's cash and short-term investments was comprised of \$27.9 million in deposits, \$27.6 million which was subject to custodial credit risk because it was uninsured and uncollateralized.

Securities Lending

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

Repurchase transactions (including tri-party repurchase agreements) collateralized at 102% or greater at the time of purchase are marked to market on each business day. Collateral will consist of one or more approved instruments without limitation on maturity, including equity securities, which are approved only as collateral for repurchase transactions. Equity securities will consist of securities from major global indices. Due to the nature of the program's collateralization of U.S. fixed-income securities on loans at 102% plus accrued interest, MERS' management believes that there is no credit risk per GASB 40 because the lender owes the borrower more than the borrower owes the lender. Interest rate risk arises due to the duration of the cash collateral. Cash collateral is invested for MERS in a dedicated short-term investment fund consisting of investment grade fixed income securities. The custodian will, at their expense, make MERS whole for any differences that might occur in the event of borrower default after selling the securities. Securities on loan are marked to fair value daily to ensure the adequacy of the collateral. There are no restrictions on the amount of securities that can be loaned at one time.

MERS security lending is also in compliance with PERSIA 38.1140e.

MERS has never experienced a loss on securities lending transactions resulting from the default of a borrower's or lending agent since it commenced lending securities in March 1995. As of December 31, 2024, the fair value of fixed-income securities invested in the cash collateral pool was \$909.6 million. Securities lending produced a net income of \$4.6 million excluding unrealized gains and losses.

Collateral Held and Fair Value of Securities on Loan

Fair Value of Securities on Loan	Nature of Collateral	Collateral Held
\$890,571,890	Cash	\$909,600,727
	Calculated Mark	
	Non-Cash	
\$890,571,890		\$909,600,727

Securities Lending Collateral

S & P Rating	Percentage	Amount
A-1+*	0.00%	
A-1*	22.69%	\$206,388,405
A-2	0.00%	
AAA	13.06%	118,793,855
AA	11.45%	104,149,283
A	20.49%	186,377,189
BBB+	0.00%	
BBB	0.00%	
BBB-	0.00%	
BB+	0.00%	
BB	0.00%	
NR_Repo	31.88%	289,980,712
NR Other	0.65%	5,912,405
Payable/Receivable	-0.22%	(2,001,122)
Market Value Not Reflected in Amortized Cost		
Invested Securities Lending Collateral	100.00%	\$909,600,727

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

Derivatives

Derivative instruments are financial contracts whose value depends on the values of underlying assets, reference rates, or financial indices. They include futures contracts, swap contracts, credit-linked notes (CLN), and forward foreign currency exchange. While the Board has no formal policy specific to derivatives, MERS holds investments in futures contracts, swap contracts, credit-linked notes, and forward foreign currency exchange. MERS enters 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. They also 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, 2024. The notional value associated with these derivative instruments is generally not recorded on 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 and Foreign Currency Forward Contracts

There are no swap or foreign currency forward contracts as of December 31, 2024.

Futures and Options Contracts

Futures Contract	Expiration Date	Long/Short	Cost	Market Value	Unrealized Gain/(Loss)
AUDUSD Currency Future (CME)	3/17/2025	Short	\$(134,267,738)	\$(130,609,000)	\$3,658,738
CANADIAN Currency Future (CME)	3/18/2025	Short	(140,697,267)	(138,264,675)	2,432,592
E-MINI RUSSELL 2000 Index Future (CME)	3/21/2025	Short	(104,816,120)	(104,840,680)	(24,560)
EURO Currency Future (CME)	3/17/2025	Short	(275,096,862)	(271,009,994)	4,086,868
MEXICAN Currency Future (CME)	3/17/2025	Long	7,962,460	7,701,750	(260,710)
S&P Currency Future (CME)	3/21/2025	Short	(306,328,950)	(306,581,488)	(252,538)

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

Private Equity and Capital Calls

During 2024, \$620.1 million was approved for new private market investments. As of December 31, 2024, the private markets portfolio unfunded commitments totaled \$1.6 billion.

MERS has various investments that can be difficult to value in that there are not readily accessible comparable market values. MERS also has level 3 investments of approximately \$124.4 million (private equity, real assets, and diversifying strategies). These investments tend to be illiquid and do not trade frequently. As a result, there may not be readily marketable prices for them. Management's estimates of these values are based on information provided by investment managers, general partners, real estate advisors, and other means. Because alternative investments are not readily marketable, their estimated value is subject to uncertainty and therefore may differ from the values that would have been used had a ready market for these securities existed. The differences could be material.

Fair Value Measurements

Investments are presented at fair value. The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

Level 1 Unadjusted quoted prices for identical instruments in active markets.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value (or NAV) (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. The table on the following page shows the fair value leveling on the investments for MERS.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. (An investment having both level 2 and level 3 inputs would be categorized as level 3.) The system's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset. The table on the following page shows the fair value leveling of the investments for MERS. Global equities and global fixed income classified in level 1 are valued using prices quoted in active markets for those securities.

Global fixed income and global equities classified in level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features, and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Level 2 fixed-income securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market.

Private Investments classified in level 3 are primarily investments in real estate and infrastructure, generally valued using the income approach by internal manager reviews or independent external appraisers. Level 3 Private Investments are valued using appraisals, cash-flow analysis, and sales of similar investments. MERS policy is to obtain an external appraisal a minimum of every 3 years for properties that MERS has some degree of control or discretion. In practice, some investments are appraised annually. Appraisals are performed by an independent appraiser with preference for Member Appraisal Institute designated appraisers. The appraisals are performed using generally accepted valuation approaches applicable to the investment type.

Self-directed participant accounts are valued at quoted prices for those securities in active markets.

Certain alternative investments such as private equity, real assets, and diversifying strategies do not have readily ascertainable fair value. Management, in consultation with their investment managers, value these investments in good faith based upon audited financials, cash-flow analysis, purchase and sales of comparable investments, other practices used within the industry, or other information provided by the underlying investment managers. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed. These investments are classified as level 3.

The valuation method for investments measured at the net asset value (NAV) per share is presented in the table on the following page. The System holds shares or interests in investment companies where the fair value of the investments is measured on a recurring basis using the net asset value per share (or its equivalent) of the investment companies as a practical expedient. Global equity and private investments at NAV are generally long-term private market investments that are illiquid with redemptions restricted over the life of the partnership.

During the partnerships' lives, distributions are received as underlying partnership investments are sold and income realized. As of December 31, 2024, all of the investments in this type will likely be sold at an amount different from the NAV per share of MERS ownership interest in partners' capital.

GASB 72 Disclosures for MERS

		Quoted Prices in Active Markets Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	
Fair Value Investments		Level 1	Level 2	Level 3	Totals
Global Equities		\$4,873,651,192	\$899		\$4,873,652,091
Global Fixed Income (includes ETFs)		3,381,331,098	1,111,743		3,382,442,841
Private Investments				\$124,381,443	124,381,443
Self Directed accounts (DC and 457)		15,677,571			15,677,571
Total Investments by Fair Value		8,270,659,861	1,112,642	124,381,443	8,396,153,946
Investments at Net Asset Value (NAV)	NAV				Totals
Global Equities	\$2,154,182,443				2,154,182,443
Fixed Income					-
Private Investments	3,628,088,901				3,628,088,901
Mutual Funds (DC, 457, HCSP, IRA)	2,429,010,880				2,429,010,880
Total Investments at NAV	8,211,282,224				8,211,282,224
Total Fair Value and NAV Investments	8,211,282,224	8,270,659,861	1,112,642	124,381,443	16,607,436,170
Securities Lending Collateral			416,076,912		416,076,912
Total Fair Value and NAV Investments with Securities Lending	\$8,211,282,224	\$8,270,659,861	\$417,189,554	\$124,381,443	\$17,023,513,082

In accordance with GASB No. 79, the System has \$1.1 billion of investments reported at amortized cost, of which \$494.3 million directly relates to securities lending. These investments are not subject to any limitations or restrictions on withdrawals.

Reconciliation to Investments on Financial Statements	
Investments at Fair Value and NAV from Above	\$16,607,436,170
Investment in Land	1,402,094
Stable Value Fund-Valued at Contract Value, which approximates Fair Value	63,335,341
Rounding	(563)
Amortized Cost	569,070,958
Investments on Financial Statements	\$17,241,244,000

MERS holds shares or interests in investment companies where the fair value of the investments is measured on a recurring basis, using net asset value (NAV) per share (or its equivalent) of the investment companies as a practical expedient.

As of December 31, 2024, the fair value, unfunded commitments, redemption frequency and redemption notice periods of those investments are as follows:

Investment Type	Fair Value	Unfunded Commitments	Redemption Frequency (if Eligible)	Redemption Notice Period
Global Equities	\$2,154,182,443		Monthly, quarterly, semi-annually, annually	30 days
Global Fixed Income	-		Monthly, quarterly, semi-annually, annually	N/A
Private Investments	3,628,088,901	\$1,588,000,000	Monthly, quarterly, semi-annually, annually	N/A
Mutual Funds*	2,429,010,880			N/A
Total Investments at NAV	\$8,211,282,224	\$1,588,000,000		

*Redemptions may be subject to penalty depending on fund choice and holding period.

Investments at NAV

The Global Equities' Portfolios are diversified by geographic region, styles, sectors and market capitalizations. Active management is used to take advantage of less efficient areas of the market. This strategy is expected to perform well in periods of low falling inflation and rising economic growth. It is also projected to provide ongoing income as well as downside protection in volatile markets. The fair value of the investments has been estimated using the net asset value of the investments.

The Private Investments Portfolio includes investments in real estate, timber, infrastructure, commodities and agriculture and farmland strategies. The real assets strategy is designed to provide a hedge against unexpected spikes in inflation as well as capitalize on long-term themes such as an emerging middle class in developing markets and global population growth. Many of the investments within this portfolio will be private investments, making the portfolio relatively illiquid and longer duration. The fair value of the investments has been estimated using the net asset value of the investments.

Private Investments also include strategies in middle market direct lending, litigation finance, healthcare royalties, bank regulatory capital and opportunistic credit, among others. The strategy is designed to provide downside protection and uncorrelated returns with traditional asset classes – specifically equities. Core fixed income has traditionally been one of the most diversifying asset classes, but the low return expectations for the asset class make it less attractive on a risk-adjusted basis. Consequently, non-traditional asset classes must be considered as an alternative. The fair value of the investments has been estimated using the net asset value of the investments.

Mutual fund investments at NAV are not publicly traded, with a strategy designed to provide participants access to target date funds based on their expected retirement date. The funds automatically adjust based on the participant's age with investments in global equities, fixed income, and other diversified investments with an appropriate level of risk that is consistent with its asset mix. The fair value of the investments has been estimated using the net asset value of the investments.

6. RISK MANAGEMENT AND INSURANCE

MERS maintains a complete portfolio of insurance coverage including, but not limited to, fiduciary liability, workers' compensation, auto, property, cyber liability and general commercial liability.

In addition, MERS provides its employees with insured medical, prescription, vision, life/disability benefits and self-insured dental benefits, among other benefits.

7. COMMITMENTS AND CONTINGENCIES

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

8. FUNDED STATUS AND FUNDING PROGRESS

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

Actuarial valuations are prepared annually as of December 31 for each participating municipality. To facilitate budgetary planning needs, employer contribution requirements are provided for each municipality's unique fiscal year that commences after the following calendar year-end. For example, the contribution requirements for fiscal years that began in 2024 were determined by actuarial valuations as of December 31, 2022. Approximately 78% of the participating municipalities have fiscal years that begin January 1 or July 1.

9. RELATED PARTIES

MERS did not conduct any material transactions with related parties during 2024.

10. GASB 68

The Governmental Accounting Standards Board (GASB) Statement No. 68, "Accounting and Financial Reporting for Pensions", requires certain disclosures for employers who provide pensions. MERS employees participate in the MERS Defined Benefit Plan. The sections below are required and pertain to MERS staff only.

Pensions

For purposes of measuring the Net Pension Liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Plan Description

The employer's defined benefit pension plan provides certain retirement benefits to plan members and beneficiaries. MERS is an agent of multiple employers, a statewide public employee pension plan established by the Michigan Legislature under Public Act 135 of 1945 and administered by a 9-member Board. MERS issues a publicly available financial report that includes financial statements and required supplementary information. This report is available on the MERS website at www.mersofmich.com.

