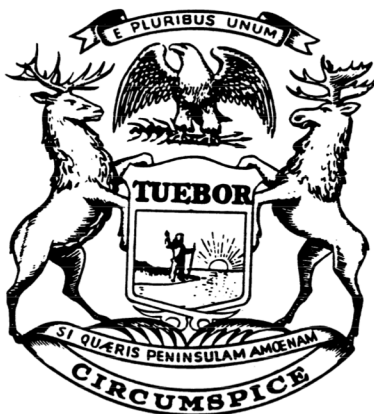


# **MICHIGAN LEGISLATIVE RETIREMENT SYSTEM**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**



## **M L R S**

**Fiduciary Component Unit of the State of Michigan**

**Prepared by:**

**Michigan Legislative Retirement System  
Anderson House Office Building, Suite S0927  
P.O. Box 30014  
Lansing, Michigan 48909  
(517) 373-0575**

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# TABLE OF CONTENTS

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## INTRODUCTORY SECTION

Certificate of Achievement .....	6
Letter of Transmittal .....	7
Administrative Organization .....	10
Retirement Board of Trustees .....	10
Organization Chart .....	10
Investment Advisors .....	11
Advisors and Consultants .....	11
Office Location .....	12

## FINANCIAL SECTION

Independent Auditor's Report .....	14
Management's Discussion and Analysis .....	17
Basic Financial Statements .....	20
Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position .....	20
Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position .....	21
Notes to Basic Financial Statements .....	22
Note 1 – Plan Description .....	22
Note 2 – Summary of Significant Accounting Policies .....	25
Note 3 – Contributions .....	27
Note 4 – Net Pension Liability .....	28
Note 5 – Net Other Postemployment Benefit Liability .....	31
Note 6 – Investments .....	35
Required Supplementary Information .....	40
Schedule of Changes in Net Pension Liability .....	40
Schedule of Changes in Net OPEB Liability .....	42
Schedules of Contributions .....	44
Schedules of Investment Returns .....	45
Note to Required Supplementary Information .....	46
Supporting Schedules .....	48
Summary Schedule of Administrative Expenses .....	48
Schedule of Investment Expenses .....	48
Schedule of Payments to Consultants .....	48
Detail of Changes in Plan Fiduciary Net Position (Pension and Other Postemployment Benefits) ..	49

## INVESTMENT SECTION

Report on Investment Activity .....	52
Asset Allocation .....	56
Investment Summary .....	56
Largest Assets Held .....	57
Schedule of Investment Fees .....	57
Schedule of Fees and Commissions .....	58

## ACTUARIAL SECTION

Actuary's Certification.....	60
Summary of Actuarial Assumptions and Methods .....	63
Actuarial Valuation Data.....	65
Prioritized Solvency Test.....	69
Analysis of System Experience.....	71
Summary of Plan Provisions .....	73

## STATISTICAL SECTION

Narrative Explanation to Statistical Section .....	76
Schedule of Additions by Source .....	77
Schedule of Pension Plan Additions by Source.....	77
Schedule of OPEB Plan Additions by Source.....	77
Schedule of Deductions by Type .....	78
Schedule of Pension Plan Deductions by Type.....	78
Schedule of OPEB Plan Deductions by Type .....	78
Schedules of Changes in Fiduciary Net Position - Pension Plan .....	79
Schedules of Changes in Fiduciary Net Position - OPEB Plan .....	79
Schedules of Benefit and Refund Deductions from Net Position by Type – Pension Plan .....	80
Schedules of Benefit and Refund Deductions from Net Position by Type – OPEB Plan .....	80
Schedules of Retired Members by Type of Benefit – Pension Plan .....	81
Schedules of Retired Members by Type of Benefit – OPEB Plan .....	82
Schedule of Average Benefit Payments – Pension Plan .....	83
Schedule of Average Benefit Payments – OPEB Plan .....	84

**Michigan Legislative Retirement System**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**

# **INTRODUCTORY SECTION**



**Certificate of Achievement  
Letter of Transmittal  
Retirement Board of Trustees  
Organization Chart  
Advisors and Consultants  
Office Location**

# INTRODUCTORY SECTION

---



Government Finance Officers Association

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

### **Michigan Legislative Retirement System**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

September 30, 2021

*Christopher P. Morrill*

Executive Director/CEO

# INTRODUCTORY SECTION

---

## Letter of Transmittal

CHRISTINE HAMMOND  
DIRECTOR

TEL. NO.: (517) 373-0575  
FAX NO.: (517) 373-5639  
TOLL FREE: (877) 577-5628  
EMAIL: [chammon@house.mi.gov](mailto:chammon@house.mi.gov)



STATE OF MICHIGAN  
**LEGISLATIVE RETIREMENT SYSTEM**

P.O. BOX 30014  
LANSING, MICHIGAN  
48909-7514

January 12, 2023

The Honorable Gretchen Whitmer  
Governor, State of Michigan

Members of the Legislature  
State of Michigan

Retirement Board Members  
and  
Members, Retirees, and Beneficiaries

Ladies and Gentlemen:

We are pleased to present the annual comprehensive financial report of the Michigan Legislative Retirement System (MLRS or System) for fiscal year 2022.

### **INTRODUCTION TO REPORT**

The System was established by legislation under Public Act 261 of 1957. Information regarding the background and description of the System is presented in Note 1 in the financial section of this report. The purpose of the System is to provide benefits for eligible current and former state legislators. The services provided by the staff are performed to facilitate the payment of benefits to members.

### ***Responsibility***

Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the System. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the System.

### ***Management's Discussion and Analysis (MD&A)***

Generally Accepted Accounting Principles (GAAP) requires that management provide an overview and analysis of the System's financial statements, which is called the MD&A. This letter of transmittal should be read in conjunction with the MD&A. The MD&A is found in the beginning of the financial section of this report.

# INTRODUCTORY SECTION

---

## **Letter of Transmittal (Continued)**

### **FINANCIAL INFORMATION**

#### ***Internal Control***

The management of the System is responsible for maintaining a system of adequate internal accounting control designed to: (1) provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization; (2) record transactions necessary to maintain accountability for assets; and (3) permit preparation of financial statements in accordance with generally accepted accounting principles in the United States of America. The internal control process is designed to provide reasonable assurance regarding the safekeeping of assets and reliability of all financial records. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. This internal control structure includes maintaining written policies and procedures.

### **INVESTMENT**

The System Board of Trustees is the investment fiduciary for the System, and pursuant to state law, the State Treasurer is the custodian of all investments of the System. The System's overall investment objective is to obtain a competitive total rate of return on investments commensurate with Act No. 314 of the Michigan Public Acts of 1965, as amended (MCL §38.1132 et seq., which is the Michigan statute governing the investments of public pension funds), the System's risk-taking ability, and the responsibilities of the System to provide retirement benefits for its members, retirees, and their beneficiaries. In absolute terms, this return objective should approximate the System's actuarial assumed rate of return, which is currently 7%. The investment activity for the year produced a total rate of return on the portfolio of (18.8%). A summary of asset allocation and investment portfolio information can be found in the investment section of this report.

### **FUNDING**

Funds are derived from the excess of additions, which include contributions and investment earnings, over deductions that are comprised of benefits and administrative expenses. Funds are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the "net position restricted for pension benefits and OPEB" in the Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position in the Financial Section of the report.

#### ***Pension Plan***

The total pension liability is not reported in the basic financial statements but is disclosed in Note 4 to the basic financial statements and in the required supplementary information. The total pension liability is determined by the actuary and is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and employees for service earned to date. The net pension liability is measured as the total pension liability less the amount of the pension plan's fiduciary net position. As of September 30, 2022, total pension liability was \$223.0 million, and plan fiduciary net position was \$87.7 million. Resulting in a net pension liability of \$135.3 million.

#### ***Other Postemployment Benefits Plan (OPEB)***

The total OPEB liability is not reported in the basic financial statements but is disclosed in Note 5 to the basic financial statements and in the required supplementary information. The total OPEB liability is determined by the actuary and is a measure of the present value of actuarial accrued liabilities estimated to be payable in the future to current retirees, beneficiaries, and employees for service earned to date. The net OPEB liability is measured as the total OPEB liability less the amount of the OPEB plan's fiduciary net position. As of September 30, 2022, total OPEB liability was \$84.1 million, and plan fiduciary net position was \$31.8 million. Resulting in a net OPEB liability of \$52.2 million.

# INTRODUCTORY SECTION

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## **Letter of Transmittal (Continued)**

### **PROFESSIONAL SERVICES**

#### ***Audit Services***

The Office of the Auditor General (OAG), independent auditors, conducts audits of the System. The independent auditor's report on the System's financial statements is included in the financial section of this report. The financial statements of the System are audited by the Auditor General as part of his constitutional responsibility.

#### ***Actuarial Services***

Statute requires an annual actuarial valuation be conducted for the pension benefits. The purpose of the valuation is to evaluate the mortality, service, compensation, and other financial experience of the System and to recommend funding rates. This annual actuarial valuation was completed for the fiscal year ended September 30, 2021. Actuarial certification and supporting statistics are included in the actuarial section of this report.

#### ***Financial Services***

The Board of Trustees for the System retains twelve (12) investment managers and a financial consultant to assist the board in its statutory responsibility to invest the System's funds. These advisors are identified in the introductory section of this report. By statute, the State Treasurer acts as the custodian for the System. Investment information is included in the investment section of this report.

### **HONORS**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Michigan Legislative Retirement System for its Annual Comprehensive Financial Report for the fiscal year ended September 30, 2021. This was the 8<sup>th</sup> consecutive year that the LRS has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Annual Comprehensive Financial Report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

### **ACKNOWLEDGEMENTS**

The preparation of this report was accomplished with the dedication and cooperation of several people, including Lorie Blundy, the System's Chief Accountant. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the funds of the System.

We would like to express our appreciation for the assistance given by staff, the advisors, and other persons who contributed to the preparation of this report. We believe their combined efforts have produced a report that will enable the System Board of Trustees, plan members, and other interested parties to evaluate and understand the Michigan Legislative Retirement System.

Sincerely,



Christine Hammond, Director  
Michigan Legislative Retirement System

# INTRODUCTORY SECTION

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## Administrative Organization

### Retirement Board of Trustees Members

As of September 30, 2022

The Honorable R. Robert Geake  
Retiree Member  
Chairperson of the Board

The Honorable Alma Wheeler Smith  
Retiree Member  
Vice-Chairperson of the Board

The Honorable J. Michael Busch  
Retiree Member

The Honorable Deborah Cherry  
Retiree Member

The Honorable John Cherry  
Retiree Member

The Honorable Philip Hoffman  
Retiree Member

The Honorable Joseph Palamara  
Retiree Member

The Honorable Richard Posthumus  
Retiree Member

The Honorable Gary Randall  
Retiree Member

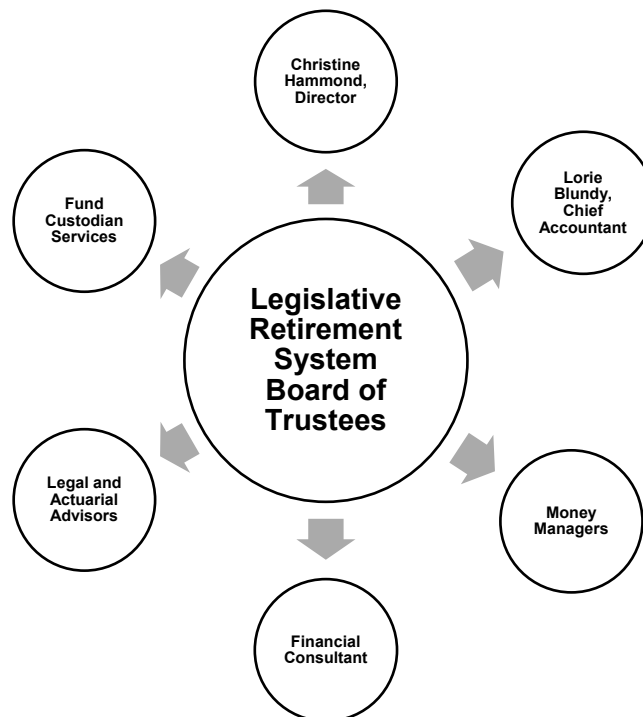
The Honorable Mark Schauer  
Retiree Member

The Honorable John Schwarz  
Tier 2 Defined Contribution Plan Member

### Administrative Organization

Anderson House Office Building  
P.O. Box 30014  
Lansing, Michigan 48909  
(517) 373-0575  
(877) 577-5628 toll-free

### Organization Chart



# INTRODUCTORY SECTION

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## **Administrative Organization (Continued)**

### **Investment Advisors\***

As of September 30, 2022

The American Fund Group  
Capital Research and Management  
EuroPacific Growth Fund  
Los Angeles, CA

Barrow Hanley Mewhinney & Strauss, Inc.  
Dallas, TX

Dimensional Fund Advisors  
Austin, TX

Dodge & Cox Funds  
Kansas City, MO

DoubleLine Funds Trust  
Los Angeles, CA

Fidelity Investments  
Boston, MA

Ironwood Capital Management  
San Francisco, CA

PIMCO  
Newport Beach, CA

RWC Emerging Markets  
Miami, FL

Victory Funds  
Sycamore Small Cap Value  
Columbus, OH

Wasatch Global Investors  
Milwaukee, WI

Wellington Management Co., LLP  
Boston, MA

\*The investments of the System are managed by the Investment Advisors, in accordance with Board directive, and applicable law. Information on the advisors can be found in the Investment Section. The investment category and rate of return for the advisors can be found on page 55, Schedule of Investment Results. Investment fees for the advisors can be found on page 57, Schedule of Investment Fees. Broker fees and commissions on shares traded can be found on pages 58, Schedule of Fees and Commissions.