Benefits Provided

Benefit Multiplier: 2.25% Multiplier (80% max)	Early Retirement (Reduced): 50/25, 55/15
Normal Retirement Age: 60	Final Average Compensation: 3 years
Vesting: 6 years	COLA for Future Retirees: 2.50% (Non-Compounded)
Early Retirement (Unreduced): 55/30	Employee Contributions: 4.00%
Act 88: Yes (Adopted 9/24/1996)	

At the December 31, 2023, valuation date, the following employees were covered by the benefit terms:

Inactive Employees or Beneficiaries Currently Receiving Benefits: 63
Inactive Employees Entitled to but Not Yet Receiving Benefits (including refunds): 88
Active Employees: 139
Total Employees: 290

Contributions

The employer is required to contribute amounts at least equal to the actuarially determined rate, as established by the Board. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The actuarial determined contribution rate for 2024 was 18.29% of payroll. MERS total employer contributions totaled \$4,199,828. MERS employees are required to contribute 4% of their salaries to help fund the pension.

Net Pension Liability/Asset

MERS Net Pension Asset, measured as of December 31, 2023, was \$699,615 and the total pension liability used to calculate the Net Pension liability was determined by an annual valuation for that date.

Actuarial Assumptions

The total pension liability in the December 31, 2023 Annual Actuarial Valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation: 2.5%
Salary Increases: 3.00% in the long term
Investment Rate of Return: 6.93% net of investment and administrative expenses, including inflation

This valuation incorporates fully generational mortality. The base mortality tables used are constructed as described below and are based on amount weighted sex distinct rates:

Pre-Retirement Mortality:

1. 100% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 100% of PubG-2010 Employee Mortality Tables for Ages 18-80
3. 100% of PubG-2010 Healthy Retiree Tables for Ages 81-120

Non-Disabled retired plan members and beneficiaries:

1. 106% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 106% of PubG-2010 Employee Mortality Tables for Ages 18-49
3. 106% of PubG-2010 Healthy Retiree Tables for Ages 50-120

Disabled retired plan members:

1. 100% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 100% of PubNS-2010 Disabled Retiree Tables for Ages 18-120

Future mortality improvements are assumed each year using scale MP-2019 applied fully generationally from the Pub-2010 base year of 2010.

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The economic assumptions used in this valuation are a 6.93% investment rate of return and a 3.00% wage inflation assumption, as adopted on February 28, 2019. The demographic assumptions used in this valuation are based on the results of a study of plan experience that covered the period from December 31, 2014, through December 31, 2018, which was dated 2020.

The long-term expected rate of return on pension plan investments was determined using a model method in which the best-estimate ranges of expected future real rates of return (expected returns net of investment and administrative expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Gross Return	Long-Term Expected Gross Return Contribution	Price Inflation Assumption	Long-Term Expected Real Rate of Return
Global Equity	60.00%	7.00%	4.20%	2.50%	2.70%
Global Fixed Income	20.00%	4.66%	0.93%	2.50%	0.43%
Private Investments	20.00%	9.00%	1.80%	2.50%	1.30%
Total	100.00%		6.93%		4.43%

Discount Rate

The discount rate used to measure the total pension liability was 7.18% for 2023 net of investment expenses. The projection of cash flows used to determine the discount rate assumes that employer and employee contributions will be made at the rates agreed upon for employees and the actuarially determined rates for employers. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay all projected future benefit payments of currently active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability/(Asset)

	Total Pension Liability/(Asset) (a)	Plan Fiduciary Net Position (b)	Net Pension Liability/ (Asset) (a) - (b)
Balances at December 31, 2022	\$57,616,158	\$56,687,570	\$928,588
Changes for the Year			
Service Cost	2,116,728		2,116,728
Interest on Total Pension Liability	4,197,045		4,197,045
Changes in benefits	-		-
Difference Between Expected and Actual Experience	2,380,178		2,380,178
Changes in Assumptions	681,284		681,284
Employer Contributions		3,863,147	(3,863,147)
Employee Contributions		677,809	(677,809)
Net Investment Income		6,599,037	(6,599,037)
Benefit Payments, Including Employee Refunds	(1,568,492)	(1,568,492)	-
Administrative Expenses		(136,556)	136,556
Other Changes	(0)		(0)
Net changes	7,806,743	9,434,946	(1,628,203)
Balances as of December 31, 2023	\$65,422,901	\$66,122,516	\$(699,615)

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate

The following presents the Net Pension Liability of MERS, calculated using the discount rate of 7.18%, as well as what the employer's Net Pension Asset would be using a discount rate that is 1% lower (6.18%) or 1% higher (8.18%) than the current rate.

Sensitivity of Net Pension Liability/(Asset)

	1% Decrease (6.18%)	Current Discount Rate (7.18%)	1% Increase (8.18%)
Net Pension Liability (Asset)		\$(699,615)	
Change in Net Pension Liability	\$10,923,895		\$(8,860,770)
Adjusted Net Pension Liability (Asset)	\$10,224,280	\$(699,615)	\$(9,560,385)

Note: the current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because GASB 68 requires that the discount rate must be gross of administrative expenses, whereas for funding purposes, it is net of administrative expenses. MERS has a net position asset due to the Plan Fiduciary Net Position exceeding the total Pension Liability.

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2024, MERS recognized a defined benefit pension expense of \$1,694,884. MERS also reported deferred outflows and inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences in Experience	\$3,129,803	\$-
Differences in Assumptions	2,064,815	
Excess (Deficit) Investment Returns	2,877,649	
Contributions Subsequent to the Measurement Date*	4,199,828	
Total	\$12,272,094	\$-

**The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction in the Net Pension Liability for the measurement date of December 31, 2024, which is recorded in 2025.*

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended	Deferred Outflows
2025	2,777,522
2026	2,560,134
2027	2,599,595
2028	135,015

REQUIRED SUPPLEMENTARY INFORMATION

The following schedules are presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years where information is available.

Annual Money-Weighted Return

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

Schedule of Annual Money Weighted Returns

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual money-weighted rate of return, net of investment expenses	-0.99%	10.78%	13.38%	-3.59%	14.05%	13.46%	14.13%	-10.42%	11.62%	7.55%

The following schedules refer to MERS' staff only. A measurement date of December 31, 2023, was used. Note that while the measurement date for calculation of the net pension liability and pension expense is December 31, 2023, the schedule of employer contributions shows the actuarial contributions that have been remitted through December 31, 2024, and the preceding 10 years.

Schedule of Employer Contributions

The Schedule of Employer Contributions shows the employer's required annual contributions from the annual actuarial valuation, compared with the actual contributions remitted over the past 10 years.

	2015	2016	2017	2018	2019
Actuarial Determined Contributions	\$1,088,267	\$1,172,934	\$1,367,084	\$1,612,796	\$1,406,884
Contributions in Relation to the Actuarially Determined Contribution	2,099,146	1,672,934	2,367,084	2,612,796	2,406,884
Contribution Deficiency (Excess)	\$(1,010,879)	\$(500,000)	\$(1,000,000)	\$(1,000,000)	\$(1,000,000)
Covered Payroll	\$9,694,637	\$10,080,837	\$10,643,044	\$11,048,903	\$11,669,868
Contributions as a Percentage of Covered Payroll	11%	12%	13%	15%	12%
	2020	2021	2022	2023	2024
Actuarial Determined Contributions	\$1,629,051	\$1,845,369	\$2,247,865	\$2,363,147	\$2,699,828
Contributions in Relation to the Actuarially Determined Contribution	2,629,051	2,845,369	4,547,865	3,863,147	4,199,828
Contribution Deficiency (Excess)	\$(1,000,000)	\$(1,000,000)	\$(2,300,000)	\$(1,500,000)	\$(1,500,000)
Covered Payroll	\$12,669,789	\$12,757,833	\$12,978,361	\$14,196,695	\$14,464,059
Contributions as a Percentage of Covered Payroll	13%	14%	17%	17%	19%

Notes to Schedule of Employer Contributions:

Actuarial Cost Method: Entry Age Normal
Amortization Method: Level percentage of payroll, open
Remaining Amortization Period: 15 years
Asset Valuation Method: 5-year smoothed
Inflation: 2.5% long-term price inflation
Salary Increases: 3.00%

Investment Rate of Return: 7.00% net of investment and administrative expenses
Normal Retirement Age: 60
Mortality: 106% of Pub-2010 Juvenile Mortality Tables for Ages 0-17, 106% of PubG-2010 Employee Mortality Tables for Ages 18-49, 106% of PubG-2010 Healthy Retiree Tables for Ages 50-120

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Schedule of Changes in Employer's Net Pension Liability/(Asset) and Related Ratios

The Schedule of Changes in Employer's Net Pension Liability and Related Ratios shows the changes in the total pension liability less the statement of changes in fiduciary net position resulting in the net Pension Liability calculation for the employer.

Schedule of Changes in the Net Pension Liability/(Asset)

Total Pension Liability	2015	2016	2017
Service Cost	\$1,203,192	\$1,269,997	\$1,379,059
Interest	1,523,654	1,706,312	1,985,384
Changes of Benefit Terms			
Difference Between Expected and Actual Experience		313,939	(134,179)
Changes of Assumptions		1,386,692	
Payments Including Refunds	(526,561)	(565,862)	(627,619)
Other		1	(1)
Net Change in Total Pension Liability	2,200,285	4,111,079	2,602,645
Total Pension Liability Beginning Balance	18,130,219	20,330,504	24,441,583
Total Pension Liability Ending Balance	\$20,330,504	\$24,441,583	\$27,044,228
Plan Fiduciary Net Position			
Contributions-Employer	\$2,089,079	\$2,099,146	\$1,672,934
Contributions-Employee	398,940	520,710	514,304
Net Investment Income	1,193,652	(343,573)	2,735,307
Payments Including Refunds	(526,561)	(565,862)	(627,619)
Administrative Expense	(44,244)	(48,754)	(53,870)
Net Change Net Position	3,110,866	1,661,667	4,241,055
Plan Fiduciary Net Position Beginning Balance	18,373,983	21,484,849	23,146,516
Fiduciary Net Ending Balance	\$21,484,849	\$23,146,516	\$27,387,571
Employer Net Liability/(Asset)	\$(1,154,345)	\$1,295,067	\$(343,343)
Fiduciary Net Position as a % of the Total Pension Liability/(Asset)	106%	95%	101%
Covered Payroll	\$9,184,670	\$9,694,637	\$10,080,837
Employer's Net Pension Liability/(Asset) as a % of covered payroll	-13%	13%	-3%

There were changes in the actuarial assumptions or methods affecting the 2015, 2019, 2020, 2021, and 2023 valuations for smoothing, price and wage inflation, discount rate, and mortality tables based on experience studies and the implementation of a dedicated gains policy. These calculations were done with an effective date of December 31, 2015, 2019, 2020, and 2021, impacting the 2016, 2020, 2021, 2022, and 2024 fiscal periods respectively.