### **Advisors and Consultants**

As of September 30, 2022

#### **Actuary**

Gabriel Roeder Smith & Company  
Francois Pieterse and Mark Buis  
Southfield, MI

#### **Financial Consultant**

Fund Evaluation Group  
Robert P. Van Den Brink  
Cincinnati, OH

#### **Independent Auditors**

Doug A. Ringler, C.P.A., C.I.A.  
Auditor General  
State of Michigan

#### **Custodian**

Rachael Eubanks  
State Treasurer  
State of Michigan

#### **Legal Advisor**

Dana Nessel  
Attorney General  
State of Michigan

# INTRODUCTORY SECTION

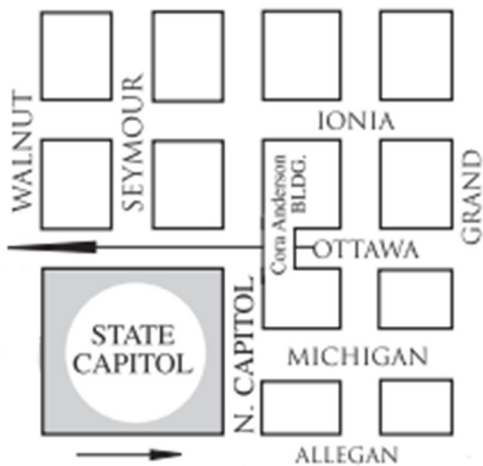
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## Administrative Organization (Continued)

### Office Location:

Michigan Legislative Retirement System  
Cora Anderson House Office Building  
124 N. Capitol Avenue, Suite S0927  
Lansing, MI 48933

Map of downtown Lansing



**Michigan Legislative Retirement System**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**

**FINANCIAL  
SECTION**



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



Doug A. Ringler, CPA, CIA  
Auditor General

201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • [audgen.michigan.gov](http://audgen.michigan.gov)

Independent Auditor's Report on the Financial Statements  
and Other Reporting Required by *Government Auditing Standards*

The Honorable R. Robert Geake, Chair  
Board of Trustees  
and  
Ms. Christine I. Hammond, Director  
Michigan Legislative Retirement System

Dear Mr. Geake and Ms. Hammond:

**Report on the Audit of the Financial Statements**

***Opinion***

We have audited the financial statements of the Michigan Legislative Retirement System, a fiduciary component unit of the State of Michigan, as of and for the fiscal year ended September 30, 2022 and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Michigan Legislative Retirement System as of September 30, 2022 and the changes in fiduciary net position for the fiscal 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 the System 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 the System's ability to continue as a going concern for the twelve 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



# OAG

Office of the Auditor General

Doug A. Ringler, CPA, CIA  
Auditor General

The Honorable R. Robert Geake, Chair  
Ms. Christine I. Hammond, Director  
Page 2

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 the System's 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 the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate to 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, schedule of changes in net pension liability, schedule of changes in net OPEB liability, schedules of contributions, schedules of investment returns, and related note, as listed 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 who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Supplementary Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The supporting schedules, as listed in



# OAG

Office of the Auditor General

Doug A. Ringler, CPA, CIA  
Auditor General

The Honorable R. Robert Geake, Chair  
Ms. Christine I. Hammond, Director  
Page 3

the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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 supporting schedules 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 report. The other information comprises the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, 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 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.

#### ***Other Matter***

##### ***Investments in Global Securities***

The System is subject to the requirements of the Public Employee Retirement System Investment Act of 1965 (the Act) as amended. The Act established limitations on investments in various asset classes, including a 20% limit on investments in global securities as defined in the Act. Without an authoritative interpretation of the law, we could not reach a conclusion regarding the System's compliance with this provision of the Act.

#### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we will also issue a report dated January 12, 2023 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 the System'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 the System's internal control over financial reporting and compliance.

Sincerely,

Doug Ringler  
Auditor General  
January 12, 2023

# FINANCIAL SECTION

## Management's Discussion and Analysis

The management's discussion and analysis (MD&A) of the System provides an overview of the financial activities and performance for the fiscal years ended September 30, 2022, and 2021. This should be read in conjunction with the financial statements and required supplemental information (RSI), which provides information for September 30, 2022.

### THE STATEMENT OF NET POSITION AND THE STATEMENT OF CHANGES IN NET POSITION

This Annual Comprehensive Financial Report (ACFR) consists of two financial statements: Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position (page 20) and Statements of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position (page 21). These financial statements report information about the System, as a whole, and about its financial condition that should help answer the question: Is the System, as a whole, better off or worse off as a result of this year's activities? These statements include all assets and liabilities using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis of accounting, all revenues and expenses are taken into account regardless of when cash is received or paid.

The Statement of Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position, presents all of the System's assets and liabilities, with the difference between the two reported as net position. Over time, increases and decreases in net position measure whether the System's financial position is improving or deteriorating. The Statement of Changes in Pension Plan and Other Postemployment Benefit Plan Fiduciary Net Position presents how the System's net position changed during the most recent fiscal year. These two financial statements should be reviewed along with the Schedule of Net Pension Liability (page 40), Schedule of Net OPEB Liability (page 42) and Schedules of Contributions (page 44) to determine whether the System is becoming financially stronger or weaker and to understand changes over time in the funded status of the System.

### FINANCIAL ANALYSIS

The Statement of Pension Plan and Other Postemployment Benefit Plan Net Position, presents information on the System's assets and liabilities using the accrual basis of accounting. Over time, increases or decreases in net position may serve as a useful indicator of the System's financial strength or weakness. System's net position, for the fiscal year ending September 30, 2022, **decreased** by \$43.2 million or 26.6%, due to a decrease in the fair value of the System's investments.

#### Plan Fiduciary Net Position

As of September 30

(\$ in thousands)

	2022	2021	Increase (Decrease)
Assets:			
Equity in common cash	\$ 1,683	\$ 2,675	(37.1) %
Receivables	230	270	(14.9)
Investments	117,698	159,976	(26.4)
<b>Total assets</b>	<b>119,611</b>	<b>162,921</b>	<b>(26.6)</b>
Liabilities:			
Accounts payable	88	151	(41.6)
<b>Total liabilities</b>	<b>88</b>	<b>151</b>	<b>(41.6)</b>
<b>Total net position</b>	<b>\$ 119,523</b>	<b>\$ 162,770</b>	<b>(26.6) %</b>

# FINANCIAL SECTION

## Management's Discussion and Analysis (Continued)

### ADDITIONS TO NET POSITION

The reserves needed to finance benefits provided by the System are accumulated through the collection of court fees, member and other contributions, State appropriations and through earnings on investments. Contributions and investment income/loss for fiscal year 2022 totaled \$(22.8) million. Total Additions to Net Position **decreased** in fiscal year 2022 by 159.2% from the prior year, primarily due to decreased investment income compared to the prior year.

### DEDUCTIONS FROM NET POSITION

The primary deductions of the System include the payment of pension and life insurance benefits to members and beneficiaries; the payments for health, dental, and vision benefits; the refund or transfer of contributions to former members; and the cost of administering the System. Total expenses for fiscal year 2022 were \$20.5 million, a **decrease** of 2.0% over 2021 expenses, primarily due to decreased health care costs.

#### **Changes in Plan Fiduciary Net Position**

For Fiscal Year Ended September 30

(\$ in thousands)

	2022	2021	Increase (Decrease)
<b>Additions</b>			
Member contributions	\$ 1	\$ 1	5.9 %
Employer contributions	4,942	4,838	2.1
Net Investment income/(loss)	(28,607)	32,609	(187.7)
Miscellaneous income	900	974	(7.5)
<b>Total additions</b>	<b>(22,763)</b>	<b>38,423</b>	<b>(159.2)</b>
<b>Deductions</b>			
Pension benefits	14,075	13,973	0.7
Health care benefits	5,408	5,816	(7.0)
Death benefits/life ins.	398	571	(30.4)
Refunds/qual. rollover	102	50	101.9
Administrative exp.	503	490	2.5
<b>Total deductions</b>	<b>20,485</b>	<b>20,901</b>	<b>(2.0)</b>
<b>Net increase (decrease)</b>	<b>(43,248)</b>	<b>17,522</b>	<b>(346.8)</b>
<b>Net position - Beginning of year</b>	<b>162,770</b>	<b>145,249</b>	<b>12.1</b>
<b>Net position - End of year</b>	<b>\$ 119,523</b>	<b>\$ 162,770</b>	<b>(26.6)%</b>

# FINANCIAL SECTION

---

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

### ***Overall Financial Analysis***

In accordance with its enabling statute, the MLRS Board of Trustees has fiduciary responsibility for the management of the System's funds, and it oversees its carefully structured and carefully monitored investment program to meet the System's financial goals, established through its Investment Policy Statement.

The third quarter of 2022 provided little respite for investors hoping to see a change in trend across the financial markets after significant downside volatility in the year's first half. While a relief rally was witnessed in July, the positive sentiment spanning both risk-oriented and high-quality assets during the month reversed course in August and September, with most major equity index levels establishing fresh year-to-date lows and interest rates ascending to the highest level in more than a decade. Stubbornly high inflation, historically tight labor market conditions, and a continued imbalance between aggregate demand and available supply were critical factors behind increased tightening efforts by the Federal Reserve (Fed) during the quarter.

Inflation concerns that started to rise in 2021 came to fruition in 2022 as the United States experienced the highest inflation rate in over 40 years. A number of factors contributed to this inflation, including fiscal and monetary stimulus, the war in Ukraine impacting energy prices, a tight labor market, and supply-chain issues. To battle inflation, the Federal Reserve aggressively raised short-term interest rates by 3% during the first nine months of calendar 2022, with expectations of further increases by the end of the year. The increase in interest rates had a negative effect on both equity and bond markets, contributing to one of the most challenging annual periods for investment portfolios. The Legislative Retirement System's (LRS) was not immune to these challenges, posting one of its worst returns for a fiscal year (ended September 30, 2022). Value stocks continued to outperform growth stocks, while larger companies outperformed smaller companies. U.S. stocks outperformed non-U.S. stock, but that is primarily due to the strength of the dollar. The LRS value-oriented domestic equity managers outperformed market indices but this was more than offset by weakness from the growth-oriented managers.

As with past practice, the Trustees of LRS continued their ongoing due diligence reviews, meeting on a regular basis to discuss markets, managers, and portfolio positioning. Rather than shun risk or even attempt to predict it, the Trustees continue to diversify the portfolio in a way that avoids excess concentration in a single risk. By doing so they recognize long-term tendencies can help raise the probability of investment success by taking a smoother path.

Detailed information regarding the MLRS investment program and performance can be found in the Investment Section of this report (beginning on page 51).

### ***Financial Questions or Requests***

This financial report is designed to provide a general overview of the System's financial position. Requests for additional information or questions about this report should be addressed to: Michigan Legislative Retirement System, P.O. Box 30014, Lansing, MI 48909.

# FINANCIAL SECTION

## Basic Financial Statements

### STATEMENT OF PENSION PLAN AND OTHER POSTEMPLOYMENT BENEFIT PLAN FIDUCIARY NET POSITION

As of September 30, 2022

	Pension Plan	OPEB Plan	Total
<b>ASSETS</b>			
Equity in common cash	\$ 1,376,801	\$ 306,260	\$ 1,683,061
Receivables			
Due from federal agencies		205,563	205,563
Interest and dividends	24,099		24,099
Total receivables:	24,099	205,563	229,662
Investments			
Equities	15,115,343	5,488,167	20,603,509
Alternative investments	10,040,591	3,645,596	13,686,187
Mutual funds	61,190,703	22,217,477	83,408,179
Total investments:	86,346,636	31,351,239	117,697,876
<b>Total assets:</b>	<b>87,747,536</b>	<b>31,863,063</b>	<b>119,610,599</b>
<b>LIABILITIES</b>			
Accounts payable and other liabilities	62,253		62,253
Unearned revenue		25,778	25,778
<b>Total liabilities:</b>	<b>62,253</b>	<b>25,778</b>	<b>88,030</b>
<b>Net position restricted for pension benefits and OPEB</b>	<b>\$ 87,685,284</b>	<b>\$ 31,837,285</b>	<b>\$ 119,522,569</b>

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

# FINANCIAL SECTION

## Basic Financial Statements (Continued)

### STATEMENT OF CHANGES IN PENSION PLAN AND OTHER POSTEMPLOYMENT BENEFIT PLAN FIDUCIARY NET POSITION

For fiscal year ended September 30, 2022

	Pension Plan	OPEB Plan	Total
<b>ADDITIONS</b>			
Member contributions:			
Other member contributions	\$ 1,284	\$	\$ 1,284
Employer contributions		4,182,700	4,182,700
Court fees		478,061	478,061
Other governmental contributions		281,576	281,576
Total contributions:	1,284	4,942,337	4,943,620
Investment Income (Loss):			
Net increase (decrease) in fair value of investments	(25,546,727)	(7,896,461)	(33,443,188)
Interest, dividends and other	3,949,795	1,214,529	5,164,324
Total investment income (loss)	(21,596,932)	(6,681,932)	(28,278,864)
Less investment expenses	(250,750)	(77,102)	(327,852)
Net investment income (loss)	(21,847,682)	(6,759,034)	(28,606,716)
Miscellaneous income		900,118	900,118
<b>Total additions:</b>	<b>(21,846,398)</b>	<b>(916,579)</b>	<b>(22,762,977)</b>
<b>DEDUCTIONS</b>			
Benefits & refunds paid to plan members and beneficiaries:			
Retirement benefits	14,075,155		14,075,155
Health benefits		5,050,276	5,050,276
Dental benefits		357,460	357,460
Death benefits	397,500		397,500
Refund of contribution & interest	29,964		29,964
Qualified rollover	71,857		71,857
Administrative expenses	384,393	118,198	502,590
<b>Total deductions:</b>	<b>14,958,869</b>	<b>5,525,933</b>	<b>20,484,802</b>
Net increase (decrease) in net position	(36,805,267)	(6,442,512)	(43,247,779)
<b>Net position restricted for pension benefits and OPEB:</b>			
<b>Beginning of year</b>	<b>124,490,551</b>	<b>38,279,797</b>	<b>162,770,348</b>
<b>End of year</b>	<b>\$ 87,685,284</b>	<b>\$ 31,837,285</b>	<b>\$ 119,522,569</b>

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

# FINANCIAL SECTION

## Notes to Basic Financial Statements

### NOTE 1 - PLAN DESCRIPTION

#### ORGANIZATION

The Michigan Legislative Retirement System (MLRS or System) is a single employer, public employee, defined benefit retirement pension plan and post-employment healthcare plan governed by the State of Michigan (the "State"). The System was created by Public Act 261 of 1957, as amended, and provides retirement and ancillary benefits to eligible current and former state legislators. The System's pension plan was established by the State to provide retirement, survivor and disability benefits to the Michigan Legislature, elected for the first time before March 31, 1997. In addition, the System's other postemployment benefit (OPEB) plan provides health care to eligible vested members, the option of receiving health, prescription, dental and vision coverage under the Michigan Legislative Retirement Act. Public Act 200 of 2011 amended the System's enabling statute and closed the OPEB Plan. The System is a fiduciary component unit of the State of Michigan, and its financial statements are included as a pension and other employee benefit trust fund in the State of Michigan Annual Comprehensive Financial Report.

The System operates within the legislative branch of state government. The System's Board of Trustees appoints the director who serves as executive secretary to the System's board, with whom the general oversight of the System resides. Public Act 486 of 1996 amended the System's enabling statute to mandate that persons elected to the Michigan Legislature after March 30, 1997, participate in a state-wide defined contribution pension plan administered by the State of Michigan Department of Technology, Management and Budget. Thus, the defined benefit plan is a closed plan. The defined contribution retirement plan operates as a 401(k) plan and is part of the State of Michigan 401K plan. The State of Michigan 401K plan annual financial report is issued separately.

The System shall be administered by a board of trustees, consisting of eleven (11) members, and composed as defined in Public Act 261 of 1957, as amended, and in the bylaws. Board members are appointed for a 4-year term. The board of trustees oversee the Systems investments, advisors and consultants. Complete information on the retirement board, advisors and consultants are included in the introductory section of this report.

#### MEMBERSHIP

At September 30, 2022, the System's pension plan membership consisted of the following:

Inactive plan members or their beneficiaries currently receiving benefits	<b>2022</b>
Regular benefits.....	179
Survivor benefits.....	61
Disability benefits.....	0
<b>Total.....</b>	<b>240 *</b>
Inactive plan members entitled to but not yet receiving benefits	<u>3</u>
Active plan members:	
Vested.....	0
Non-vested.....	0
<b>Total.....</b>	<b>0</b>
<b>Total Plan Members</b>	<b><u>243</u></b>

\*Includes 10 domestic relations orders (DRO) alternate payees for 2022

# FINANCIAL SECTION

## **Notes to Basic Financial Statements (Continued)**

### **MEMBERSHIP (continued)**

The System provides life insurance benefits. The number of plan participants is as follows:

<b>Life Insurance Plan</b>	<b>2022</b>
Eligible active plan members.....	0
Eligible inactive vested plan members.....	3
Eligible retired plan members.....	124

Enrollment in the health plan is voluntary. The number of plan participants is as follows:

<b>Health/Dental/Vision Plan</b>	<b>2022</b>
Active participants.....	2
Deferred participants.....	61
Participants currently eligible for health benefits.....	368 **
Participants receiving health benefits.....	341 **

\*\*Includes 115 defined contribution (DC) participants at September 30, 2022 who are receiving health care insurance through System in accordance with state statute. At September 30, 2022, the number of DC participants who were eligible for health care insurance but declined to receive the benefits were 25.

### **BENEFIT PROVISIONS**

#### **Introduction**

Public Act 261 of 1957, the Michigan Legislative Retirement System Act, as amended, establishes eligibility and benefit provisions for this defined benefit pension plan.

Michigan's constitutional term-limit amendment limits members of the House of Representatives to six (6) years in office and members of the Michigan Senate to eight (8) years in office. Effective March 31, 1997, Public Act 486 of 1996 closed the System to new legislators. The act provides certain re-elected former legislators the option to rejoin the system. All legislators who first take office after 1997 are automatically enrolled in the State of Michigan Defined Contribution Plan.

Benefit provisions of the post-employment healthcare plan are established by State statute, which may be amended. Public Act 261 of 1957, as amended, establishes eligibility and benefit provisions for the health plan. Eligible members may receive health, prescription, hearing, dental, and vision coverage.

#### **Regular Retirement**

A member may retire and receive retirement benefits based on age and service after: (1) attaining age 50, if age and years of credited service combined are equal to or greater than 70; or (2) attaining age 55 with 5 or more years of credited service if elected, qualified, and seated not less than (a) 3 full or partial terms in the House of Representatives, (b) 2 full or partial terms in the Senate, or (c) 1 term in the House of Representatives and 1 term in the Senate. Within 30 days after becoming 55 years of age, a deferred vested member may elect to defer receipt of the retirement allowance to which the member is entitled, not to exceed 70-1/2 years of age.

A member's retirement benefit is computed using a benefit formula prescribed by the enabling statute and described below. The benefit is paid on a monthly basis.

For those legislators who first became members on or before January 1, 1995, the retirement benefit is calculated by multiplying 20% of the highest salary earned for the first 5 years of service, plus 4% of highest salary for each of the next 11 years of service, plus 1% of the highest salary for each additional year.

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

### **BENEFIT PROVISIONS (continued)**

For those legislators who first became members after January 1, 1995, the retirement benefit is calculated by multiplying 3% of the highest salary for each year of service.

#### ***Post Retirement Benefit Adjustment***

For those legislators who first became members on or before January 1, 1995, the annual retirement benefit payable to a retiree and/or his/her survivor is increased by 4% compounded annually. The adjustment is effective each January.

For those legislators who first became members after January 1, 1995, the annual retirement benefit payable to a retiree and/or his/her survivor is increased by 4%, but it is not compounded annually. The adjustment is effective each January.

#### ***Other Postemployment Benefits***

Under Section 50a and 50b of the Legislative Retirement System Act, all retirees and their dependents and survivors receive health, dental, vision, and hearing insurance coverage. The System also provides health, dental, vision, and hearing insurance coverage for deferred vested members who were members on or before January 1, 1995, and for their survivors and dependents. In addition, in accordance with state law, the System provides health insurance coverage to eligible former legislators (and their dependents) who meet certain vesting requirements established by statute and who belong to the State's Defined Contribution Plan. Member enrollment to the System's health plan is voluntary. The System pays for health, dental, vision, and hearing benefits on a modified pay-as-you-go basis; however, the State has begun to advance fund for future System health insurance costs. Public Act 200 of 2011 amended the System's enabling statute and closed the OPEB Plan. All qualified participants must have completed six (6) years of service before January 1, 2013 to qualify for health insurance in the System.

#### ***Life Insurance Benefits***

The System provides \$150,000 in life insurance coverage to active members. Deferred vested members are covered by varying amounts of life insurance, ranging from \$5,000 to \$150,000, depending on the member's date of deferral and, in some instances, the payment of an annual premium. Retirees are covered by varying amounts of life insurance, ranging from \$2,500 to \$75,000, depending on their retirement dates and, in some instances, the payment of an annual premium. The System prefunds life insurance benefits using the entry age actuarial cost method. The life insurance plan and the pension plan use the same actuarial assumptions, which are stated in the actuarial section.

#### ***Disability Benefit***

A member or deferred vested member who becomes disabled as determined by at least (2) licensed physicians appointed by the board of trustees is eligible for a disability benefit computed in the same manner described under Regular Retirement.

#### ***Survivor Benefit***

Upon the death of a vested member or deferred vested member who meets the service, but not the age requirements, for regular retirement (see Regular Retirement), or upon the death of a retiree, a surviving spouse shall be entitled to a benefit equal to 66 2/3% of the benefit the member would have received or was receiving at the time of death. Special provisions apply to surviving minor children and surviving spouses with minor children.

#### ***Refunds***

A member who leaves legislative service may request a refund of his/her contributions from the Members' Saving Fund. A member who receives a refund of contributions forfeits all rights to any future System benefits. Members who return to legislative service and who previously received a refund of their contributions may reinstate their service through repayment of the refund plus interest in accordance with the statute.

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

### **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

#### ***Basis of Accounting and Presentation***

The System's financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting, as provided by generally accepted accounting principles for governments. Contributions are recognized as revenue when due, pursuant to formal commitments, as well as statutory requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

GASB Statement No. 67, which was adopted during the fiscal year ended September 30, 2014, addresses accounting and financial reporting requirements for pension plans. The requirements for GASB Statement No. 67 requires changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The implementation of GASB Statement No. 67 did not significantly impact the accounting for accounts receivables and investment balances. The total pension liability, determined in accordance with GASB Statement No. 67, is presented in Note 4 on page 28 and in the Required Supplementary Information on page 40.

GASB Statement No. 74, which was adopted during the fiscal year ended September 30, 2017, addresses accounting and financial reporting requirements for other postemployment benefit (OPEB) plans. The requirements for GASB Statement No. 74, are much like 67 addressed for pension plans, which requires changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net OPEB liability. It also includes comprehensive footnote disclosure regarding the OPEB liability, the sensitivity of the net OPEB liability to the discount rate, and increased investment activity disclosures. The implementation of GASB Statement No. 74 did not significantly impact the accounting for accounts receivables and investment balances. The total OPEB liability, determined in accordance with GASB Statement No. 74, is presented in Note 5 on page 31 and in the Required Supplementary Information on page 42.

#### ***Contributions and Reserves***

The Legislative Retirement System Act provides for several "reserves" or "funds." These funds and the contributions and other monies allocated to them are described below.

Members' Savings Fund (MSF) — A member who first becomes a member on or before January 1, 1995, with less than 20 years of experience, contributed approximately 7% of salary to MSF. A member who first becomes a member after January 1, 1995, contributed approximately 5% of salary to MSF. Beginning January 1, 1999, there were no member contributions allocated to MSF except for approximately 4% of salary for the period beginning on January 1, 1999 and ending on December 31, 2000, for members who first becomes a member after December 1, 1994 and on or before January 1, 1995, in accordance with legislation. Eligible members may make other contributions to the MSF to purchase special service credit or to repay previously refunded contributions. MSF represents active member contributions (and interest credited from the Income Fund) less amounts transferred to reserves for retirement and amounts refunded to terminated members. At September 30, 2022, the balance in this account was \$26.9 thousand.

Members' Retirement Fund (MRF) — The MRF represents the reserves for payment of retirement benefits. At retirement a member's accumulated contributions (with interest) are transferred to the MRF (from the MSF). Interest is credited to the MRF (from the Income Fund), and monthly allowances are debited. At each fiscal year end an actuarial valuation determines the 100% funding requirements for the MRF. Any amounts required to 100% fund the MRF are transferred in the next fiscal year. At September 30, 2022, the balance in this account was \$(13.5) million.

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

### ***Contributions and Reserves (continued)***

Survivors' Retirement Fund (SRF) — On and before January 1, 1999, all members with less than 20 years of service contributed 1/2% of salary to the SRF. After January 1, 1999, there are no member contributions allocated to the SRF. Interest is credited annually to the SRF (from the Income Fund), and member savings are transferred to the SRF from the MSF upon the death of a vested member, and additional state contributions may be made in order to make the SRF 100% funded. Survivors' monthly retirement allowances are paid from this fund upon the death of vested members, deferred vested members, and retirants. At September 30, 2022, the balance in this account was \$71.8 million.

Insurance Revolving Fund (IRF) — On and before January 1, 1999, all members contributed 1/2% of salary to the Insurance Revolving Fund. After January 1, 1999, there are no member contributions allocated to the IRF. State contributions, if any, member premiums, and interest from the Income Fund are credited to this fund. Life insurance benefits are paid from the IRF to beneficiaries of members, retirants, and deferred vested members. At September 30, 2022, the balance in this account was \$29.4 million.