2018	2019	2020	2021	2022	2023	2024
\$1,457,033	\$1,507,070	\$1,601,106	\$1,734,494	\$1,750,375	\$1,919,500	\$2,116,728
2,192,266	2,429,062	2,686,643	2,886,270	3,453,001	3,785,787	4,197,045
95,943	189,688	12,338	1,787,274	144,111	1,350,935	2,380,178
		1,122,227	2,249,052	2,674,943	-	681,284
(738,847)	(881,777)	(1,024,365)	(1,165,256)	(1,250,821)	(1,396,122)	(1,568,492)
(1)	2			(1)	(0)	(0)
3,006,394	3,244,045	4,397,949	7,491,834	6,771,609	5,660,100	7,806,743
27,044,228	30,050,622	33,294,667	37,692,616	45,184,449	51,956,058	57,616,158
\$30,050,622	\$33,294,667	\$37,692,616	\$45,184,449	\$51,956,058	\$57,616,158	\$65,422,901
\$2,367,084	\$2,610,796	\$2,406,884	\$2,629,051	\$2,845,369	\$4,547,865	\$3,863,147
525,320	461,803	521,092	852,920	1,579,425	1,381,069	677,809
3,753,767	(1,378,989)	4,722,235	6,114,163	6,848,194	-6,547,693	6,599,037
(738,847)	(881,777)	(1,024,365)	(1,165,256)	-1,250,821	-1,396,122	-1,568,492
(59,178)	(66,335)	(81,434)	(84,290)	-80,729	-111,202	-136,556
5,848,147	745,498	6,544,411	8,346,588	9,941,439	(2,126,083)	9,434,946
27,387,571	33,235,718	33,981,216	40,525,627	48,872,215	58,813,654	56,687,571
\$33,235,718	\$33,981,216	\$40,525,627	\$48,872,215	\$58,813,654	\$56,687,571	\$66,122,517
\$(3,185,096)	\$(686,549)	\$(2,833,011)	\$(3,687,765)	\$(6,857,595)	\$928,588	\$(699,615)
111%	102%	108%	108%	113%	98%	101%
\$10,643,044	\$11,048,903	\$11,669,868	\$12,669,789	\$12,757,833	\$12,978,365	\$14,196,698
-30%	-6%	-24%	-29%	-54%	7%	-5%

SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses

	Budget (Unaudited)	Actual	Variance	Percentage of Budget
Personnel Services				
Salaries	\$14,452,600	\$13,942,499	\$510,101	96%
Social Security	1,075,300	981,788	93,512	91%
Retirement	3,666,027	3,930,962	(264,935)	107%
Insurance	2,624,100	2,540,275	83,825	97%
Total Personnel Services	21,818,027	21,395,524	422,503	98%
Professional Services				
Third Party Administrator	2,609,963	2,733,434	(123,471)	105%
Actuarial Services	1,900,000	1,320,008	579,992	69%
Audit Services	261,000	257,990	3,010	99%
Commercial Banking	64,000	46,103	17,897	72%
IT Services/Continuity/Records	418,204	449,288	(31,084)	107%
Business Consultants	577,110	394,024	183,086	68%
Legal Services	61,300	32,997	28,303	54%
Medical Services	85,000	38,530	46,470	45%
Total Professional Services	5,976,577	5,272,374	704,203	88%
Communication				
Annual Conference	155,000	143,106	11,894	92%
Board Travel, Education and Meetings ¹	45,000	26,876	18,124	60%
Outreach	249,948	184,561	65,387	74%
Postage/Shipping	179,100	144,159	34,941	80%
Printing and Copying Services	58,000	52,111	5,889	90%
Travel and Meetings	131,032	107,028	24,004	82%
Total Communication	818,080	657,841	160,239	80%
Miscellaneous				
Depreciation	4,995,000	5,251,778	(256,778)	105%
Equipment Purchases & Rental	68,800	21,908	46,892	32%
Insurance	705,000	577,054	127,946	82%
Building/Maintenance/Utilities	104,500	103,806	694	99%
Office Supplies/Subscriptions	97,200	61,644	35,556	63%
Operating Expenses	587,750	76,475	511,275	13%
Personnel Support	217,350	115,810	101,540	53%
Professional Development	287,575	209,702	77,873	73%
Software Support	2,273,093	1,899,656	373,437	84%
Total Miscellaneous	9,336,268	8,317,833	1,018,435	89%
Total Administrative Expenses	\$37,948,952	\$35,643,572	\$2,305,380	94%
Less Service Product Fees ²	(17,037,501)	(11,831,996)	(5,205,505)	69%
Total Net Administrative Expenses	\$20,911,451	\$23,811,576	\$(2,900,125)	114%

¹Board Travel, Education, and Meetings includes \$11,612.65 for board members' training and education, including related travel expenditures. These expenditures comply with the requirements of Section 38.1133 of the Michigan Compiled Laws.

²Service fees come primarily from fees paid on participant-directed accounts to cover administrative expenses. They are reported as miscellaneous income.

Note: See accompanying Independent Auditor's Report.

Schedule of Investment Expenses

	Budget (Unaudited)	Actual	Variance	Percentage of Budget
Personnel Services				
Salaries	\$2,064,300	\$2,084,214	\$(19,914)	101%
Incentive Pay	1,125,151	44,944	1,080,207	4%
Social Security	138,500	132,833	5,667	96%
Retirement	438,536	503,225	(64,689)	115%
Insurance	252,500	249,357	3,143	99%
Total Personnel Services	4,018,987	3,014,573	1,004,414	75%
Professional Services				
Commercial Banking	1,170,000	1,140,623	29,377	97%
Investment Managers	7,400,000	6,535,015	864,985	88%
Business Consultants	100,000	130,749	(30,749)	131%
Total Professional Services	8,670,000	7,806,387	863,613	90%
Miscellaneous				
Travel	205,000	141,913	63,087	69%
Diligence	50,000	66,200	(16,200)	132%
Office Supplies	3,000	1,214	1,786	40%
Professional Development	30,000	23,861	6,139	80%
Operating Expenses	10,000	3,459	6,541	35%
Research and Portfolio Management	360,000	344,550	15,450	96%
Total Miscellaneous	658,000	581,197	76,803	88%
Total Investment Expenses	\$13,346,987	\$11,402,157	\$1,944,830	85%
Less Service Product Fees ¹	(862,647)	(681,220)	(181,427)	79%
Total Net Investment Expenses	\$12,484,340	\$10,720,937	\$1,763,403	86%

¹Service fees come primarily from fees paid on participant directed accounts to cover administrative expenses. They are reported as miscellaneous income.

FINANCIAL

2024 annual comprehensive financial report

Schedule of Payments to Consultants

Firm	Nature of Services	Amount
Tegrit Software Ventures, Inc.	Software Consulting and Configuration Services	\$5,158,851
Alerus Retirement Solutions	Third Party Administration	2,733,434
BNY	Depository Trust Banking Services	1,632,597
Gabriel, Roeder, Smith & Company	Actuarial Consultant	1,365,043
Dewpoint Inc.	Software Consulting and Configuration Services	219,463
Innova Solutions, Inc.	Software Consulting and Configuration Services	215,625
Plante & Moran, PLLC	Auditing Services	204,880
Gartner Inc.	Software Consulting and Configuration Services	145,562
Bloomberg Finance L.P.	Investment Data Services	138,823
Rapid7 LLC	Software Consulting and Configuration Services	126,001
GovInvest Inc.	Software Consulting and Configuration Services	121,500
Presidio Networked Solutions	Software Consulting and Configuration Services	120,838
Treo Capital Advisors LLC	Investment Consultant	99,999
Seyfarth Shaw, LLP	Investment Consultant	80,241
Ice Miller LLP	Legal Services	66,671
Siddhi Services LLC	Investment Consultant	66,345
BCA Research	Investment Consultant	62,500
BDO USA LLP	Investment Consultant	59,200
Miller, Canfield, Paddock, and Stone, PLC	Legal Services	53,736
Vergence Institutional Partners LLC	Investment Consultant	52,000
Cobalt Labs	Software Consulting and Configuration Services	47,685
TTEC Digital LLC	Software Consulting and Configuration Services	44,500
Managed Medical Review Organization	Medical Advisors	43,235
Michigan Legislative Consultants	Legislative Consultant	42,840
L.P. Gavekal Capital	Investment Consultant	42,436
Ned Davis Research	Investment Consultant	38,200
Byrum & Fisk Advocacy	Marketing and Public Relations Services	36,000
Winklevoss Technologies LLC	Software Consulting and Configuration Services	30,888
Process Renewal Consulting Group (2015) Inc.	Software Consulting and Configuration Services	29,995
The Townsend Group	Investment Consultant	29,803
PBI Research Services	Research Services	28,460
Karoub Associates	Legislative Consultant	24,720
Salary.com	Compensation Consultant	23,062
Wendell Rhoads Consulting	Executive Coaching	22,500
Total		\$13,207,632

This schedule only includes firms whose annual payment amount was \$20,000 or above. Fees paid to investment managers are included in the Investments Section.

Payments to consultants are included in the Administrative and Investments Expenses reported in the Statement of Changes in Fiduciary Net Position.

See accompanying Independent Auditor's Report.

INVESTMENTS

INVESTMENT ACTIVITY

MERS Total Market Portfolio

The MERS Total Market Portfolio (gross) returned 8.07% for the year, underperforming the MERS Policy Benchmark by 3.18%. The Total Market Portfolio continued to outperform at the 5-year period, outpacing the benchmark by 0.39%. The MERS Global Equity Portfolio returned 13.63%, underperforming the Global Equity Policy Blend by 4.27%, mainly due to an underweight in U.S. large-cap equities. The MERS Global Fixed Income portfolio delivered positive returns 3.42% and outperformed the Global Fixed Income Policy Blend by 3.75%. The MERS Private Investments Portfolio delivered a positive return of 3.77%. The drivers of that portfolio were the diversifying strategies and the infrastructure strategy, as they returned 15.61% and 14.70%, respectively. The Liquid Natural Resources portfolio, designed to protect MERS' assets from rising inflation, returned 1.04%. The MERS Investment Policy Statement (IPS) outlines the investment goals, objectives, and policies of the MERS' Defined Benefit Portfolio. The purpose of the IPS is to ensure that the investment activities are carried out within the framework established by the Board in accordance with applicable law. The IPS assists the Board, Investment Committee, and the Office in effectively and prudently monitoring and administering MERS' investment program. In accordance with GASB Statement No. 67, plan investments are presented at fair value. Short-term investments are valued at cost plus accrued interest, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price using 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. Other investments that do not have established values, which is the industry standard, but the values as of December 31 are estimated based on the third-quarter capital statements plus fourth-quarter cash flows, adjusted for any other known events. MERS maintains its books and adjusts to fair market value as statements and valuations are received.

MERS 2024 highlights:

- MERS Total Market Portfolio returned 8.07% gross of fees for the year, outperforming its actuarial assumption rate for the year.
- MERS Total Market Portfolio outperformed its benchmark at the 5-, and 10-year time periods.
- MERS Total Market Portfolio returned 6.84% at the 10-year mark and outperformed the policy benchmark by 0.09%.
- Strong fund performance versus industry peers.
- The Office of Investments expanded work on a Valuation Based Allocation (VBA) approach to its investment program.
- The base asset allocation breakdown is shown below:

Global Equity	60.00%
Global Fixed Income	20.00%
Private Investments	20.00%
- At the broad asset class level, absolute returns gross of investment fees for the year were as follows:

Global Equity	12.93%
Global Fixed Income	3.42%
Private Investments	
Private Equity	1.73%
Real Assets	0.60%
Diversifying Strategies	15.61%

DEFINED BENEFIT INVESTMENT POLICY STATEMENT

The Investment Policy Statement (IPS) outlines the investment goals, objectives, and policies of the MERS' Defined Benefit Portfolio. The purpose of the IPS is to ensure that the investment activities are carried out within the framework established by the Board in accordance with applicable law. The IPS assists the Board, Investment Committee, and the Office in effectively and prudently monitoring and administering MERS' investment program. This Policy supersedes all previous Board policies pertaining to MERS' investments.

The IPS is designed to provide sufficient flexibility in the management and oversight process to reflect the dynamic nature of the capital markets and facilitate proactive decision-making. It is a working document and may be modified as needed or as market conditions change. At a minimum, the IPS is reviewed and approved annually by the Board.

In accordance with GASB Statement No. 67, plan investments are presented at fair value. Short-term investments are valued at cost plus accrued interest, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price using current exchange rates. Corporate bonds not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. Other investments that don't have established markets are recorded at an estimated fair value. Real estate, private equity and certain alternative investments typically have a quarter lag in reporting, which is the industry standard, but the values as of December 31 are estimated based on the third-quarter capital statements plus the fourth-quarter cash flows, adjusted for any other known events. MERS maintains its books and adjusts to fair market value as statements and valuations are received. Periodic and independent appraisals of the assets are performed to ensure an accurate evaluation to determine the fair value of the Defined Benefit Portfolio. MERS uses a time-weighted rate of return calculation methodology based on the market rate of return for a time-weighted rate of return calculation methodology based on the market rate of return for schedule of investment results in this report.

DEFINED BENEFIT PLAN INVESTMENT GOALS AND OBJECTIVES

In conformity with PERSIA, the primary goal of MERS' investment program is to grow assets at a rate that, when coupled with employer and employee contributions, satisfies promised benefits to MERS' members. To achieve this objective, the Board prudently allocates the Total Market Portfolio's assets with a strategic, long-term perspective to reduce risk by:

- Exceeding the Board-approved actuarial investment return assumption on a long-term basis
- Maintaining adequate liquidity to pay promised benefits
- Adopting an asset allocation approach that reflects current and future liabilities, balances Total Market Portfolio risk, and maximizes the long-term total rate of return
- Minimizing costs through the efficient use of internal and external resources
- Maintaining above-median peer rankings for the 10-year time period
- Exceeding the return of the Total Market Portfolio's Policy Benchmark, which currently consists of:

Index	Weighting
Russell 3000	45%
MSCI ACWI IM ex-US	20%
Bloomberg US Aggregate	25%
Bloomberg Global Aggregate ex-US	10%

Valuation Based Allocation Program Monitoring and Reporting

MERS follows a Valuation Based Allocation (VBA) approach to allocate the Total Market Portfolio's assets. Adequate oversight and monitoring of the VBA program is critical to ensure portfolio performance and positioning is within established parameters and risks are well understood and incorporated into the investment decision-making process. A dedicated Asset Allocation Team (AAT) is responsible for maintaining and enhancing the VBA model on an ongoing basis. The VBA model is updated on a weekly basis and the AAT meets monthly to review the model and recommended positioning. The AAT provides formal recommendations to the Portfolio Review Committee (PRC) as necessary, but quarterly at a minimum. The PRC is responsible for implementing the recommended allocation in compliance with the PRC Guidelines. The AAT conducts a VBA model input review annually to evaluate all economic assumptions which drive asset class fair values as well as risk and correlation estimates. If it is determined that model inputs need revision or model changes are necessary, they are approved by the PRC and communicated to the Investment Committee. The Office provides and presents a formal asset allocation report to the Board on an annual basis. The report summarizes asset class valuations, long-term expected returns, the Portfolio's asset allocation, and portfolio performance (including risk) and attribution. The report also includes the forward-looking long-term absolute risk and active risk (vs Policy Benchmark) of the Portfolio including and excluding Private Markets' investments.

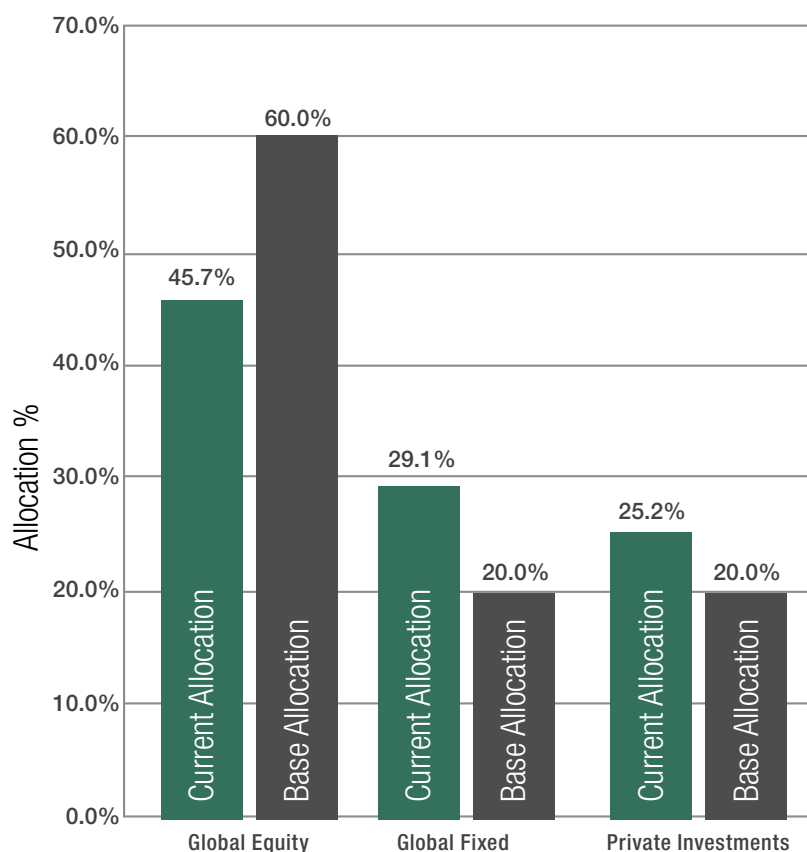
A formal review of the VBA program is conducted every five years, starting from program inception, to ensure performance is within modeled expectations and to re-validate Board support. In conjunction with this review, the Policy Benchmark is also analyzed to assess its suitability. An independent, third-party consultant conducts the benchmark and VBA program review and reports its findings and recommendations to the Board. Following the review and presentation of findings, the Board formally approves or rejects any changes to the VBA program and the Policy Benchmark.

Total Market Portfolio Rebalance Policy

In conducting portfolio rebalancing activities, the AAT, Office and PRC are responsible for the following:

- Approving all rebalancing transactions.
- The AAT (with CIO approval) has discretion to rebalance up to 5% (total notional) of the Total Market Portfolio. All decisions are communicated to the PRC and larger allocation shifts require PRC approval.
- Running the VBA model and assessing the recommended portfolio on a weekly basis or any time there is an equity market decline or increase in excess of 5%.
- Reviewing the asset allocation at least monthly to ensure compliance with the asset class allocation ranges set by the Board.
- Initiating rebalancing transactions to bring all asset class allocations inside the approved range or promptly seeking Board approval to remain outside of the range if an asset class falls out of said range.
- Rebalancing the Total Market Portfolio on a quarterly basis in line with the VBA model-recommended allocations.
- Initiating a rebalancing transaction when an asset class or sub-asset class deviates more than 5% from the VBA model-recommended weight.
- Implementing rebalancing activities at a reasonable cost using index futures via an external derivatives manager, ETFs, CITs or other index funds, or active managers.
- Initiating approved rebalancing transactions in a timely manner (generally within 24 hours of approval).

Current Asset Allocation versus Base Allocation



INVESTMENTS

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Statistical Performance

Portfolio Characteristics	1 Year	3 Year	5 Year	7 Year	10 Year
Annualized Return (gross of fees)	8.07%	2.78%	7.15%	6.47%	6.84%
Annualized Standard Deviation	5.66%	9.58%	10.22%	9.20%	8.18%
Sharpe Ratio	0.44	(0.09)	0.43	0.45	0.59
Excess Return	-3.18%	0.22%	0.39%	-0.34%	0.09%
Correlation to Policy Benchmark	0.92	0.98	0.98	0.98	0.97

	1 Year	3 Year	5 Year	7 Year	10 Year
MERS Total Market Portfolio (Gross of Fees)	8.07%	2.78%	7.15%	6.47%	6.84%
MERS Total Market Portfolio (Net of Fees)	7.72%	2.52%	6.91%	6.27%	6.62%
TMP Custom Benchmark*	11.25%	2.56%	6.76%	6.81%	6.75%
Excess (Gross)	-3.18%	0.22%	0.39%	-0.34%	0.09%

*45% Russell 3000, 20% MSCI ACWI ex USA IMI (Net), 25% Bloomberg Aggregate, 10% Bloomberg Global Aggregate ex US

Investment Summary for Defined Benefit, Defined Contribution, Hybrid, Health Care Savings Program, Retiree Health Funding Vehicle, 457 Program, IRA, and Investment Services Program

Type of Investment	Fair Value	Percentage
Global Equities	\$7,020,495,475	47.8%
Global Fixed Income	3,382,442,841	23.0%
Private Investments	3,728,142,781	25.4%
Cash	546,133,119	3.7%
Sub Total Investments	\$14,677,214,216	100.0%

Reconciliation of Investments to Financial Statements	Fair Value
Total Investments from Above	\$14,677,214,216
Receivables - Sale of Investments, Interest & Dividends	(8,085,289)
Alternative Asset Adjustment not in BNY Portfolio	31,666,622
Investment in Land	1,402,094
Investments in Mutual Funds and Self Directed Accounts	2,524,115,775
Investments in Cash	(4,619,054)
Payables - Purchases of Investments	19,550,200
Rounding	(563)
Investments on Financial Statements	\$17,241,244,000

Note: Includes receivables and payables for sales and purchases of securities with settlement dates after December 31, 2024.

Defined Benefit Plan Performance Chart

	1 Year	3 Years	5 Years	10 Years
Global Equity	12.93%	3.63%	8.24%	7.93%
Global Equity Policy Blend ¹	17.90%	5.74%	10.87%	9.91%
Excess	-4.97%	-2.11%	-2.63%	-1.98%
Global Fixed Income	3.10%	-0.95%	1.65%	3.09%
Global Fixed Income Policy Blend ²	-0.33%	-3.51%	-1.18%	0.51%
Excess	3.43%	2.56%	2.83%	2.58%
Private Investments	3.77%	4.59%	9.75%	
Policy Benchmark ³	11.25%	2.56%	6.76%	
Excess	-7.48%	2.03%	2.99%	

¹ 70% R.U.S.sell 3000, 30% MSCI ACWI ex USA IMI (net)

² 70% Bloomberg U.S. Aggregate, 30% Bloomberg Global Aggregate ex U.S.

³ 45% R.U.S.sell 3000, 20% MSCI ACWI ex USA IMI (net), 25% Bloomberg U.S. Aggregate, and 10% Bloomberg Global Aggregate ex. U.S.

Asset Description	Fair Value	Percentage of Total Fair Value
Invesco S&P 500 QVM Multi-factor ETF	\$1,048,923,417	7.18%
iShares Core S&P 500 ETF	\$846,861,414	5.80%
SPDR Portfolio Intermediate Term Treasury ETF	\$736,710,376	5.04%
SPDR Short Term Treasury ETF	\$629,434,902	4.31%
Schwab U.S. TIPS ETF	\$402,061,489	2.75%
iShares Core MSCI Pacific ETF	\$391,333,708	2.68%
Invesco S&P Mid Cap 400 QVM Multi-factor ETF	\$312,115,544	2.14%
SPDR Long Term Treasury ETF	\$305,688,737	2.09%
iShares Core MSCI Emerging Markets ETF	\$249,251,856	1.71%
Vanguard FTSE Europe ETF	\$237,544,028	1.63%

A complete list of MERS Total Market Portfolio holdings is available upon request.

INVESTMENTS

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INVESTMENT MANAGEMENT FEES

Management fees directly affect the net returns of an investment, so best efforts are made to achieve the lowest fee agreement possible. The Office of Investments leverages the scale of the Portfolio to negotiate deals that are at the lower end of industry standards and highly competitive with peers. However, management fees cannot be considered in isolation. Performance expectations and fees need to be carefully balanced. Managers with a track record of superior returns and capacity constrained strategies often have higher fee structures. Fee transparency is critical to ensure all fees are understood and appropriate. Future investment performance is uncertain, but fees constitute the only investment variable determinable beforehand; thus, it is critical to minimize fees to the extent possible. All else being equal, managers with lower fees will be favored.

Schedule of Investment Fees

Investment Managers	Average Assets Under Management	Annual Fee	Average Basis Points
Global Equity	\$7,020,495,475	\$6,528,208	9.30
Global Fixed Income	3,382,442,841	6,807	0.02
Private Investments	3,728,142,781	0	0.00
Total	\$14,131,081,097	\$6,535,015	4.62
Investment Custodian			
BNY		1,140,598	
Securities Lending Agent			
BNY		67,413	
Total Investment Fees		\$7,743,026	

Schedule of Investment Commissions

Brokerage Firm	Shares Traded	Total Dollars	Commission/Share
Goldman Sachs & Co, New York	2,721,657	\$104,129	\$0.04
Bank Of America Corp, Charlotte	17,162,387	20,637	0.00
BNP Paribas Peregrine Sec Ltd, Hong Kong	9,400	494	0.05
BNP Paribas Sec Srvs Sa, Singapore	1,222,973	6,355	0.01
Citigroup Gbl Mkts Inc, New York	783,293	4,829	0.01
Credit Lyonnais Secs, Singapore	735,967	3,804	0.01
Daiwa Sec SMBC Singapore Ltd, Singapore	824,787	4,667	0.01
Daiwa Secs (HK) Ltd, Hong Kong	251,800	640	0.00
Daiwa Secs Amer Inc, New York	853,513	5,183	0.01
Goldman Sachs Intl, London (Gsilgb2X)	736,426	4,234	0.01
Ichiyoshi Sec Co Ltd, Tokyo	88,906	245	0.00
Instinet Europe Limited, London	2,666,950	17,115	0.01
J.P. Morgan Secs Ltd, London	1,814,669	9,765	0.01
Jefferies & Co Inc, New York	858,556	9,339	0.01
Merrill Lynch Gilts Ltd, London	3,869,510	61,707	0.02
Mizuho Securities Asia, Hong Kong	1,939,700	2,717	0.00
Mizuho Securities Usa Inc, New York	955,410	9,695	0.01
Morgan Stanley And Co., Llc, New York	1,815,830	11,560	0.01
Nomura Secs Intl, London	4,480,500	6,170	0.00
Okasan International (Asia), Hong Kong	472,300	671	0.00
SBI Securities (Hong Kong) Li, Hong Kong	44,478	277	0.01
SMBC Securities, Inc New York	417,531	6,401	0.02
Societe Generale, Paris	201,410	1,010	0.01
UBS Warburg Asia Ltd, Hong Kong	763,295	4,425	0.01
Total Commissions	45,691,248	\$296,068	\$0.01

ACTUARIAL



October 3, 2024

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

Dear Board Members:

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

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

In order to measure progress toward this fundamental objective, MERS has annual actuarial valuations completed. Separate actuarial valuations are prepared for each participating municipality and court. The purposes of the December 31, 2023 annual actuarial valuations were to:

- measure funding progress as of December 31, 2023;
- establish contribution requirements for the fiscal years beginning in 2025;
- provide information regarding the identification and assessment of risk;
- provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) Statements; and
- provide information to assist the local unit of government with state reporting requirements.