Health Insurance Fund (HIF) — On and before January 1, 1999, all members contributed 1% of salary to this fund. After January 1, 1999, member contributions are made as follows: (1) members who first became members on or before January 1, 1995, contribute 9% to the HIF; (2) members who first became members after January 1, 1995, contribute 7% to the HIF. This fund is also credited with employer contributions, court fees, other governmental contributions and interest income. Funds from this reserve are used to pay health care expenses and are accumulated to fully fund the future health insurance liabilities for the System. At September 30, 2022, the balance in this account was \$31.8 million.

In July, 2011, the Michigan Legislature passed, and Governor Rick Snyder signed, a new law that provides for the use of the health insurance reserve funds to pay for the current costs associated with the retiree health insurance plan. Before the passage of the new law, Public Act 99 of 2011, the System statute prohibited the use of certain prefunding dollars maintained in the health insurance reserve, and their investment income, until the retiree health insurance (OPEB) liabilities in the System became 100% funded. Public Act 99 of 2011 removed the 100%-funding requirement, and thus allows for the immediate use of the funds for health insurance costs of the System. The System used \$6.4 million from the reserve for fiscal year ending September 30, 2022.

Income Fund (IF) — The IF is credited with all investment earnings and other miscellaneous income. Interest transfers are made annually to the other reserves, based on beginning balance. This fund also accounts for investment and administrative expenses and interest on refunds and transfers.

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

System investments are presented at fair value, consistent with the provisions of GASB Statement No. 72, *Fair Value Measurement and Application*. Short-term, highly liquid debt instruments, including commercial paper, are reported at amortized cost. Additional disclosures describing investments are provided in Note 6.

### ***Reporting Entity***

The System is a fiduciary component unit of the State of Michigan and its financial statements are included as a pension and other employee benefit trust fund in the State of Michigan Annual Comprehensive Financial Report. As such, the System is considered part of the State and is included in the State's Annual Comprehensive Financial Report as a pension and OPEB trust fund. The System and the System's Board of Trustees are not financially accountable for any other entities. Accordingly, the System is the only entity included in this financial report.

### ***Investment Income***

Dividend income is recognized on the ex-dividend date, and interest income is recognized on the accrual basis as earned. Fair value changes are recorded as investment income or loss. Purchases and sales of investments are recorded as of the trade date.

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

### ***Cost of Administering the System***

The System shall pay the expenses for the administration of the System, exclusive of amounts payable as retirement allowances and other benefits provided in this act, from the income fund.

### ***Related Party Transactions***

The cash account includes \$1.7 million on September 30, 2022, which represents funds deposited in a common cash investment pool maintained for various State operating funds. The participating funds in the common cash pool earn interest at various rates depending upon prevailing short-term interest rates. Earnings from these activities amounted to \$18,808 for the year ended September 30, 2022.

### ***Excess Benefits***

Internal Revenue Service (IRS) Code Section 415 requires that, for individuals who receive retirement benefits in excess of established limits, these benefits should be recorded and reported outside of the pension fund in order to keep the qualified status of the plan. This includes coordination of benefits issued where a retiree participates in more than one qualified plan. The System provided excess benefits to seven (7) retirees, for a total amount of \$279,468 as of September 30, 2022.

## **NOTE 3 - CONTRIBUTIONS**

### ***Member Contributions***

On or before January 1, 1999, the following contributions were made by members of the System:

Members who first became members on or before January 1, 1995, contributed 9% of their salaries to the System. The contributions were placed in the following reserves created by the enabling statute: 7% to the Members' Savings Fund for the first 20 years of service; 0.5% to the Insurance Revolving Fund; 0.5% to the Survivors' Retirement Fund for the first 20 years of service; and 1% to the Health Insurance Fund.

Members who first became members on or after January 1, 1995, contributed 7% of their salaries to the System. The contributions were placed in the following reserves created by the enabling statute: 5% to the Members' Savings Fund; 0.5% to the Insurance Revolving Fund; 0.5% to the Survivors' Retirement Fund; and 1% to the Health Insurance Fund.

After January 1, 1999, the following contributions are made by the members of the System:

Members who first became members after December 1, 1994, contribute 9% of their salaries to the System. The contributions are placed in accordance with enabling statute to Health Insurance Fund.

Members who first became members after December 1, 1994 and on or before January 1, 1995, contributed 13% of their salaries to the System. The contributions were placed in the following reserves in accordance with the enabling statute: 9% to the Health Insurance Fund and 4% to the Members' Savings Fund until December 31, 2000. After December 31, 2000, these members contribute 9% of their salaries to the System. The contributions are placed in accordance with enabling statute to Health Insurance Fund.

Members who first became members after January 1, 1995, contribute 7% of their salaries to the System. The contributions are placed in the following reserve in accordance with the enabling statute: 7% to the Health Insurance Fund.

Member contributions are tax-deferred through the provisions of section 414(h)(2) of the Internal Revenue Code.

# FINANCIAL SECTION

## **Notes to Basic Financial Statements (Continued)**

### ***State Contributions***

State contributions are made on the basis of actuarial requirements as determined by the System actuary and approved by the Board of Trustees. Through the annual state budgetary process, the Legislature annually appropriates, and the Governor approves, the State contributions along with certain court fee revenues, which are paid to the System pursuant to state statute.

Pension plan State contributions are determined based on an actuarially determined contributions. Actual employer contributions for pension plan benefits were \$0.0 million for fiscal year 2022.

OPEB plan State contributions are determined based on an actuarially determined contributions. Actual employer contributions for OPEB were \$4.2 million for fiscal year 2022.

Schedules showing actuarially determined State contributions are presented in the Required Supplementary Information, in the financial section of this report. Also included in the Required Supplementary Information, are the actuarial assumptions used to determine the contribution rates.

### **NOTE 4 – NET PENSION LIABILITY**

#### ***Measurement of the Net Pension Liability***

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the fair value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement)

#### **Net Pension Liability**

Total Pension Liability	\$ 223,019,499
Plan Fiduciary Net Position	87,685,284
Net Pension Liability	<u>\$ 135,334,215</u>
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	39.32%
Net Pension Liability as a Percentage of Covered Payroll	N/A
Total Covered Payroll	\$ -

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### Long-Term Expected Return on Pension Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense 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. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2022, are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return*</u>
Large Cap Equity	26.0 %	2.2 %
Small Cap Equity	10.0	3.2
International Equity	20.0	3.2
Emerging Markets	9.0	5.2
Fixed Income	20.0	(0.7)
Hedge Fund	10.0	2.0
Real Assets	4.0	3.0
Cash	1.0	(1.3)
<b>Total</b>	<u>100.0 %</u>	

\*Real rate of return is based on investment manager inflation assumption of 2.30%

### Pension Plan Rate of Return

For the year ended September 30, 2022, the annual money-weighted rate of return on pension plan investments, net pension plan investment expense, was (18.96%). The money weighted rate of return expresses investment performances, net of investment expense, adjusted for the changing amounts actually invested.

### Pension Plan Discount Rate

The single discount rate used to measure the total pension liability increased to 4.72%, compared to the prior year's 3.13%. This single discount rate was based on an expected rate of return on pension plan investments of 7.0% and a municipal bond rate of 4.40% (based on the daily rate closest to but not later than measurement date of the Fidelity "20-Year Municipal GO AA Index"). The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contributions rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2029. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2029, and the municipal bond rate was applied to all benefit payments after that date.

# FINANCIAL SECTION

## **Notes to Basic Financial Statements** (Continued)

### ***Sensitivity of the Net Pension Liability to Changes in the Discount Rate***

As required by GASB Statement No. 67, the following presents the plan's net pension liability, calculated using a single discount rate of 4.72%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

	<b>1% Decrease</b>	<b>Current Single Discount</b>	<b>1% Increase</b>
	<b>3.72%</b>	<b>Rate Assumption</b>	<b>5.72%</b>
Net Pension Liability/(Asset)	\$161,146,016	\$135,334,215	\$113,839,724

### ***Timing of the Valuation***

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the pension plan's fiscal year end. The total pension liability as of September 30, 2022, is based on the results of an actuarial valuation performed as of September 30, 2021 and rolled forward using generally accepted actuarial procedures.

### ***Actuarial Valuations and Assumptions***

Actuarial valuations for pension plans involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality. Amounts determined regarding the net pension liability of the plan and the rate of return are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The Schedule of Contributions in RSI present trend information about the amounts contributed to the plan by employers in comparison to an amount that is actuarially determined.

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

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

# FINANCIAL SECTION

## **Notes to Basic Financial Statements (Continued)**

### **Summary of Actuarial Assumptions**

Methods and assumptions used to determine Net Pension Liability as of September 30, 2022:

Valuation Date	September 30, 2021
Actuarial Cost Method	Entry-Age Normal
Asset Valuation Method	Fair Value
Wage Inflation	4.00%
Salary Increases	4.00%
Investment Rate of Return	4.72% Single Discount Rate
Cost-of-living Adjustments	4% Annual Compounded (non-compounded for legislators who first became members after 1/1/95)
Retirement Age	Age-based table of rates with 100% probability of retirement once a member is subject to term limits
Mortality	RP-2014 Mortality Tables scaled by 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006.

Note: Actuarial assumptions are periodically reviewed and modified, if needed, upon the recommendation of the actuary, and with approval of the board.

## **NOTE 5 – NET OTHER POSTEMPLOYMENT BENEFIT LIABILITY**

### **Measurement of the Net OPEB Liability**

The net OPEB liability is to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the fair value of assets (not the smoothed actuarial value of assets that is often encountered in the actuarial valuations performed to determine the employer's contribution requirement). The net OPEB liability should be measured as of the OPEB plan's most recent fiscal year end.

#### **Net OPEB Liability**

Total OPEB Liability	\$ 84,070,830
Plan Fiduciary Net Position	31,837,285
Net OPEB Liability	<u>\$ 52,233,545</u>
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	37.87%

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### Long-Term Expected Return on OPEB Plan Assets

The long-term expected rate of return on OPEB plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB investment expense 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. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset allocation as of September 30, 2022, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Large Cap Equity	26.0 %	2.2 %
Small Cap Equity	10.0	3.2
International Equity	20.0	3.2
Emerging Markets	9.0	5.2
Fixed Income	20.0	(0.7)
Hedge Fund	10.0	2.0
Real Assets	4.0	3.0
Cash	1.0	(1.3)
<b>Total</b>	<b>100.0 %</b>	

\*The arithmetic rates of return were provided by the System's investment consultant along with a 2.3% price inflation assumption.

### OPEB Plan Rate of Return

For the year ended September 30, 2022, the annual money-weighted rate of return on OPEB plan investments, net OPEB plan investment expense, was (15.70%). The money weighted rate of return expresses investment performances, net of investment expense, adjusted for the changing amounts actually invested.

### OPEB Plan Discount Rate

The single discount rate of 7.0% was used to measure the total OPEB liability, compared to the prior year's 7.0%. This single discount rate was based on an expected rate of return on OPEB plan investments of 7.0%. The projection of cash flows used to determine this single discount rate assumed that employer contributions will be made at rates equal to actuarially determined contributions rate. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### *Sensitivity of the Net OPEB Liability to Changes in the Discount Rate*

As required by GASB Statement No. 74, the following presents the plan's net OPEB liability, calculated using a single discount rate of 7.00%, as well as what the plan's net OPEB liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

	<b>1% Decrease</b>	<b>Current Single Discount</b>	<b>1% Increase</b>
	<b>6.00%</b>	<b>Rate Assumption</b>	<b>8.00%</b>
Net OPEB Liability/(Asset)	\$61,579,471	\$52,233,545	\$44,414,697

### *Sensitivity of the Net OPEB Liability to the Healthcare Cost Trend Rate*

Regarding the sensitivity of the net OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's net OPEB liability, calculated using the assumed trend rates as well as what the plan's net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

	<b>1% Decrease</b>	<b>Current Healthcare Cost</b>	<b>1% Increase</b>
	<b>(5.25% decreasing</b>	<b>Trend Rate Assumption</b>	<b>(7.25% decreasing</b>
	<b>to 2.5%)</b>	<b>(6.25 decreasing</b>	<b>to 4.5%)</b>
		<b>to 3.5%)</b>	
Net OPEB Liability/(Asset)	\$43,799,927	\$52,233,545	\$62,189,936

### *Timing of the Valuation*

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. The total OPEB liability as of September 30, 2022, is based on the results of an actuarial valuation performed as of September 30, 2021 and rolled forward using generally accepted actuarial procedures.

### *Actuarial Valuations and Assumptions*

Actuarial valuations OPEB plans involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the net OPEB liability of the plan and the rate of return are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The Schedule of Contributions in RSI present trend information about the amounts contributed to the plans by employers in comparison to an amount that is actuarially determined.