Each valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund the plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings of each report are based on data and other information through December 31, 2023. Each valuation was based upon information furnished by MERS concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by MERS.

ACTUARIAL

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Each report was prepared at the request of the MERS Retirement Board and may be provided only in its entirety by the municipality to other interested parties (MERS customarily provides the full report on request to associated third parties such as the auditor for the municipality). GRS is not responsible for the consequences of any unauthorized use. Individual reports should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in each report, for purposes other than those identified above may be significantly different.

The Municipal Employees' Retirement Act, Public Act 427 of 1984 and the MERS' Plan Document Article VI Sec. 71 (1)(d), provides the MERS Board with the authority to set actuarial assumptions and methods after consultation with the actuary. As the fiduciary of the plan, the MERS Retirement Board sets certain assumptions for funding and GASB purposes. These assumptions are checked regularly through a comprehensive study called an Experience Study.

The Michigan Department of Treasury provides required assumptions to be used for purposes of Public Act 202 of 2017 reporting. These assumptions are for reporting purposes only and do not impact required contributions. For a full list of all the assumptions used, please refer to the division-specific assumptions described in the table(s) in each report and to the Appendix on the MERS website at:

<https://www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2023AnnualActuarialValuation-Appendix.pdf>

Assets are valued on a market related basis that fully recognizes expected investment return and averages unanticipated market return over a five-year period. MERS also uses a dedicated gains policy. The policy accelerates recognition of asset returns in excess of expected returns in conjunction with lowering the assumed rate of investment return.

MERS' staff prepared various supporting schedules in the Annual Comprehensive Financial Report based upon the information included in the annual actuarial valuations prepared by Gabriel, Roeder, Smith & Company (GRS). Specifically, these exhibits are:

- Actuarial Section Schedules
 - Summary of Actuarial Methods and Assumptions
 - Assumptions and Method Changes
 - Schedule of Active Member Valuation Data
 - Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Statistical Section Schedules
 - Schedule of Average Benefit Payments – Defined Benefit Plan
 - Schedule of Retired Members by Type of Benefit – Defined Benefit Plan
 - Schedule of Retired Members by Option Selected – Defined Benefit Plan



The actuarial assumptions used for each valuation are reasonable for purposes of the measurement. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic).

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to the Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. Beginning with the December 31, 2023 annual actuarial valuation, the revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the “Low-Default-Risk Obligation Measure” (LDROM). The LDROM calculation is provided in aggregate, in the Summary Report, provided annually.

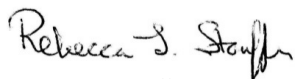
Each report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in each report is accurate and fairly presents the actuarial position of the plans as of the valuation date. All calculations, including all actuarial assumptions and methods used for funding purposes, have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Rebecca L. Stouffer, Mark Buis, Kurt Dosson, and Shana M. Neeson are Members of the American Academy of Actuaries (MAAA). These actuaries meet the Academy’s Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsors. GRS maintains independent consulting agreements with certain local units of government for services unrelated to the actuarial consulting services provided in this report.

The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

The information in each report is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting or investment advice.

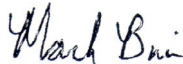
Sincerely,
Gabriel, Roeder, Smith & Company



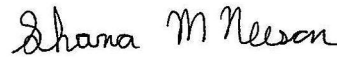
Rebecca L. Stouffer, ASA, FCA, MAAA



Kurt Dosson, ASA, FCA, MAAA



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Shana M. Neeson, ASA, FCA, MAAA



SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

An actuarial valuation is the mathematical model that estimates plan liabilities and employer contribution requirements for purposes of funding the individual employer plans within the Michigan Municipal Employees' Retirement System (MERS), for determining plan costs for Governmental Accounting Standards Board (GASB) accounting purposes, and for State Reporting. This model is updated annually to adjust the liabilities and contribution requirements for changes in member census and plan features, and to reflect actual plan experience in the process. Annual valuations are required by the Municipal Employees' Retirement Act, MCL 38.1501, et seq., as amended (MERS Act).

Each annual actuarial valuation uses current membership and financial data. In addition, an actuarial valuation requires the use of a series of assumptions regarding uncertain future events. The assumptions and methods used in the December 31, 2023 Actuarial Valuation are those adopted by the Retirement Board on February 17, 2022, and February 27, 2020. The economic assumptions used in this valuation are a 6.93% investment rate of return and a 3.00% wage inflation assumption, as adopted February 28, 2019. The demographic assumptions used in this valuation are based on the results of a study of plan experience that covered the period from December 31, 2014, through December 31, 2018. Employers were offered an alternative contribution option to phase-in the impacts from the 2019 and 2020 assumption changes. The last year of phase-in was provided with the 2023 Actuarial Valuations. All actuarial assumptions are estimates of future experience.

There have been no changes in the funding method that was adopted by the Board commencing with the December 31, 1993 valuations. The basic funding method is entry age normal and employer contribution amounts are developed as a level percentage of payroll. For purposes of determining plan accounting costs under GASB, there has been a modification to the implementation of the individual level percent method of the entry age normal cost method for divisions with bridged benefits or frozen accrued benefits.

Valuation assets were valued for each municipality by taking the difference in investment income between expected return and market return and recognizing it over a 5-year period. This asset valuation method was first adopted for the December 31, 2016 valuation. The transition from the 10-year to the 5-year asset method was fully recognized as of December 31, 2019.

The employer contribution rate is determined for each municipality based on the entry age normal funding method. Under the entry age normal cost funding method, the total employer contribution is comprised of the normal cost plus the amortization payment required to fund the unfunded actuarial accrued liability over a period of years. For open divisions (new hires are included in the division) the amortization period is 15 years. The year period will decline by 1 each year until the initial unfunded accrued liability is paid off. For divisions of active municipalities that closed to new hires prior to 2016 (new hires are not covered by the MERS Defined Benefit Plan or Hybrid Plan (Part I) provisions in a linked division), the employer had 2 amortization options. Under the Accelerated to 5-Year Option, the amortization period decreases annually by 2 years until the period reaches 6 or 5 years. Each year thereafter it decreases by 1 each year until the unfunded liability is paid off. Under the Accelerated to 15-Year Option, the amortization period decreases annually by 2 years until the period reaches 16 or 15 years. Each year thereafter the amortization period decreases annually by 1 year until the unfunded accrued liability is paid off. Negative unfunded accrued liabilities are amortized over 10 years, with the 10-year period reestablished with each annual actuarial valuation. As of December 31, 2023, there were 2,352 closed divisions.

The total normal cost is, for each active participant, the level percentage of payroll contribution (from entry age to retirement) required to accumulate sufficient assets at the participant's retirement to pay for his or her projected benefit. The employer normal cost is the total normal cost reduced by the participant contribution rate. Closed municipalities (no longer actively participating in MERS) are subject to special funding requirements as set forth in the Actuarial Policy. Employers' computed normal cost of benefits expressed as a percentage of valuation payroll is 7.64% and the total required contribution rate expressed as a percentage of valuation payroll is 34.58%.

There have been no recent changes that have had an impact on the System. Municipalities could modify provisions that apply to their individual plan if set forth in a collective bargaining agreement. The individual municipality contribution rates are modified to account for changes in provisions of the plan selected by the municipality.

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

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

ASSUMPTIONS AND METHOD CHANGES

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 is used to discount liabilities and project what plan assets will earn.
- A mortality assumption projecting the number of participants who will die before retirement and the duration of benefit payments after retirement.
- Assumed retirement rates project when participants will retire and commence receiving retirement benefits.
- A set of withdrawal and disability rates to estimate the number of participants who will leave the workforce before retirement.
- Assumed rate of pay increases to project participant compensation in future years.

Interest Rate

Funding plan benefits involve the accumulation of assets to pay future benefits. 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 2023 actuarial valuation, the long-term investment yield, net of administrative and investment expenses, is assumed to be 6.93%. This assumption was first used for the December 31, 2023 actuarial valuations.

Pay Increases

Because benefits are based on a participant's final average compensation (FAC), it is necessary to assume with respect to each participant's estimated pay progression. The pay increase assumption used in the actuarial valuation projects annual pay increases of 3.00% in the long term 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 on the following page. The 3.00% long-term wage inflation assumption was first used for the December 31, 2019 actuarial valuations. The merit and longevity pay increase assumption was first used for the December 31, 2020 actuarial valuations.

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Annual Percentage Increase in Salary

Sample Years of Service	Base (Wage Inflation)	Merit and Longevity	Total Percentage Increase in Salary
0	3.00%	6.70%	9.70%
5	3.00%	1.90%	4.90%
10	3.00%	1.10%	4.10%
15	3.00%	0.70%	3.70%
20	3.00%	0.60%	3.60%
25	3.00%	0.40%	3.40%
30	3.00%	0.20%	3.20%
35	3.00%	0.10%	3.10%
40 and Over	3.00%	0.00%	3.00%

Inflation

Although no specific price inflation assumption is needed for this valuation, the assumed long-term annual rate of price inflation is 2.50%.

Increase in Final Average Compensation

The last 3 experience studies determined that for some retirees of some municipalities, the actual final average compensation (FAC) at retirement was larger than would be expected based on reported annual pays and FACs for the years just before retirement. Some possible sources for the differences are:

- Lump sum payments for unused paid time off. Unused sick leave payouts have been excluded from FAC since the mid-1970s. However, since that time it has become popular to combine sick and vacation time into paid time off, which is included in the FAC. Consequently, the lump sums that are includible in FAC have grown over the years.
- Extra overtime pays during the final year of employment. Our studies only reflect any increase in overtime during the final year, not any increase that occurs during the full 3 or more-year averaging period.

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

The Board adopted new FAC assumptions to be applied to the December 31, 2020 actuarial valuations. These assumptions reflect an FAC load of 1% to 15% for each municipality, based on the municipality's experience in the 2014-2018 experience study. A load of 0% is used for divisions with a definition of compensation equal to base wages. The FAC increase assumption(s) for each municipality are shown in individual actuarial valuation reports. Note that for divisions that adopted Sick Leave in FAC (SLIF), the assumption is developed individually for each division based on the specific SLIF provision and/or past experience.

Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible participants retiring during the next year.

The retirement rates for Normal Retirement are determined by each participant's replacement index at the time of retirement. The replacement index is defined as the approximate percentage of the participant's pay (after reducing participant contributions) that will be replaced by the participant's benefit at retirement. The index is calculated as:

Replacement Index = $100 \times \text{Accrued Benefit} \div [\text{Pay} - \text{Participant Contributions}]$.

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

The normal retirement rates and early retirement rates below were first used for the December 31, 2020 actuarial valuations.

Normal Retirement – Service Based Benefit F(N) Adopted

Sample Replacement Index	Percent of Eligible Active Participants Retiring Within the Next Year	
	Public Safety	General
5	11.0%	9%
10	14.0%	11%
15	19.0%	15%
20	24.0%	19%
25	24.0%	19%
30	24.0%	19%
35	24.0%	19%
40	24.0%	19%
45	25.0%	20%
50	26.0%	21%
55	26.0%	21%
60	30.0%	24%
65	30.0%	24%
70	31.0%	25%
75	33.0%	27%
80	38.0%	30%
85	42.0%	33%
90	48.0%	38%
95	52.0%	42%
100+	60.0%	48%

Early Retirement – Reduced Benefit

Retirement Ages	Percent of Eligible Active Participants Retiring Within Next Year
All Applicable ages	4.00%

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Withdrawal Rates

The withdrawal rates are used to estimate the number of participants at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to participants eligible to retire, and do not include separation on account of death or disability. The assumed rates of withdrawal applied in the current valuation are based on years of service and employment classification. Divisions 02, 20-29, 05, and 50-59 are a Public Safety employment classification. All other divisions are considered a General employment classification.