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

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

### ***Summary of Actuarial Assumptions***

Methods and assumptions used to determine Net OPEB Liability as of September 30, 2022:

Valuation Date	September 30, 2021
Actuarial Cost Method	Entry-Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions:	
Wage Inflation	4.00%
Investment Rate of Return	7.0% Single Discount Rate
Retirement Age	Age-based table of rates with 100% probability of retirement once a member is subject to term limits
Mortality	RP-2014 Mortality Tables scaled by 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006.
Healthcare Cost Trend Rate	Pre-65: 7.50% trend, gradually decreasing to 3.50% in 12 years Post-65: 6.25% trend, gradually decreasing to 3.50% in 12 years
Excise Tax	No load was applied to the health care liabilities of current retirees or future retirees to approximate the cost for future excise tax.
Aging factors	Based on the 2013 SOA Study "Health Care Costs – From Birth to Death"

Note: Actuarial assumptions are periodically reviewed and modified, if needed, upon the recommendation of the actuary, and with approval of the board.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### NOTE 6 - INVESTMENTS

#### *Investment Authority*

All investments made are subject to approval by the Board of Trustees, which has investment authority under Public Act 261 of 1957. Investments made are subject to statutory regulations imposed under the Michigan Public Employee Retirement System Investment Act, Public Act 314 of 1965, as amended. The Public Employee Retirement System Investment Act authorizes, with certain restrictions, the investment of pension fund assets in stocks, corporate and governmental bonds and notes, mortgages, real estate, and certain short-term and alternative investments. The System also contracts with independent investment advisors.

#### *Derivative Instruments*

State investment statutes limits total derivative instrument exposure to 15% of a fund's total asset value and restricts uses to replication of returns and hedging of assets. The System Investment Policy Statement (IPS) has a target asset allocation of 10% for hedge funds, which may include derivative instruments. Systems investment in hedge funds has an exposure to derivative instruments of approximately 10-15%. The System invests in derivative instruments for investment purposes and not hedging purposes. As of September 30, 2022, total investments in hedge funds was 11.5%. The fair value of the hedge funds at September 30, 2022 was \$13,686,187.

#### *Securities Lending*

The System did not participate in any securities lending activities.

#### *Risk*

In accordance with GASB statement 40, investments require certain disclosure regarding policies and the risks associated with them. The credit risk, custodial credit risk, foreign currency risk and interest rate risk are discussed in the following paragraphs.

#### *Credit risk*

Credit risk is the risk that an issuer will not fulfill its obligations. The System has a policy to maintain an overall weighted average of "Aa" or better by Moody's Investors Service and "AA" or better by Standards & Poor's for active management of fixed income securities. Mutual fund fixed income investments are not subject to this constraint; they are governed by the terms of their prospectuses. GASB 40 states that governments should disclose the credit quality ratings of external investment pools, money market funds, bond mutual funds and other pooled investments of fixed income securities in which they invest.

#### **Debt Securities As of September 30, 2022**

Investment Type	Fair Value	Rating	
		S & P	Moody's
Mutual Funds**	\$ 11,234,845	B	Baa2
	11,259,412	NR	NR
	<u>\$ 22,494,257</u>		

\*\* Average Rating

# FINANCIAL SECTION

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## **Notes to Basic Financial Statements (Continued)**

### *Custodial credit risk*

The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the System's deposits may not be recovered. Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are: a.) Uncollateralized, b.) Collateralized with securities held by the pledging financial institution, or c.) Collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

The common cash pool is managed by the State Treasurer and is authorized to invest surplus funds in depository accounts at financial institutions, bonds, notes, and other U.S. government debt, prime commercial paper, certificates of deposits, and special State investment programs. At September 30, 2022, the common cash pool held the majority of its funds in depository accounts 3.4% and short term investments 95.7%. The State Treasurer's policy for common cash depository accounts requires financial institutions to secure State funds with collateral, to be organized under federal or State law, and to maintain an office in Michigan. The policy also restricts deposits to a maximum of 50% of the financial institution's net worth. At September 30, 2022, the carrying amount of deposits including time and demand deposits, was \$1.01 billion. The deposits were reflected in the accounts of the banks at \$1.01 billion. Of the bank balance, \$4.1 million was covered by federal depository insurance and \$1.01 billion was collateralized with securities held by the State's agent in the State's name. There were demand deposits of \$0 exposed to custodial credit risk that were uninsured and uncollateralized. Compensating balances kept in demand deposit accounts to avoid service charges totaled \$1.664 billion at September 30, 2022. Additional details on the common cash pool policies and risk disclosures are described in the State of Michigan Annual Comprehensive Financial Report.

### *Concentration of Credit Risk*

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

System is prohibited by Public Act 314 of 1965, as amended, from investing in more than 5% of the outstanding stock or obligations of any one issuer or investing more than 5% of its assets in the stock or obligations of any one issuer.

At September 30, 2022, there were no investments in any one issuer that accounted for more than 5% of System's assets nor were there any investments totaling more than 5% of the stock or obligations of any one issuer.

### *Foreign currency risk*

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of deposits. Public Act 35 of 1997 requires State deposits be held in a financial institution which maintains a principal office or branch office located in the State of Michigan. The System had no common cash deposits subject to foreign currency risk at September 30, 2022.

### *Custodial credit risk associated with investments*

In accordance with GASB statement 40, investments also require certain disclosures regarding policies and procedures with respect to the risks associated with them. The custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the System will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party.

Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government and are held by either: a.) the counterparty, or b.) the counterparty's trust department or agent but are not in the government's name. The State Treasurer does not have an investment policy for managing custodial credit risk. At September 30, 2022, the System's investments were not exposed to custodial credit risk.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### Interest rate risk associated with investments

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of an investment. The System has an 20% target allocation of fixed income securities, which are affected by interest rates because they are a debt investment. At September 30, 2022, the fair value was \$22,494,257, with the investment activity for the year producing a total rate of return of (13.1%), and a rate of return since inception of 1.4%. The projected duration is 5.43 years. The System does not have a policy for controlling interest rate risk.

### Foreign currency risk associated with investments

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments. The System invests in various foreign investments (including, but not limited to, equities, fixed income, and mutual funds), which are subject to various limitations in accordance with the System's Investment Policy Statement (or "IPS") (which incorporates the provisions of the Public Employee Retirement System Investment Act, or Public Act 314 of 1965, as amended). The IPS foreign investment restrictions includes a 53% limitation of the total assets of the System. The limitation includes a 24% limit on Non-US developed, 14% limit on emerging markets and a 15% limit in diversifying strategies. Additionally, investments have a 5% limitation in the outstanding foreign securities of a single issuer (allowances are made for the daily market pricing fluctuations of an investment). New investments in countries that have been identified by the United States Department of State as engaging in or sponsoring terrorism are prohibited, and existing investments in any such newly-identified country shall be quickly divested in accordance with the law. At September 30, 2022, the System held the following investments subject to foreign currency risk:

### Foreign Currency Risk

As of September 30, 2022

(Value in US dollars)

Currency	Country	Alt. Invest	Mutual Funds	International Equities	TOTAL
<b>EUROPE</b>					
Euro	European Union	\$	\$	\$ 239,592	\$ 239,592
<b>WORLD-WIDE</b>					
Various	Various	13,686,187	31,966,731		45,652,918
	Total	\$ 13,686,187	\$ 31,966,731	\$ 239,592	\$ 45,892,510

### Significant Accounting Policies

As of September 30, 2016, the Retirement System applies Governmental Accounting Standards Board ("GASB") Statement No. 72, *Fair Value Measurement and Application*. GASB Statement No. 72 provides guidance for determining a fair value measurement for reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements.

# FINANCIAL SECTION

## Notes to Basic Financial Statements (Continued)

### Fair Value Measurements

The MLRS 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. Not all investments held by the MLRS are recorded at fair value. GASB 72 allows for certain investments to be recorded at cost (or amortized cost or any other valuation method), and therefore, they are not presented in the fair value hierarchy table. Equity and fixed income securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Equity Swaps and Fixed Income securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique and other significant observable inputs. Equity and fixed income securities classified as Level 3 of the fair value hierarchy are valued using a third party data and reports that are unobservable. Securities reported at Net Asset Value (NAV) are valued using the most recent third party statement adjusted for cash flows as of September 30, 2022. Investments that are measured at fair value using the Net Asset Value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The MLRS' assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability.

### Investment by Fair Value Level

As of September 30, 2022

	Level 1
<b>Total Cash and Cash Equivalents</b>	\$ -
<b>Equity</b>	
Depository Receipts	90,688
Common Stocks	20,110,868
Real Estate Investment Trusts	401,953
Commingled Funds, ETF's	52,886,655
<b>Total Equity</b>	<b>73,490,164</b>
<b>Fixed Income</b>	
Commingled Funds and ETF's	30,521,524
<b>Total Fixed Income</b>	<b>30,521,524</b>
<b>Total Investment by fair value level</b>	<b>\$ 104,011,688</b>
<b>Investments measured at the net asset value (NAV)</b>	
Private Equity	13,686,187
<b>Total Investments measured at NAV</b>	<b>13,686,187</b>
<b>Total Investments measured at fair value</b>	<b>\$ 117,697,875</b>

Additional disclosures needed for fair value measurements of investments in certain entities that calculate the Net Asset Value per share (or its equivalent):

#### Alternative Investments

Total investments measured at the NAV \$13,686,187  
Unfunded commitments \$0

There is one investment reported at NAV:

- The one investment is a hedge fund that requires 95 days' notice for redemption; generally redemptions are only allowed semi-annually. A full redemption would require withholding 5% of the NAV retained until all costs are settled.

## FINANCIAL SECTION

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# FINANCIAL SECTION

## Required Supplementary Information

### Schedule of Changes in Net Pension Liability

Fiscal years ending September 30,	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
<b>Total pension liability</b>					
Service Cost	\$ -	\$ -	\$ -	\$ 38,955	\$ 77,125
Interest on the total pension liability	8,391,799	8,579,719	9,614,058	11,050,515	10,555,045
Benefit changes	-	-	-	-	-
Difference between expected and actual experience					
of the total pension liability	(2,685,543)	(1,676,726)	1,780,292	479,528	66,388
Assumption changes	(43,544,046)	(1,010,884)	19,452,109	30,744,212	(3,054,941)
Benefit payments and refunds	(14,502,619)	(14,594,667)	(14,655,163)	(14,129,965)	(14,521,128)
<b>Net changes in total pension liability</b>	<b>(52,340,409)</b>	<b>(8,702,558)</b>	<b>16,191,296</b>	<b>28,183,245</b>	<b>(6,877,511)</b>
<b>Total pension liability - beginning</b>	<b>275,359,908</b>	<b>284,062,466</b>	<b>267,871,170</b>	<b>239,687,925</b>	<b>246,565,436</b>
<b>Total pension liability - ending (a)</b>	<b>\$ 223,019,499</b>	<b>\$ 275,359,908</b>	<b>\$ 284,062,466</b>	<b>\$ 267,871,170</b>	<b>\$ 239,687,925</b>
<b>Plan fiduciary net position</b>					
Employer contributions	\$ -	\$ -	\$ -	\$ 8,063,327	\$ -
Employee contributions	1,284	1,213	1,123	2,445	998
Pension plan net investment income	(21,847,682)	25,587,919	6,635,565	3,319,925	8,629,843
Benefit payments and refunds	(14,502,619)	(14,594,667)	(14,655,163)	(14,129,965)	(14,521,128)
Pension plan administrative expense	(384,393)	(384,369)	(406,665)	(405,319)	(398,871)
Other	(71,857)	-	6,733	-	-
<b>Net change in plan fiduciary net position</b>	<b>(36,805,267)</b>	<b>10,610,096</b>	<b>(8,418,407)</b>	<b>(3,149,587)</b>	<b>(6,289,158)</b>
<b>Plan fiduciary net position - beginning</b>	<b>124,490,551</b>	<b>113,880,455</b>	<b>122,298,862</b>	<b>125,448,449</b>	<b>131,737,607</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 87,685,284</b>	<b>\$ 124,490,551</b>	<b>\$ 113,880,455</b>	<b>\$ 122,298,862</b>	<b>\$ 125,448,449</b>
<b>Net pension liability - (a) - (b)</b>	<b>135,334,215</b>	<b>150,869,357</b>	<b>170,182,011</b>	<b>145,572,308</b>	<b>114,239,476</b>
<b>Plan fiduciary net position as a percentage</b>					
of total pension liability	39.32%	45.21%	40.09%	45.66%	52.34%
<b>Covered payroll</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 71,685</b>	<b>\$ 71,685</b>
<b>Net pension liability as a percentage</b>					
of covered payroll	N/A	N/A	N/A	203,072.20%	159,363.15%

(1) Schedule has been restated due to retroactively applying mortality assumption change.

# FINANCIAL SECTION

## Required Supplementary Information (Continued)

<u>2017</u>	<u>2016</u>	<u>2015<sup>(1)</sup></u>	<u>2014<sup>(1)</sup></u>
\$ 85,889	\$ 73,996	\$ 61,979	\$ 56,715
10,213,286	11,025,152	11,839,056	11,297,018
-	-	-	-
(1,617,292)	1,899,056	405,924	-
(13,496,599)	18,936,985	20,079,527	24,547,477
(14,282,224)	(13,919,312)	(14,495,307)	(13,550,106)
(19,096,940)	18,015,877	17,891,179	22,351,104
265,662,376	247,646,499	229,755,320	207,404,216
<u>\$246,565,436</u>	<u>\$265,662,376</u>	<u>\$247,646,499</u>	<u>\$229,755,320</u>
\$ -	\$ -	\$ -	\$ -
3,895	3,648	3,226	5,662
15,840,766	11,324,783	(6,545,332)	14,868,119
(14,282,224)	(13,919,312)	(14,495,307)	(13,550,106)
(391,937)	(405,381)	(362,431)	(430,200)
6,649	-	-	-
1,177,149	(2,996,262)	(21,399,844)	893,475
130,560,458	133,556,720	154,956,564	154,063,089
<u>\$131,737,607</u>	<u>\$130,560,458</u>	<u>\$133,556,720</u>	<u>\$154,956,564</u>
114,827,829	135,101,918	114,089,779	74,798,756
53.43%	49.15%	53.93%	67.44%
\$ 71,685	\$ 71,685	\$ 71,685	\$ 71,685
160,183.90%	188,466.09%	159,154.33%	104,343.66%

# FINANCIAL SECTION

## Required Supplementary Information (Continued)

### Schedule of Changes in Net OPEB Liability

Fiscal years ending September 30,	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
<b>Total OPEB liability</b>					
Service Cost	\$ 24,231	\$ 154,723	\$ 154,932	\$ 1,147,517	\$ 1,482,175
Interest on the total OPEB liability	6,423,404	5,468,170	6,446,545	7,517,765	7,076,802
Changes in benefit terms	-	-	-	-	-
Difference between expected and actual experience	(12,927,950)	(7,428,519)	(26,458,278)	(25,628,961)	3,291,754
Changes of assumptions	1,504,214	(41,686,334)	(393,431)	4,385,679	(9,407,229)
Benefit payments, including refunds of employee contributions	(5,407,735)	(5,816,447)	(5,836,338)	(6,163,773)	(6,695,207)
<b>Net changes in total OPEB liability</b>	<u>(10,383,836)</u>	<u>(49,308,407)</u>	<u>(26,086,570)</u>	<u>(18,741,773)</u>	<u>(4,251,705)</u>
<b>Total OPEB liability - beginning</b>	<u>94,454,666</u>	<u>143,763,073</u>	<u>169,849,643</u>	<u>188,591,416</u>	<u>192,843,121</u>
<b>Total OPEB liability - ending (a)</b>	<u><u>\$ 84,070,830</u></u>	<u><u>\$ 94,454,666</u></u>	<u><u>\$ 143,763,073</u></u>	<u><u>\$ 169,849,643</u></u>	<u><u>\$ 188,591,416</u></u>
<b>Plan fiduciary net position</b>					
Employer contributions	\$ 4,660,761	\$ 4,611,638	\$ 4,637,799	\$ 9,091,371	\$ 4,657,040
Employee contributions	-	-	-	1,737	6,452
OPEB plan net investment income	(6,759,034)	7,021,482	1,581,923	625,677	1,573,478
Benefit payments, including refunds of employee contributions	(5,407,735)	(5,816,447)	(5,836,338)	(6,163,773)	(6,695,207)
OPEB plan administrative expense	(118,198)	(105,785)	(99,031)	(80,542)	(74,201)
Other	1,181,694	1,200,350	1,302,035	1,379,333	953,927
<b>Net change in plan fiduciary net position</b>	<u>(6,442,512)</u>	<u>6,911,238</u>	<u>1,586,388</u>	<u>4,853,803</u>	<u>421,489</u>
<b>Plan fiduciary net position - beginning</b>	<u>38,279,797</u>	<u>31,368,559</u>	<u>29,782,171</u>	<u>24,928,368</u>	<u>24,506,879</u>
<b>Plan fiduciary net position - ending (b)</b>	<u><u>\$ 31,837,285</u></u>	<u><u>\$ 38,279,797</u></u>	<u><u>\$ 31,368,559</u></u>	<u><u>\$ 29,782,171</u></u>	<u><u>\$ 24,928,368</u></u>
<b>Net OPEB liability - (a) - (b)</b>	<u><u>\$ 52,233,545</u></u>	<u><u>\$ 56,174,869</u></u>	<u><u>\$ 112,394,514</u></u>	<u><u>\$ 140,067,472</u></u>	<u><u>\$ 163,663,048</u></u>
<b>Plan fiduciary net position as a percentage of total OPEB liability</b>	37.87%	40.53%	21.82%	17.53%	13.22%

Note: Contributions to the OPEB plan are not based on a measure of pay. Therefore, in accordance with GASB Statement No. 85, covered payroll is not presented in this schedule.

# FINANCIAL SECTION

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## Required Supplementary Information (Continued)

### 2017

\$ 797,000  
8,463,585  
-

18,099  
66,226,054

(6,342,947)  

---

69,161,791

123,681,330  

---

\$ 192,843,121  

---

\$ 4,571,636  
6,452  
2,754,692

(6,342,947)  
(68,871)  
643,981  

---

1,564,943

22,941,936  

---

\$ 24,506,879  

---

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\$ 168,336,242  

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12.71%

# FINANCIAL SECTION

## Required Supplementary Information (Continued)

### Schedules of Contributions

#### Pension Benefits

Fiscal Year Ended Sept. 30	Actuarially Determined Contribution	Actual Employer Contributions	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2013	\$5,993,209	\$0	\$5,993,209	\$71,685	0.0 %
2014	6,327,209	0	6,327,209	71,685	0.0
2015	7,843,450	0	7,843,450	71,685	0.0
2016	8,063,327	0	8,063,327	71,685	0.0
2017	7,878,170	0	7,878,170	71,685	0.0
2018	8,236,583	0	8,236,583	71,685	0.0
2019	9,348,433	8,063,327	1,285,106	17,921	N/A
2020	9,291,507	0	9,291,507	0	N/A <sup>(1)</sup>
2021	9,556,222	0	9,556,222	0	N/A
2022	9,373,970	0	9,373,970	0	N/A

<sup>(1)</sup> For the 2019 and later valuations, a contribution percentage is not computed because the Retirement System is closed.

#### Other Postemployment Benefits<sup>(1)</sup>

Fiscal Year Ended Sept. 30	Actuarially Determined Contribution	Actual Employer Contributions	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2013	\$9,630,395	\$4,240,388	\$5,390,007	\$3,312,132	128.0 %
2014	9,381,877	4,323,381	5,058,496	2,497,497	173.1
2015	9,362,804	4,473,374	4,889,430	1,733,547	258.0
2016	10,464,110	4,537,633	5,926,477	1,661,862	273.0
2017	11,336,578	4,571,636	6,764,942	1,661,862	275.1
2018 <sup>(2)</sup>	11,631,582	4,657,040	6,974,542	N/A	N/A
2019	10,172,054	9,091,371	1,080,683	N/A	N/A
2020	7,907,429	4,637,799	3,269,630	N/A	N/A
2021	7,531,715	4,611,638	2,920,077	N/A	N/A
2022	6,065,982	4,660,761	1,405,221	N/A	N/A

<sup>(1)</sup> Includes members in both the defined benefit plan and the defined contribution plan

<sup>(2)</sup> Beginning FY2018, covered payroll is not disclosed

# FINANCIAL SECTION

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## Required Supplementary Information (Continued)

### Schedules of Investment Returns

#### Pension Benefits

<u>Fiscal Years Ending September 30,</u>	<u>Annual Return*</u>
2014	9.76 %
2015	(4.61)
2016	8.58
2017	12.44
2018	6.58
2019	2.30
2020	5.39
2021	23.45
2022	(18.96)

\* Annual money-weighted rate of return, net of investment expenses

#### Other Postemployment Benefits

<u>Fiscal Years Ending September 30,</u>	<u>Annual Return*</u>
2017	14.87 %
2018	10.34
2019	6.74
2020	8.60
2021	23.72
2022	(15.70)

\* Annual money-weighted rate of return, net of investment expenses

# FINANCIAL SECTION

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## **Required Supplementary Information (Continued)**

### **NOTE A - DESCRIPTION**

Ten-year historical trend information designed to provide information about the System's progress in accumulating sufficient assets to pay benefits when due is presented in the preceding schedules. Other ten-year historical trend information related to the System is presented in the Statistical and Actuarial sections of the report. This information is presented to enable the interested parties to assess the progress made by the System in accumulating sufficient assets to pay pension benefits and other postemployment benefits as they become due. In accordance with GASB Statement No. 67, nine years of historical trend information is provided. Also, in accordance with GASB 74, six years of historical trend information is provided.

The comparability of trend information is affected by changes in actuarial assumptions, benefit provisions, actuarial funding methods, accounting policies, and other changes. Those changes usually affect trends in contribution requirements and in ratios that use the pension benefit and OPEB obligations as a factor. A change in actuarial assumption, beginning with fiscal year ending September 30, 2018, was made to use the RP-2014 Mortality Table scaled by 100% and adjusted for mortality improvements using projection scale MP-2017 from 2006.

The Schedule of Contributions is reported as historical trend information. The schedule is presented to show the responsibility of the State in meeting the actuarial requirements to maintain the System on a sound financial basis. The Schedule of Changes in Net Pension Liability, Schedule of Contributions, and Schedule of Investment Returns are schedules that are required in implementing GASB Statement No. 67. The Schedule of Changes in Net OPEB Liability, Schedule of Contributions, and Schedule of Investment Returns are schedules that are required in implementing GASB Statement No. 74. These schedules are required to show information for ten years. Additional years will be displayed as it becomes available. The Schedule of Changes in Net Pension Liability and the Schedule of Changes in Net OPEB Liability represents in actuarial terms, the accrued liability less the fair value of assets. The Schedule of Contributions is a comparison of the employer's contributions to the actuarially determined contributions. The Schedule of Investment Returns represents a money-weighted rate of return that expresses investment performances, net of investment expense, adjusted for the changing amounts actually invested.

# FINANCIAL SECTION

## Required Supplementary Information (Continued)

The information presented in the Schedule of Contributions was used in the actuarial valuation for the purposes of determining actuarially determined contribution rate. Additional information as of the latest actuarial valuation for the pension plan follows:

**Valuation Date:** Actuarially determined rates are calculated as of September 30, each year, which is 1 day prior to the beginning of the fiscal year in which contributions are reported.

### **Methods and Assumptions Used to Determine Pension Contribution Rates:**

Valuation Date	September 30, 2021
Actuarial Cost Method	Entry-Age Normal
Amortization Method	Level Dollar
Remaining Amortization Period	10-Years Open
Asset Valuation Method	5-Year Smoothed Market
Wage Inflation	4%
Actuarial Assumptions:	
Investment Rate of Return	7%
Projected Salary Increases	4%
Cost-of-living Adjustments	4% Annual Compounded (non-compounded for legislators who first became members after 1/1/95)
Retirement Age	Age-based table of rates with 100% probability of retirement once a member is subject to term limits
Mortality	The RP-2014 Healthy Annuitant Generational Mortality Tables, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2017.

### **Methods and Assumptions Used to Determine Other Postemployment Contribution Rates:**

Valuation Date	September 30, 2021
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Dollar Closed
Remaining Amortization Period	19 Years Closed
Asset Valuation Method	Fair Value
Actuarial Assumptions:	
Investment Rate of Return	4%
Wage Inflation	4%
Projected Salary Increases	4%
Healthcare Cost Trend Rate	Pre-65: 7.50% in 2022, grading to 3.5% in 2033 Post-65: 6.25% in 2022, grading to 3.5% in 2033
Retirement Age	Age-based table of rates with 100% probability of retirement once a member is subject to term limits
Mortality	The RP-2014 Healthy Annuitant Generational Mortality Tables, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale, resulting in a base year of 2006 with future mortality improvements assumed each year using scale MP-2017.
Excise Tax	No load was applied to the health care liabilities of current retirees or future retirees to approximate the cost for future excise tax
Aging Factors	Based on the 2013 SOA Study "Health Care Costs – From Birth to Death"

Note: Actuarial assumptions are periodically reviewed and modified, if needed, upon the recommendation of the actuary, and with approval of the board.

# FINANCIAL SECTION

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## Supporting Schedules

### **Summary Schedule of Administrative Expenses** **For Fiscal Year Ended September 30, 2022**

Personnel services	\$ 347,179
Actuarial services	72,490
Audit	31,900
Attorney & other professional services	4,061
Postage, telephone and other	46,960
	<hr/>
<b>Total Administrative Expenses</b>	<b>\$ 502,590</b>

### **Schedule of Investment Expenses\*** **For Fiscal Year Ended September 30, 2022**

Management fees	\$ 215,184
State Treasurer and custody fees	16,734
Other investment expenses	95,934
	<hr/>
<b>Total Investment Expenses</b>	<b>\$ 327,852</b>

\*Mutual fund management fees are netted against returns earned.