Sample rates of withdrawal from active employment, prior to the scaling factor, are shown. These rates were first used for the December 31, 2020 actuarial valuations.

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

Sample Years of Service	% of Active Participants Withdrawing Within the Next Year	
	Public Safety	General
0	13.90%	23.40%
1	11.60%	19.50%
2	9.40%	15.80%
3	7.40%	12.50%
4	6.10%	10.30%
5	4.90%	8.30%
10	3.20%	5.40%
15	2.40%	4.00%
20	1.80%	3.10%
25 and over	1.50%	2.60%

Disability Rates

Disability rates are used in the valuation to estimate the incidence of participant disability in future years.

The assumed rates of disablement at various ages are shown. These rates were first used for the December 31, 2015 actuarial valuations.

¹80% of the disabilities are assumed to be non-duty, and 20% of the disabilities are assumed to be duty related. For those plans that have adopted disability provision D-2, 40% of the disabilities are assumed to be non-duty, and 60% are assumed to be duty related.

Rates of Withdrawal Due To Disability¹

Sample Ages	Percent of Active Participants Becoming Disabled Within Next Year
20	0.02%
25	0.02%
30	0.02%
35	0.05%
40	0.08%
45	0.20%
50	0.29%
55	0.38%
60 and above	0.39%

Mortality Tables

In estimating the amount of reserves required at retirement to pay a participant'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.

This valuation incorporates fully generational mortality. The base mortality tables used are constructed as described below and are based on the weighted sex distinct rates:

Pre-Retirement Mortality:

1. 100% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 100% of PubG-2010 Employee Mortality Tables for Ages 18-80
3. 100% of PubG-2010 Healthy Retiree Tables for Ages 81-120

Non-Disabled retired plan members and beneficiaries:

1. 106% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 106% of PubG-2010 Employee Mortality Tables for Ages 18-49
3. 106% of PubG-2010 Healthy Retiree Tables for Ages 50-120

Disabled retired plan members:

1. 100% of Pub-2010 Juvenile Mortality Tables for Ages 0-17
2. 100% of PubNS-2010 Disabled Retiree Tables for Ages 18-120

Future mortality improvements are assumed each year using scale MP-2019 applied fully generationally from the Pub-2010 base year of 2010.

These mortality tables were first used for the December 31, 2020 actuarial valuations. Sample life expectancies and mortality rates are shown below.

Pre-Retirement Mortality:

Age on Dec 31, 2023	Expected Years of Life Remaining		Mortality Rates	
	Male	Female	Male	Female
20	70.26	72.95	0.040%	0.015%
25	64.97	67.63	0.034%	0.011%
30	59.68	62.30	0.052%	0.021%
35	54.44	57.01	0.071%	0.032%
40	49.25	51.74	0.087%	0.043%
45	44.09	46.50	0.103%	0.056%
50	38.95	41.28	0.140%	0.079%
55	33.88	36.11	0.210%	0.127%
60	28.91	31.02	0.327%	0.197%
65	24.07	26.01	0.469%	0.286%

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Mortality Tables (Non – Disabled)

Age on December 31, 2023	Expected Years of Life Remaining		Mortality Rates	
	Male	Female	Male	Female
45	40.45	43.50	0.109%	0.060%
50	35.23	38.21	0.296%	0.224%
55	30.36	33.24	0.439%	0.313%
60	25.66	28.38	0.669%	0.430%
65	21.17	23.65	0.970%	0.627%
70	16.91	19.11	1.499%	1.006%
75	12.99	14.87	2.530%	1.777%
80	9.54	11.06	4.539%	3.272%
85	6.72	7.85	8.310%	6.177%
90	4.65	5.40	14.395%	11.506%

Mortality Tables (Disabled)

Age on December 31, 2023	Expected Years of Life Remaining		Mortality Rates	
	Male	Female	Male	Female
45	30.11	32.81	1.061%	0.987%
50	26.29	28.99	1.503%	1.413%
55	22.84	25.55	2.030%	1.796%
60	19.73	22.35	2.567%	2.068%
65	16.82	19.11	3.050%	2.177%
70	13.99	15.76	3.615%	2.555%
75	11.22	12.48	4.639%	3.564%
80	8.64	9.54	6.591%	5.519%
85	6.43	7.14	9.869%	8.763%
90	4.65	5.34	15.043%	12.912%

Schedule of Active Member Valuation Data

Valuation Dec 31	Participating Municipalities	Active Participants	Active Participants Annual Payroll	Annual Average Pay	Percent Increase in Average Pay	Participants on Deferred Status
2014	728	35,302	\$1,743,799,124	\$49,397	1.9%	7,690
2015	732	35,274	1,786,825,334	50,656	2.5%	8,340
2016	735	34,843	1,779,919,980	51,084	0.8%	8,252
2017	743	34,787	1,812,477,401	52,102	2.0%	8,361
2018	745	33,891	1,812,758,776	53,488	2.7%	8,605
2019	745	33,710	1,850,299,634	54,889	2.6%	8,638
2020	742	32,314	1,851,572,891	57,299	4.4%	8,663
2021	744	31,019	1,833,562,238	59,111	3.2%	8,916
2022	746	30,438	1,890,680,777	62,116	5.1%	9,128
2023	748	30,153	1,958,236,023	64,943	4.6%	9,239

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Valuation Dec 31	Added to Rolls		Removed from Rolls	
	Retirees/ Beneficiaries Number	Annual Allowance	Retirees/ Beneficiaries Number	Annual Allowance
2014	4,242	\$107,064,445	948	\$12,090,122
2015	2,714	68,984,180	1,001	13,947,540
2016	2,847	70,269,768	1,540	25,743,252
2017	2,479	60,140,628	1,105	16,084,776
2018	2,406	60,508,490	1,204	18,264,095
2019	2,304	58,870,634	1,168	18,699,589
2020	2,555	68,137,414	1,444	24,315,326
2021	2,488	66,827,838	1,362	23,046,770
2022	2,521	70,333,043	1,405	25,800,481
2023	2,256	64,719,178	1,458	27,510,791

End-of-Year Rolls				
Valuation Dec 31	Retirees/ Beneficiaries Number	Annual Allowance	% Increase in Annual Allowance	Average Annual Allowance
2014	35,754	\$723,077,656	15.1%	\$20,224
2015	37,467	778,114,296	7.6%	20,768
2016	38,774	822,640,812	5.7%	21,216
2017	40,148	866,696,664	5.4%	21,588
2018	41,350	908,941,059	4.9%	21,982
2019	42,486	949,112,105	4.4%	22,339
2020	43,597	992,934,193	4.6%	22,775
2021	44,723	1,036,715,280	4.4%	23,181
2022	45,839	1,081,247,846	8.9%	23,588
2023	46,637	1,118,456,220	3.4%	23,982

SUMMARY OF PLAN DOCUMENT PROVISIONS

There were no recent changes in the nature of the Defined Benefit Plan that would have a material impact on the actuarial valuations for December 31, 2023. Pursuant to a collective bargaining agreement, a participating municipality may provide for retirement benefits that are modifications of some of the MERS standard retirement benefits otherwise included, although the Hybrid Plan and Defined Contribution Plan are not modifiable. The actuary took the known modifications into consideration when determining the municipality contribution rates in the December 31, 2023 actuarial valuations for the Defined Benefit Plan.

The benefits summarized in this section are intended only as general information regarding MERS. The 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 governs.

The December 31, 2023 actuarial valuations were based on the provisions of the MERS Plan Document as of that date.

Defined Benefit Plan

Eligibility for Retirement

Monthly retirement payments are made over the lifetime of the retiree, the lifetime of the retiree and a beneficiary, or the lifetime of the retiree and a period certain. The final payment option is elected by the retiring participant.

Participants are eligible to retire after vesting and meeting age and service requirements. Vesting occurs after a number of years of credited service as selected by the municipality.

Early retirement benefits are available if the vested participant meets eligibility requirements. The monthly payment is reduced for each month the participant is younger than the normal retirement age selected by the municipality. If selected by the municipality, an unreduced early retirement benefit may be payable if the eligibility requirement for that benefit is met.

Benefit Formula

The annual benefit equals a specified percentage of the participant's final average compensation, multiplied by the number of years and months of credited service. The plan has several benefit multipliers available. The benefit multipliers vary and are adopted by a participating municipality.

Mandatory Retirement

There is no mandatory retirement age; however, participants must take a required minimum distribution as required by law.

Deferred Vested Benefits

When a participant leaves MERS covered employment after earning the required number of years of service for vesting, that former participant may apply for a deferred vested benefit any time at or after the vested former participant meets the age eligibility requirements. Vested deferred benefits commence effective as of the first day of the month next following the month in which the vested former participant both meets the age eligibility requirements and applies for benefits, accompanied by all required documentation.

Maximum Benefit Payable by MERS

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (IRC). Benefits in excess of the maximum benefit will be paid by the MERS Qualified Excess Benefit Plan Arrangement.

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 eligibility requirements for that municipality.

Final Average Compensation

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

Disability Retirement Allowance – Duty or Non-Duty

A disability retirement benefit is available to an active participant who becomes totally and permanently disabled from performing his/her job while employed by a participating municipality after meeting the vesting requirement of the benefit program. If the disability is determined to be the natural and proximate result of a personal injury or disease arising out of and in the course of the participant's actual performance of duty with a municipality, the service requirement is waived.

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

If disability is duty-related, the amount of the retirement allowance shall be the greater of 25% of the members' FAC or a benefit based on 10 years of credited service in addition to the member's actual period of service, provided the total years of service do not exceed the greater of 30 years or the member's actual period of service.

A disability retirement benefit commences the first day of the month next following the date on which the completed application for disability retirement benefits is received by the System, or, if later, the date of the participant's termination of employment with the participating municipality or court resulting from the incapacity. Applications for disability retirement benefits must be filed within 2 years of termination of employment.

Death Allowance – Duty or Non-Duty

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

A monthly pension beneficiary of a deceased active participant 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 a 100% joint and survivor election. The reduction for retirement before attainment of normal retirement age is not applied. If the monthly pension beneficiary of a deceased active participant is a spouse, the spouse will receive a monthly benefit in the amount of 85% of the deceased active participant'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 (but not less than the amount that would have been payable under the 100% form, above). Payment to the monthly pension beneficiary of a deceased active participant commences on the first day of the month in which the deceased active died.

Payment to the monthly pension beneficiary of a deceased active participant commences immediately. If the beneficiary of a deceased vested former participant is a spouse, the spouse will receive a monthly benefit in the amount of 85% of the deceased vested form participant'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 (but not less than the amount that would have been payable under the 100% form, above). Payment to the pension beneficiary of a deceased vested former participant commences on the later of the first day of the month following the month in which the vested former participant would have first satisfied the age requirement for an unreduced service retirement allowance, or upon the receipt by MERS of a completed application on the form prepared by the System, along with other forms and documents required by the System.

The amount of a surviving spouse's benefit is always the larger of (1) the benefit computed as a monthly pension 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 participant's or the deceased former vested participant'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, if none, the decedent's estate would receive a refund of any remaining participant'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/children if death occurs as the natural and proximate result of a personal injury or disease arising out of and in the course of the participant's actual performance of duty with a municipality. The vesting requirement is waived, and the minimum benefit is 25% of the deceased participant's final average compensation.

Participant Contributions

If selected by the municipality, each participant must contribute a percentage of their annual compensation on a pre-tax basis. The weighted average of participant contributions in 2023 was 4.28%. Interest is credited to accumulated participant contributions each December 31 at a rate determined by MERS. Currently MERS is using the 1-year U.S. Treasury bill rate determined as of December 31.

If a participant dies without a retirement allowance or other benefit payable on their account, the participant's accumulated contributions plus interest are refunded upon application to the participant's surviving spouse or a beneficiary named by the participant (with spousal consent). If a participant terminates employment, the participant may take a refund of participant contributions, which has the effect of forfeiting all service credit.