### **Schedule of Payments to Consultants** **For Fiscal Year Ended September 30, 2022**

Auditor General	\$ 31,900
Fund Evaluation Group	95,934
Gabriel Roeder	72,490
VanOverbeke Michaud & Timmony PC	4,061
	<hr/>
<b>Total Payments to Consultants</b>	<b>\$ 204,385</b>

# FINANCIAL SECTION

## Supporting Schedules (Continued)

### DETAIL OF CHANGES IN PLAN FIDUCIARY NET POSITION (Pension and other Postemployment Benefits)

For Fiscal Year Ended September 30, 2022

	Member Savings Fund	Member Retirement Fund	Survivors Retirement Fund	Insurance Revolving Fund	Health Insurance Fund	Income Fund	Total
<b>ADDITIONS</b>							
Member contributions:							
Other member contributions	\$	\$	\$	\$ 1,284	\$	\$	\$ 1,284
Employer contributions					4,182,700		4,182,700
Court fees					478,061		478,061
Other governmental contributions					281,576		281,576
Total contributions:				1,284	4,942,337		4,943,620
Investment income (loss)							
Net increase (decrease) in fair value of investments					(7,896,461)	(25,546,727)	(33,443,188)
Interest, dividends and other					1,214,529	3,949,795	5,164,324
Total investment income (loss)					(6,681,932)	(21,596,932)	(28,278,864)
Less investment expenses					(77,102)	(250,750)	(327,852)
Net investment income (loss)					(6,759,034)	(21,847,682)	(28,606,716)
Miscellaneous income					900,118		900,118
Total additions:				1,284	(916,579)	(21,847,682)	(22,762,977)
<b>DEDUCTIONS</b>							
Benefits & refunds paid to plan members & beneficiaries:							
Retirement benefits		11,184,521	2,890,634				14,075,155
Health benefits					5,050,276		5,050,276
Dental benefits					357,460		357,460
Death benefits				397,500			397,500
Refund of contribution & interest			29,964				29,964
Qualified rollover		71,857					71,857
Administrative expenses					118,198	384,393	502,590
Total deductions:		11,256,378	2,920,598	397,500	5,525,933	384,393	20,484,802
Net increase (decrease) in net position		(11,256,378)	(2,920,598)	(396,216)	(6,442,512)	(22,232,074)	(43,247,779)
Other changes in net position:							
Interest/loss allocations	1,036	512,554	(16,263,834)	(6,481,831)		22,232,074	
Transfer upon retirements	(68,513)	68,513					
Total other changes in net position	(67,476)	581,067	(16,263,834)	(6,481,831)		22,232,074	
Net increase (decrease) after changes	(67,476)	(10,675,312)	(19,184,432)	(6,878,047)	(6,442,512)		(43,247,779)
<b>Net position restricted for pension benefits and OPEB:</b>							
Beginning of Year:	94,417	(2,867,783)	90,997,525	36,266,391	38,279,797		162,770,348
End of Year:	\$ 26,941	\$ (13,543,094)	\$ 71,813,093	\$ 29,388,344	\$ 31,837,285	\$	\$ 119,522,569

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**Michigan Legislative Retirement System**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**

# **INVESTMENT SECTION**



**Report on Investment Activity  
Asset Allocation  
Investment Summary  
List of Largest Assets Held  
Schedule of Investment Fees  
Schedule of Fees and Commissions**

# INVESTMENT SECTION

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## Report on Investment Activity

### INTRODUCTION

The System's Board of Trustees is the investment fiduciary for the System in accordance with the law. Investment decisions, including investment policies and procedures, are subject to statutory regulations imposed by the Michigan Public Employee Retirement System Investment Act, Public Act 314 of 1965, as amended.

As the investment fiduciary for the System, the board's responsibilities include, but are not limited to: (1) establishing an investment policy and asset allocation for the System pension fund; (2) prudently selecting investment managers and consultants for the System, and (3) conducting periodic reviews to ensure that its policies are followed and that its investment professionals perform satisfactorily in accordance with established standards and goals.

The State Treasurer for the State of Michigan acts as the custodian for the System funds pursuant to state law, and the board has also contracted with independent investment advisors to assist with investment decisions and to manage the pension fund assets.

Fund Evaluation Group (FEG) is the investment advisor for the System and they monitor all the investments and the performance of the investments for both the pension and OPEB funds. The market review is prepared in its entirety by FEG. While the rest of the report of investment activity is prepared by the System, using information from FEG.

### INVESTMENT OBJECTIVES

The System's primary investment objective is to provide a real rate of return, net of inflation, administrative and investment expenses, sufficient to support the System's ability to meet its obligations to plan participants and beneficiaries without undue exposure to risk. In absolute terms, this return objective should approximate the System's actuarial assumed rate of return, which is currently 7%. The System seeks to attain investment results over a full market cycle. It does not expect that all investment objectives will be attained in each year and recognizes that over various periods of time the System investment results may produce significant "over" or "under" performance relative to broad markets. For this reason, the board of trustees takes a LONG-TERM perspective and will measure quantitative investment returns over a 5-year moving period. Managers and other parties are also expected to meet qualitative performance objectives (adherence to its investment philosophy and System policies, continuity of firm personnel and practices, etc.) as established by the board.

### MARKET REVIEW

#### *Twelve Months Ending September 30, 2022*

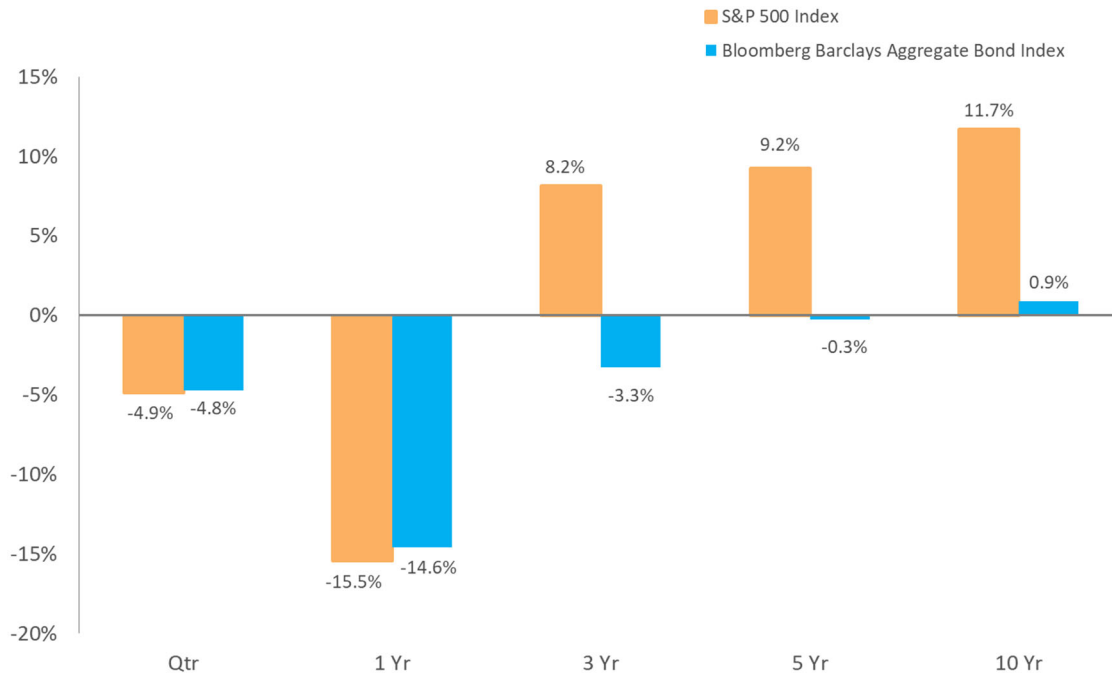
Inflation concerns that started to rise in 2021 came to fruition in 2022 as the United States experienced the highest inflation rate in over 40 years. A number of factors contributed to this inflation, including fiscal and monetary stimulus, the war in Ukraine impacting energy prices, a tight labor market, and supply-chain issues. To battle inflation, the Federal Reserve aggressively raised short-term interest rates by 3% during the first nine months of calendar 2022, with expectations of further increases by the end of the year. The increase in interest rates had a negative effect on both equity and bond markets, contributing to one of the most challenging annual periods for investment portfolios. The Legislative Retirement System's (LRS) was not immune to these challenges, posting one of its worst returns for a fiscal year (ended September 30, 2022). Value stocks continued to outperform growth stocks, while larger companies outperformed smaller companies. U.S. stocks outperformed non-U.S. stock, but that is primarily due to the strength of the dollar. The LRS value-oriented domestic equity managers outperformed market indices but this was more than offset by weakness from the growth-oriented managers.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### MARKET REVIEW (continued)

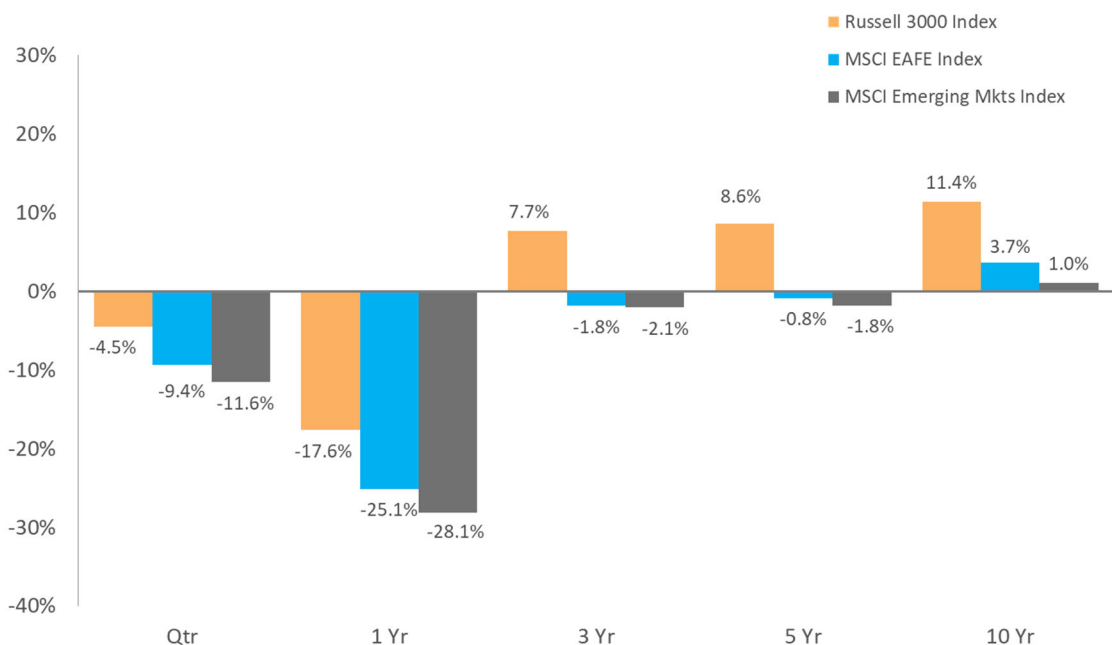
#### U.S. Stocks vs. Bonds



Data Source: Lipper

Developed international equity markets produced weak results for the trailing 12 months. However, more than half of the losses were due to currency losses (U.S. dollar appreciation). Emerging market stocks were particularly impacted by weakness in Asian markets. LRS' international equity managers produced mixed results relative to market indices.

#### U.S. and Non-U.S. Equities



Data Source: Lipper

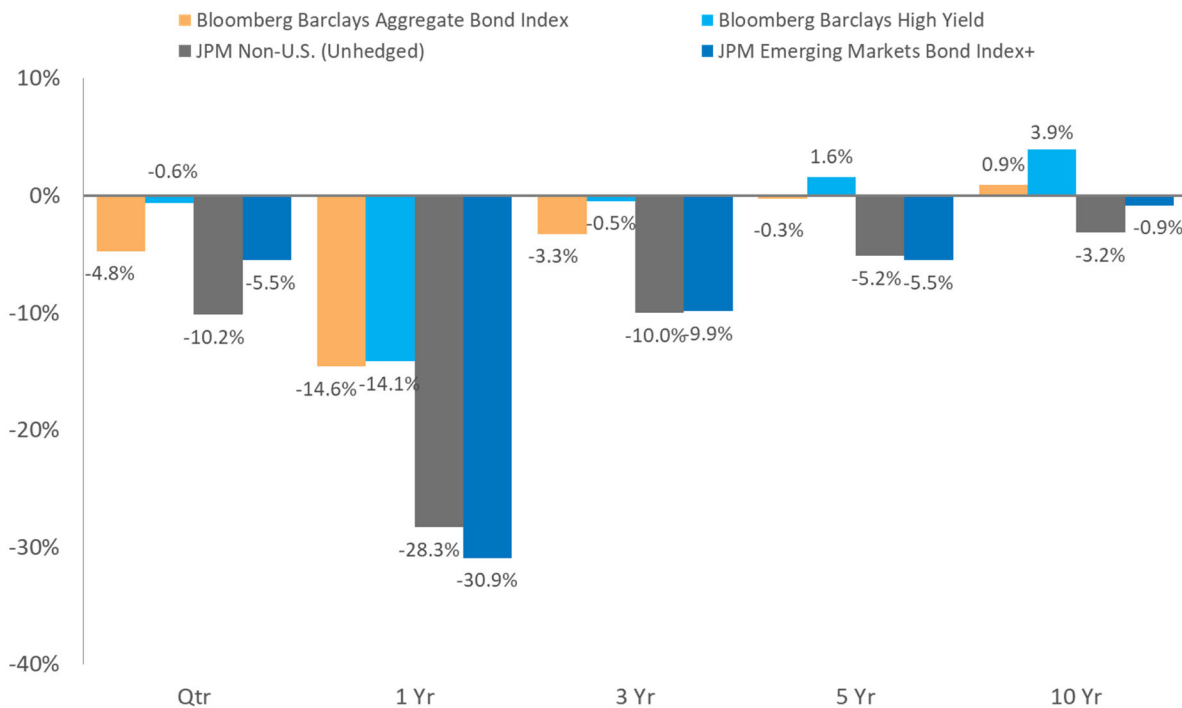
# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### MARKET REVIEW (continued)

During the previous fiscal year, the Federal Reserve was working under the assumption that inflation was “transitory” and was cautious about raising interest rates and hurting the economy. As this fiscal year progressed, this hypothesis proved to be incorrect, and it appears that the Federal Reserve was ultimately “late” in raising interest rates to combat inflation. The increase in short term interest rates was one of the most aggressive actions since the Volcker era of the 1980s, causing some of the worst returns for investment grade bond market investors in decades. (e.g., Bloomberg Barclays Aggregate Bond Index, see chart below). During a difficult period for the broad investment grade bond market, the LRS fixed income managers outperformed the market index.