Post-Retirement Adjustments

Each municipality may elect to provide post-retirement adjustments to retirees and their beneficiaries. The municipality can choose a one-time adjustment, an annual adjustment for all retirees, or an adjustment for future retirees only. This cost-of-living adjustment (COLA) increase is effective in January of each year. The COLA may be compounded, or based upon the original retirement benefit, as selected by the municipality in the adoption agreement.

Forms of Benefit Payment

The participant 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:

- Straight Life paid over the retiree's life only.
- A reduced benefit paid over the joint lives of the retiree and beneficiary and continuing at 100% of the original reduced amount for the life of the beneficiary if s/he survives the retiree. If the retiree survives the beneficiary, the retiree's benefit is prospectively converted to a straight life benefit.
- A reduced benefit paid over the life of the retirement, continuing as 75% or 50% of the original reduced amount for the life of the beneficiary if s/he survives the retiree. If the retiree survives the beneficiary, the retiree's benefit is prospectively converted to a straight life benefit.
- A reduced benefit paid to the retiree for life, and if the retiree dies before the number of monthly benefits elected at retirement (60, 120, 180, or 240) is reached, the reduced benefit continues to the beneficiary until the sum of the number of the monthly benefits paid to the retiree and to the beneficiary reaches the number elected at retirement.

Deferred Retirement Option Program (DROP): Traditional

If a municipality has added a DROP benefit to its plan, a participant covered by the Benefit Program DROP may, when eligible for retirement, choose a specified DROP period in which s/he will cease to accrue any additional retirement benefits, but remain employed by the participating municipality or court. The participant must elect a DROP end date at least 6 months after the beginning date, but no more than 60 months after the beginning date, in 1-month increments.

Upon the participant's election of DROP and the receipt of an application to enroll in DROP, MERS will calculate the participant's service retirement and benefit payment as of the beginning date. The System shall also calculate any age differential between the participant and the participant's beneficiary as of the calendar year of the DROP exit date in accordance with Treasury Regulation 26 CFR § 1.401(a)(9)-6. Upon the beginning date of the DROP period, the participant shall be responsible to continue paying participant contributions, if any.

On the next available benefit payment date after processing is complete, and monthly thereafter, an amount equal

to 100% of the monthly service retirement benefit payment the participant would have received if he or she had retired as of the DROP beginning date will be credited to a notional account for the benefit of the participant.

Funds in the DROP account are credited with interest in the amount of 3% annually or prorated in the event of a DROP period that is less than 12 months.

Upon the end date, the participant shall receive a lump-sum distribution of the participant's DROP account and on the first day of the calendar month following end date, the participant will begin receiving monthly service retirement benefit payments.

Deferred Retirement Option Program (DROP+) Partial Lump Sum

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

- The participant can elect a lump sum equal to 12, 24, 36, 48, or 60 times their monthly accrued benefit.
- For each 12 months included in the lump sum, the participant's lifetime benefit is reduced by the DROP+ percentage adopted by the employer. The employer can adopt any of the following DROP+ reduction percentages: 6, 7, 8, 9, or 10%.

As of June 30, 2013, Benefit Program DROP+ may no longer be adopted; 2 employers adopted the program prior to it ending.

Annuity Withdrawal

Under the Annuity Withdrawal Program, a retiring participant may elect to receive a refund of their accumulated participant contributions with interest in a lump sum at retirement. The participant's monthly pension would then be reduced by the actuarial equivalent of the lump sum payment. The employer has 2 options for the interest discount rate used to compute the actuarial equivalent reduction: the current investment return assumption used in the annual actuarial valuations, or the most recent December 31 interest rate used for crediting interest on participant contributions.

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 participant.

The normal retirement age shall be an age between 60 and 70, as selected by the participating municipality or court in the Hybrid Plan Adoption Agreement, with 6 years of service. The unreduced early retirement age shall be an age between 55 and 65, as selected by the participating municipality or court in the Hybrid Plan Adoption Agreement, with 25 years of service.

Benefit Formula

Where the employee division has Social Security coverage, the choices of multipliers are 1.00%, 1.25% or 1.50%.

Where the employee division does not have Social Security coverage, the choices of multipliers are 1.00%, 1.25%, 1.50%, 1.75% or 2.00%.

Service credit purchases are not permitted in the Hybrid Plan.

Mandatory Retirement

There is no mandatory retirement age; however, all benefits must commence by the required beginning dated determined under IRC Section 401(a)(9).

Deferred Vested Benefits

When a participant leaves MERS covered employment after earning the required number of years of service for vesting, that former participant may apply for a deferred vested benefit any time at or after the vested former participant meets the age eligibility requirements. Vested deferred benefits commence effective as of the first day of the month next following the month in which the vested former participant both meets the age eligibility requirements and applies for benefits, accompanied by all required documentation.

Maximum Benefit Payable by MERS

The maximum benefit that may be paid by MERS is governed by Section 415 of the Internal Revenue Code (IRC). Benefits in excess of the maximum benefit will be paid by the MERS Qualified Excess Benefit Plan under Plan Section 88.

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 eligibility requirements for that municipality.

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 IRC 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.

Participant Contributions

In the event the municipality elects an employer cap under Plan Document section 66(3), each participant is required to contribute a percentage of their annual compensation, up to the compensation limit under IRC Section 401(a)(17), once the employer cap is exceeded. Interest is credited to accumulated participant contributions each December 31 at a rate determined by MERS. Currently MERS is using the 1-year U.S. Treasury bill rate determined as of December 31.

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

Post-Retirement Adjustments

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

Forms of Benefit Payment

The participant 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:

- Straight Life paid over the retiree's life only.
- A reduced benefit paid over the joint lives of the retiree and beneficiary and continuing as 100% of the original reduced amount for the life of the beneficiary if s/he survives the retiree. If the retiree survives the beneficiary, the retiree's benefit is prospectively converted to a straight life benefit.
- A reduced benefit paid over the life of the retirement, continuing as 75% or 50% of the original reduced amount for the life of the beneficiary if s/he survives the retiree. If the retiree survives the beneficiary, the retiree's benefit is prospectively converted to a straight life benefit.

A reduced benefit paid to the retiree for life, and if the retiree dies before the number of monthly benefits elected at retirement (60, 120, 180, or 240) is reached, the reduced benefit continues to the beneficiary until the sum of the number of the monthly benefits paid to the retiree and to the beneficiary reaches the number elected at retirement.

Deferred Retirement Option Program (DROP): Traditional

There is no DROP option in the Hybrid Plan.

Deferred Retirement Option Program (DROP+) Partial Lump Sum

There is no DROP+ option in the Hybrid Plan.

Annuity Withdrawal

There is no Annuity Withdrawal option in the Hybrid Plan.

Part II - Defined Contribution Portion of Hybrid Plan

Contributions — Employer

The employer shall contribute the amount determined under the contribution plan elected in the Adoption Agreement. Such contribution plans may include contributions determined as a flat dollar amount, as a percentage of compensation, as a combination of these, or contingent upon and/or in proportion to the amount of employee contributions elected under this or a related plan sponsored by the employer. Contributions are limited by the requirements of Internal Revenue Code Section 415.

There are 3 vesting schedules from which an employer may choose to adopt:

- Immediate vesting upon participation
- 100% vesting after stated years (the maximum vesting period is 5 years)
- Graded vesting percentages per year of service, with the following limitations
 - (i) Not less than 25% vesting after 3 years of service
 - (ii) Not less than 50% vesting after 4 years of service
 - (iii) Not less than 75% vesting after 5 years of service
 - (iv) Not less than 100% vesting after 6 years of service

Notwithstanding the above, a participant shall be vested in his/her entire employer contribution account, to the extent that the balance of such account has not previously been forfeited, if s/he is employed on or after his/her Normal Retirement Age. "Normal Retirement Age" is age 60 or as otherwise specified by the employer in the Adoption Agreement.

In the event of the disability or death of an active participant, the participant shall be 100% vested in his/her entire employer contribution account.

Contributions — Participant

Mandatory employee pre-tax employee contributions and voluntary after-tax employee contributions are allowed. No pre-tax elective deferral contributions are permitted. Participant contributions are vested immediately.

Contributions are limited by the requirements of Internal Revenue Code Section 415.

Note: The Annual Actuarial Valuation addresses assets and liabilities for participation under the MERS Defined Benefit Plan and the Defined Benefit portion of the Hybrid Plan. The Defined Contribution portion of the Hybrid Plan is not addressed in the valuation results.

STATISTICAL

STATISTICAL SUMMARY

The Statistical Section provides pertinent information to assist readers when viewing the Financial Statements, Notes to the Financial Statements, and Required Supplementary Information to help in understanding and assessing the System's overall financial condition. The information reported here is in compliance with GASB Statement No. 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements for the supplementary information provided in this section.

The schedules and graphs beginning on the next page show financial trend information about the growth of the MERS assets for the past 10 years. These schedules provide detailed information about the trends of key sources of additions and deductions to the System's assets, and assist in providing a context framing of how MERS' financial position has changed over time. The financial trend schedules presented are:

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

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

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

Changes in Fiduciary Net Position – Last 10 Years (Dollars in Thousands)

Year	2015	2016	2017	2018
Defined Benefit Plan				
Additions:				
Plan Member Contributions	\$86,553	\$87,043	\$88,192	\$87,739
Employer Contributions	635,581	566,815	609,707	707,958
Nonemployer Contributions				
Net Investment Gain (Loss)	(140,903)	867,584	1,176,099	(394,517)
Total Additions to Net Assets	581,231	1,521,442	1,873,998	401,180
Deductions:				
Benefits and Employee Refunds	754,978	917,084	849,734	892,536
Special Litigation Expense			4,250	
Administrative Expenses	17,665	17,446	17,389	17,463
Total Deductions from Net Assets	772,643	934,530	871,373	909,999
Net Increase (Decrease)	(191,412)	586,912	1,002,625	(508,818)
Net Position				
Balance Beginning of Fiscal Period	8,078,524	7,887,112	8,473,498	9,476,123
Balance End of Fiscal Period	\$7,887,112	\$8,474,024	\$9,476,123	\$8,967,305
Defined Contribution Plan				
Additions:				
Plan Member Contributions	\$23,496	\$20,882	\$22,259	\$25,412
Employer Contributions	38,151	56,696	32,666	49,077
Net Investment Gain (Loss)	(7,482)	45,744	85,984	(41,168)
Total Additions to Net Assets	54,165	123,322	140,909	33,321
Deductions:				
Benefits and Withdrawals	34,797	61,088	34,722	39,015
Administrative Expenses	601	619	648	555
Total Deductions from Net Assets	35,398	61,707	35,370	39,570
Net Increase (Decrease)	18,767	61,615	105,539	(6,249)
Net Position				
Balance Beginning of Fiscal Period	480,919	499,686	561,301	666,840
Balance End of Fiscal Period	\$499,686	\$561,301	\$666,840	\$660,591
Health Care Savings Program				
Additions:				
Employer Employee Contributions	\$20,275	\$27,158	\$23,477	\$27,846
Net Investment Gain (Loss)	(1,779)	11,393	19,926	(6,817)
Miscellaneous Income				
Total Additions to Net Assets	18,496	38,551	43,403	21,029
Deductions:				
Medical Disbursements Paid	3,694	4,925	5,645	5,954
Forfeitures and transfers	355			
Administrative Expenses	145	165	187	168
Total Deductions from Net Assets	4,194	5,090	5,832	6,123
Net Increase (Decrease)	14,302	33,461	37,571	14,906
Net Position				
Balance Beginning of Fiscal Period	97,255	111,557	145,018	182,589
Balance End of Fiscal Period	\$111,557	\$145,018	\$182,589	\$197,495

2019	2020	2021	2022	2023	2024
\$86,400	\$88,986	\$88,179	\$88,520	\$87,118	\$91,136
622,384	722,022	899,518	785,582	721,728	808,591
				464,446	23,531
1,193,686	1,404,124	1,503,832	(1,383,633)	1,263,610	919,734
1,902,470	2,215,132	2,491,529	(509,531)	2,536,902	1,842,992
934,739	975,756	1,029,742	1,069,073	1,110,046	1,169,365
19,708	17,854	17,801	22,540	25,339	26,564
954,447	993,610	1,047,543	1,091,613	1,135,385	1,195,929
948,023	1,221,522	1,443,986	(1,601,144)	1,401,517	647,062
8,967,305	9,915,328	11,136,850	12,580,836	10,979,692	12,381,209
\$9,915,328	\$11,136,850	\$12,580,836	\$10,979,692	\$12,381,209	\$13,028,271

\$28,036	\$45,952	\$35,335	\$39,800	\$54,144	\$61,664
76,517	54,032	64,154	57,232	92,576	97,597
136,874	111,772	155,438	(180,503)	180,179	171,622
241,427	211,756	254,927	(83,471)	326,899	330,883
39,619	47,353	58,600	70,069	75,362	87,780
628	717	905	3,055	3,677	3,957
40,247	48,070	59,505	73,124	79,039	91,736
201,180	163,686	195,422	(156,595)	247,861	239,147
660,591	861,771	1,025,457	1,220,879	1,064,284	1,312,145
\$861,771	\$1,025,457	\$1,220,879	\$1,064,284	\$1,312,145	\$1,551,292

\$36,192	\$35,495	\$44,519	\$45,693	\$57,787	\$87,630
30,913	33,788	44,348	(58,080)	60,513	57,786
67,105	69,283	88,867	(12,387)	118,300	145,416
7,267	7,623	9,545	16,475	17,089	19,293
195	229	299	979	1,344	1,456
7,462	7,852	9,844	17,454	18,433	20,748
59,643	61,431	79,023	(29,841)	99,868	124,667
197,495	257,138	318,569	397,592	367,751	467,619
\$257,138	\$318,569	\$397,592	\$367,751	\$467,619	\$592,286

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Changes in Fiduciary Net Position – Last 10 Years (Dollars in Thousands)

Year	2015	2016	2017	2018
Retiree Health Funding Vehicle				
Additions:				
Employer Contributions	\$73,764	\$71,741	\$59,219	\$88,650
Nonemployer Contributions				
Net Investment Gain (Loss)	(8,833)	70,585	107,415	(42,560)
Total Additions to Net Assets	64,931	142,326	166,634	46,090
Deductions:				
Disbursements Paid to Municipalities	22,002	24,893	12,286	35,004
Transfers and Special Expenses				
Administrative Expenses	732	773	841	731
Total Deductions from Net Assets	22,734	25,666	13,127	35,735
Net Increase (Decrease)	42,197	116,660	153,507	10,355
Net Position				
Balance Beginning of Fiscal Period	594,156	636,352	753,012	906,519
Balance End of Fiscal Period	\$636,352	\$753,012	\$906,519	\$916,874

Investment Services Program				
Additions:				
Employee and Employer Contributions	\$19,721	\$289	\$142	
Net Investment Gain (Loss)	138	6,699	7,385	\$(2,035)
Total Additions to Net Assets	19,859	6,988	7,527	(2,035)
Deductions:				
Disbursements and Transfers	40,798	3,309	3,355	10,554
Administrative Expenses	82	74	71	55
Total Deductions from Net Assets	40,880	3,383	3,426	10,609
Net Increase (Decrease)	(21,021)	3,605	4,101	(12,644)
Net Position				
Balance Beginning of Fiscal Period	86,134	65,113	68,718	72,819
Balance End of Fiscal Period	\$65,113	\$68,718	\$72,819	\$60,175

2019	2020	2021	2022	2023	2024
\$98,326	\$57,878	\$57,450	\$50,421	\$40,467	\$32,711
					2,526
133,376	164,540	170,147	(162,578)	156,141	117,441
231,702	222,418	227,597	(112,157)	196,608	152,678
14,531	16,291	106,822	16,429	22,462	25,969
811	913	1,107	1,893	2,342	2,518
15,342	17,204	107,929	18,322	24,804	28,487
216,360	205,214	119,668	(130,479)	171,804	124,191
916,874	1,133,234	1,338,448	1,458,116	1,327,637	1,499,441
\$1,133,234	\$1,338,448	\$1,458,116	\$1,327,637	\$1,499,441	\$1,623,632

	\$3,479	\$535	\$950	\$649	\$91
\$6,207	7,067	7,458	(6,793)	5,843	4,152
6,207	10,546	7,993	(5,843)	6,492	4,243
16,459	4,105	2,738	2,827	4,387	3,936
42	39	45	73	90	94
16,501	4,144	2,783	2,900	4,477	4,030
(10,294)	6,402	5,210	(8,743)	2,015	213
60,175	49,881	56,283	61,493	52,750	54,766
\$49,881	\$56,283	\$61,493	\$52,750	\$54,766	\$54,979

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Changes in Fiduciary Net Position – Last 10 Years (Dollars in Thousands)

Year	2015	2016	2017	2018
457 Program				
Additions:				
Employee Contributions	\$12,442	\$20,646	\$22,566	\$36,803
Employer Contributions				1,048
Net Investment Gain (Loss)	(747)	3,643	11,698	(7,729)
Total Additions to Net Assets	11,695	24,289	34,264	30,122
Deductions:				
Benefits	1,066	1,717	3,389	4,386
Administrative Expenses	51	66	86	93
Total Deductions from Net Assets	1,117	1,783	3,475	4,479
Net Increase (Decrease)	10,578	22,506	30,789	25,642
Net Position				
Balance Beginning of Fiscal Period	19,311	29,889	52,395	83,184
Balance End of Fiscal Period	\$29,889	\$52,395	\$83,184	\$108,826
IRA Program				
Additions:				
Employee Contributions				\$53
Employer Contributions				
Net Investment Gain (Loss)				(2)
Total Additions to Net Assets				51
Deductions:				
Benefits				5
Administrative Expenses				
Total Deductions from Net Assets				5
Net Increase (Decrease)				46
Net Position				
Balance Beginning of Fiscal Period				-
Balance End of Fiscal Period				\$46

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

2019	2020	2021	2022	2023	2024
\$52,039	\$48,986	\$44,007	\$53,473	\$69,895	\$77,237
1,254	1,944	2,332	3,011	3,580	4,430
24,199	22,596	33,332	(45,073)	49,125	48,423
77,492	73,526	79,671	11,411	122,601	130,091
8,550	11,068	15,131	15,846	22,690	35,077
129	173	229	634	884	981
8,679	11,241	15,360	16,480	23,574	36,058
68,813	62,285	64,311	(5,069)	99,027	94,032
108,826	177,639	239,924	304,235	299,166	398,193
\$177,639	\$239,924	\$304,235	\$299,166	\$398,193	\$492,225
\$2,022	\$1,791	\$2,647	\$3,897	\$4,253	\$5,053
139	537	735	(1,269)	1,689	1,911
2,161	2,328	3,382	2,628	5,942	6,964
5	244	266	366	658	867
9	23	34	42	69	75
14	267	300	408	727	941
2,147	2,061	3,082	2,220	5,213	6,023
46	2,193	4,254	7,336	9,556	14,769
\$2,193	\$4,254	\$7,336	\$9,556	\$14,769	\$20,792

Schedule of Changes in Reserves (Dollars in Thousands)

	Reserve for Employee Contributions	Reserve for Employer Contributions and Benefit Payments	Reserve for Expenses and Undistributed Investment Income	Total Reserve for Defined Benefit Plan
Additions				
Member Contributions	\$91,136			\$91,136
Employer Contributions		\$808,591		808,591
Nonemployer Contributing Entity Contributions		23,531		23,531
Net Investment Income			\$919,396	919,396
Miscellaneous Income			338	338
Total Additions	91,136	832,121	919,733	1,842,991
Deductions				
Benefits and Withdrawals	11,935	1,157,430		1,169,365
Administrative Expense			26,564	26,564
Total Deductions	11,935	1,157,430	26,564	1,195,929
Net Increase (Decrease)	79,201	(325,308)	893,169	647,062
Other Changes in Reserves				
Investment Income Allocations	37,473	853,038	(890,511)	-
Retirement and Division Transfers	(84,452)	84,452		-
Total Other Changes in Reserves	(46,979)	937,490	(890,511)	-
Net Increase in Reserves After Other Changes	32,222	612,182	2,658	647,062
Reserve Balance Beginning of Year	982,320	11,373,808	25,080	12,381,209
Reserve Balance End of Year	\$1,014,542	\$11,985,990	\$27,739	\$13,028,271

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

Reserve for Defined Contribution	Reserve for Health Care Savings Program	Reserve for Individual Retirement Account	Reserve for Retiree Health Funding Vehicle	Reserve for Investment Services Program	Reserve for 457 Program	Total Reserve for Pension Trust Funds
\$61,664	\$19,406	\$5,053			\$77,237	\$254,496
97,597	68,224		\$32,585	\$91	4,430	1,011,518
			2,652			26,183
166,770	56,058	1,849	113,281	4,009	46,924	1,308,287
4,852	1,728	62	4,159	143	1,499	12,781
330,883	145,416	6,964	152,678	4,243	130,090	2,613,264
87,780	19,293	867	25,969	3,936	35,077	1,342,286
3,957	1,456	75	2,518	94	981	35,643
91,736	20,748	941	28,487	4,030	36,058	1,377,929
239,146	124,667	6,023	124,191	213	94,032	1,235,336
						-
						-
-	-	-	-	-	-	-
239,146	124,667	6,023	124,191	213	94,032	1,235,336
1,312,145	467,619	14,769	1,499,441	54,766	398,193	16,128,142
\$1,551,292	\$592,286	\$20,792	\$1,623,632	\$54,979	\$492,225	\$17,363,476

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Schedule of Average Benefit Payments – Defined Benefit Plan

Retirements Effective	Years Credited Service								Total Retirees
	0*	>0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 30	30+	
2022									
Average Monthly Benefit	\$1,851	\$335	\$638	\$886	\$1,496	\$2,002	\$3,236	\$3,484	\$1,966
Average Final Average Salary	\$322	\$32,568	\$35,272	\$35,956	\$41,996	\$43,985	\$54,868	\$52,842	\$30,755
Number of Active Recipients	14,326	1,302	2,640	5,898	4,872	5,392	6,388	5,021	45,839
2023									
Average Monthly Benefit	\$1,874	\$334	\$648	\$897	\$1,525	\$2,056	\$3,293	\$3,522	\$1,999
Average Final Average Salary	\$376	\$30,570	\$32,557	\$33,886	\$40,069	\$42,117	\$51,893	\$50,003	\$29,850
Number of Active Recipients	13,782	1,386	2,792	6,132	5,071	5,549	6,705	5,220	46,637

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

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

Fiscal Year Ended	Pension Benefits and Employer Withdrawals	Disability Benefits	Employee Refunds and Withdrawals	Total
December 31, 2015	\$715,638	\$31,364	\$7,976	\$754,978
December 31, 2016	870,741	35,829	10,514	917,084
December 31, 2017	802,037	37,250	10,432	849,719
December 31, 2018	845,688	38,209	8,633	892,530
December 31, 2019	885,698	38,858	10,182	934,738
December 31, 2020	927,312	39,210	9,220	975,742
December 31, 2021	978,676	39,524	11,529	1,029,729
December 31, 2022	1,013,932	40,420	14,706	1,069,058
December 31, 2023	1,057,470	40,910	11,663	1,110,043
December 31, 2024	1,116,193	41,134	12,029	1,169,356

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

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

Tabulated by Optional Form of Benefit Being Paid, Tabulated by Type of Benefit Being Paid

Type of Benefit	Number of Retirees	Total Monthly Benefits
Normal Retirement for age and service	38,432	\$82,036,615
Non-Duty Disability ¹	1,047	1,605,684
Duty Disability ¹	562	1,171,439
Beneficiaries ²	5,651	7,155,422
Non-Duty Death	895	1,168,349
Duty Death	50	67,176
Totals	46,637	\$93,204,685

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

²Includes EDRO alternate payees

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

Tabulated by Optional Form of Benefit Being Paid

Type of Benefit	Number of Retirees	Total Monthly Benefits
Beneficiary draws 100% of retiree's benefit	15,647	\$33,073,177
Beneficiary draws 67% of retiree's benefit	3	\$12,816
Beneficiary draws 75% of retiree's benefit	3,398	8,881,978
Beneficiary draws 60% of retiree's benefit	383	1,447,792
Beneficiary draws 50% of retiree's benefit	6,279	14,633,271
Equated Option (changing at Social Security age)	248	266,401
5 year certain and life	338	622,628
10 year certain and life	794	1,638,867
15 year certain and life	315	577,186
20 year certain and life	649	1,075,383
Straight life allowance	18,583	30,975,186
Totals	46,637	\$93,204,685

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



This publication contains a summary description of MERS' benefits, policies, or procedures. MERS endeavors to ensure that the information provided is accurate and up to date. Where the publication conflicts with the relevant Plan Document, the Plan Document controls.