#### Broad Fixed Income



Data Source: Lipper

The fiscal year ending September 30, 2022 proved to be a difficult and rare investment period as both stock and bond markets experienced double-digit declines. The Legislative Retirement System returned negative 18.8% net-of-fees. This one-year return significantly impacted longer-term averages. The LRS portfolio returned 2.9% (net of fees) over five years and 5.7% (net of fees) over ten years. For comparison, the actuarially assumed rate-of-return is 7%. The LRS portfolio has exceeded its market benchmark over several of the historical time periods.

The LRS portfolio remains well-diversified and positioned to generate results under a wide variety of economic scenarios. The largest allocations within the portfolio continue to be domestic and non-U.S. equity investments combined with investment grade fixed. The portfolio includes allocations to real asset investments to offer inflation protection as well as non-traditional exposures to provide diversification to the total portfolio.

The LRS Trustees continued to meet on a regular basis to discuss markets, investment managers, and portfolio positioning. During the fiscal year, the Trustees made a modest change to the asset allocation that resulted in a slight increase to real assets with offsetting changes to emerging markets and fixed income. The portfolio was rebalanced frequently using equity investment sales to fund benefit payments.

# INVESTMENT SECTION

## Report on Investment Activity (Continued)

### Schedule of Investment Results

for period ending September 30, 2022

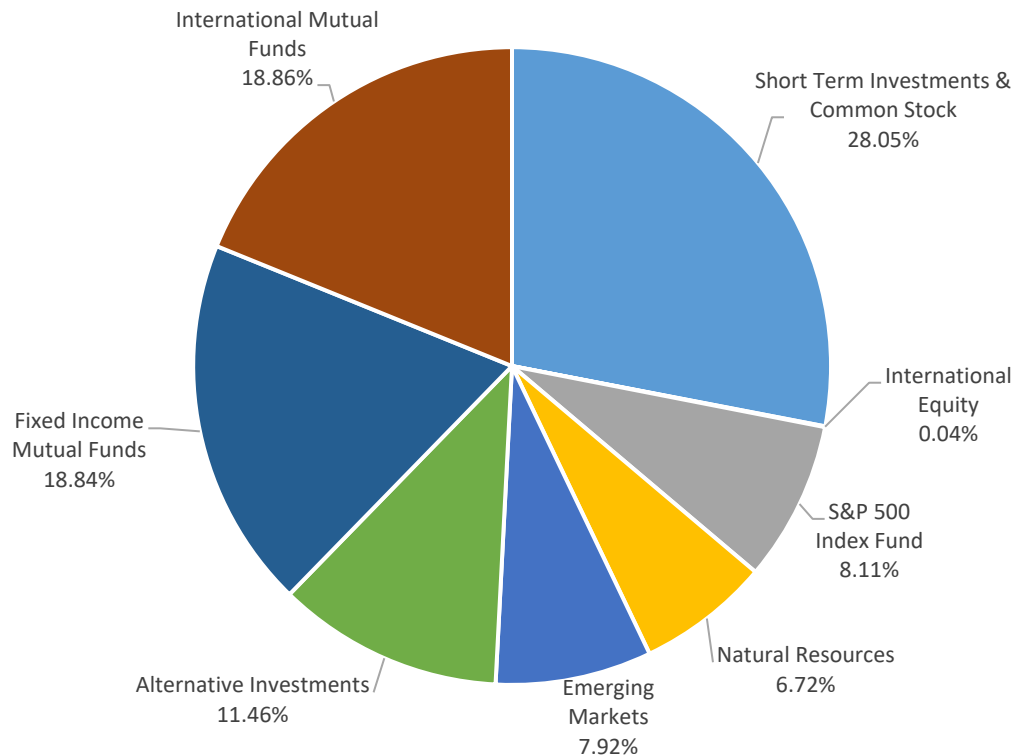
Investment Category	Current Year	Annualized Rate of Return <sup>1</sup>			
		3 years	5 years	7 years	10 years
Total Portfolio	(18.8) %	1.8 %	2.9 %	5.2 %	5.7 %
Large Cap Equity Managers					
Wellington	(32.2)	6.3	11.6	13.0	14.1
Russell 1000 Growth Index	(22.6)	10.7	12.2	13.7	13.7
Barrow, Hanley, Mewhinney & Strauss	(4.6)	6.0	7.2	9.0	9.7
Russell 1000 Value Index	(11.4)	4.4	5.3	8.2	9.2
Fidelity 500 Index	(15.5)	8.1			
S&P 500 Index	(15.5)	8.2			
Small Cap Equity Managers					
Wasatch Core Growth Fund	(31.4)				
Russell 2000 Growth Index	(29.3)				
Russell 2000 Index	(23.5)				
Sycamore Small Company Fund					
Russell 1000 Value Index					
International Equity Managers					
EuroPacific Growth	(33.1)	(1.6)	(0.6)	3.4	4.2
Fidelity Total International Index	(25.6)	(1.4)			
MSCI AC World Index	(25.2)	(1.5)	(0.8)	3.3	3.0
DFA Emerging Markets Fund	(24.4)	(0.8)			
RWC Emerging Markets Equity Fund	(31.5)	-			
MSCI Emerging Markets Index	(28.1)	(2.1)			
MSCI Emerging Markets Growth Index	(32.1)	(1.7)			
Fixed Income Managers					
Dodge & Cox Income Fund	(13.6)	(1.7)	0.7	1.8	
DoubleLine Total Return Bond Fund	(12.6)	(3.0)	(0.3)	0.5	1.4
Bloomberg US Aggregate Ind	(14.6)	(3.3)	(0.3)	0.5	0.9
Natural Resources Managers					
PIMCO Inflation Response	(7.0)	4.6			
PIMCO IRMAF Benchmark	(7.2)	2.8			
CPI + 2% Index	10.2	7.1			
Hedge Fund Manager					
Ironwood International Ltd	(1.0)	7.9	6.4	5.7	6.5
HFRI FOF: Conservative Index	(0.5)	4.8	3.8	3.4	3.7
Bloomberg Barclays US Aggregate Index	(14.6)	(3.3)	(0.3)	0.5	0.9

<sup>1</sup> Calculations used a time-weighted net-of-fees total return based on the market rate of return in accordance with industry standards

# INVESTMENT SECTION

## Asset Allocation

As of September 30, 2022



## Investment Summary

As of September 30, 2022

Investment Category	Fair Value	Percentages of Fair Value	Percentages of Income/(Loss)	Fiscal Year Income/(Loss)**
Short Term Investments* & Common Stocks	\$ 33,481,645	28.05 %	(116.03) %	\$(32,811,123)
International Equity	47,492	0.04	0.01	1,824
S&P 500 Index Fund	9,677,359	8.11	3.23	912,175
Natural Resources	8,027,266	6.72	3.07	866,759
Emerging Markets	9,453,553	7.92	1.79	506,459
Alternative Investments	13,686,187	11.46	2.68	758,523
Fixed Income Mutual Funds	22,494,257	18.84	0.67	188,715
International Mutual Funds	22,513,179	18.86	4.59	1,297,805
Total Investments	<u>\$ 119,380,937</u>	<u>100.00 %</u>	<u>100.00 %</u>	<u>\$(28,278,864)</u>

\* Short Term Investments are equity in the State Treasurer's Common Cash Fund.

\*\* Includes realized/unrealized gains and losses.

# INVESTMENT SECTION

## Largest Assets Held

### **Largest Stock Holdings (By Fair Value)** September 30, 2022

Rank	Shares	Stocks	Fair Value
1	7,506	APPLE INC	\$ 1,037,329
2	4,419	MICROSOFT CORP	1,029,185
3	6,505	AMAZON.COM INC	735,065
4	1,407	UNITEDHEALTH GROUP	710,591
5	5,862	ALPHABET INC-CL C	563,631
6	1,037	ELEVANCE HEALTH IN	471,047
7	1,521	MASTERCARD INC-CLA	432,481
8	3,887	HESS CORP	423,644
9	4,735	MERCK & CO INC	407,778
10	4,911	PHILLIPS 66	396,416

A complete list of stock holdings is available from the System.

## Schedule of Investment Fees

### **Schedule of Investment Fees at September 30, 2022**

#### Investment Managers Fees\*:

	<u>Assets under Management</u>	<u>Fees</u>
Barrow Hanley Mewhinney & Strauss	\$11,421,753	\$ 81,221
Cramer Rosenthal McGlynn	0	59,982
Wellington	9,914,720	73,981
		<u>215,184</u>
Other Investment Fees		
State Treasurer		16,734
Fund Evaluation Group		95,934
		<u>112,668</u>
	<b>TOTAL</b>	<b><u>\$ 327,852</u></b>

\*American Funds, Fidelity, Ironwood International Ltd., PIMCO, DFA, RWC, Dodge & Cox, DoubleLine, Victory and Wasatch management fees are netted against return earned by mutual fund money managers.

# INVESTMENT SECTION

## Schedule of Fees and Commissions

Investment Broker Name	Fiscal Year Ended September 30, 2022		
	Shares	Total Value	Average Commission
	Traded	of Commissions	Per Share
ABEL NOSER	15,369.00	614.76	0.04
ALLEN & COMPANY LLC	1891.00	53.74	0.03
BARCLAYS CAPITAL LE	5,673.00	181.38	0.03
BERENBERG CAPITAL MARKETS LLC	2,711.00	94.90	0.04
BMO CAPITAL MARKETS	556.00	16.91	0.03
BOFA SECURITIES, INC.	12,386.00	450.81	0.04
BTIG, LLC	1488.00	318.2	0.02
CABRERA CAPITAL MARKETS	132.00	0.81	0.01
CANACCORD GENUITY INC.	462.00	9.24	0.02
CANTOR FITZGERALD + CO.	9,936.00	248.93	0.03
CITATION GROUP	5,439.00	146.99	0.03
CITIGROUP GLOBAL MARKETS INC	12,891.00	424.00	0.03
COWEN AND COMPANY, LLC	2,541.00	26.93	0.01
CREDIT SUISSE SECURITIES (USA) LLC	238,331.00	5,085.24	0.02
DAIWA CAPITAL MARKETS AMERICA INC.	1209.00	42.31	0.03
DOWLING & PARTNERS	367.00	12.85	0.04
EVERCORE ISI	15,099.00	517.72	0.03
EXANE INC	812.00	28.42	0.04
GOLDMAN SACHS + CO LLC	19,820.00	589.91	0.03
GUGGENHEIM CAPITAL MARKETS LLC	56.00	1.68	0.03
INSTINET	71,486.00	1,664.73	0.02
J.P. MORGAN SECURITIES LLC	14,246.00	472.50	0.03
JANNEY MONTGOMERY SCOTT INC.	2100	0.42	0.02
JEFFERIES LLC	12,549.00	233.81	0.02
JONESTRADING INSTITUTIONAL SERVICES LLC	10,693.00	267.35	0.03
KEEFE BRUYETTE + WOODS INC	1841.00	73.18	0.04
KEYBANC CAPITAL MARKETS INC	530.00	19.65	0.04
LIQUIDNET INC	33,962.00	816.08	0.02
LOOP CAPITAL MARKETS	6,084.00	238.25	0.04
LUMINEX TRADING AND ANALYTICS LLC	1,162.00	5.81	0.01
MERRILL LYNCH PROFESSIONAL CLEARING CORP	339.00	13.56	0.04
MIZUHO SECURITIES USA INC.	805.00	16.10	0.02
MKM PARTNERS LLC	3,665.00	120.52	0.03
MONNESS, CRESPI, HARDT & CO. INC	180.00	6.31	0.04
MORGAN STANLEY CO INCORPORATED	11,548.00	277.25	0.02
NEEDHAM AND COMPANY LLC	1,231.00	49.24	0.04
OPPENHEIMER + CO. INC.	1,155.00	39.80	0.03
PENSERRA SECURITIES	400.00	2.65	0.01
PERSHING LLC	1514.00	17.56	0.01
PIPER JAFFRAY & CO.	8,740.00	219.47	0.03
RAYMOND JAMES AND ASSOCIATES INC	7,600.00	264.76	0.03
RBC CAPITAL MARKETS, LLC	5,268.00	67.41	0.01
ROBERT W. BAIRD CO. INCORPORATED	7,459.00	266.81	0.04
SANDERS MORRIS HARRIS	1,286.00	45.02	0.04
SANFORD C BERNSTEIN CO LLC	11,373.00	346.44	0.03
SCOTIA CAPITAL (USA) INC	94.00	0.68	0.01
STATE STREET GLOBAL MARKETS, LLC	8,951.00	268.53	0.03
STEPHENS INC	3,592.00	138.40	0.04
STIFEL NICOLAUS + CO INC	3,929.00	147.09	0.04
STRATEGAS SECURITIES LLC	2,290.00	80.18	0.04
STUART FRANKEL + CO INC	450.00	4.50	0.01
SUNTRUST CAPITAL MARKETS, INC.	13,388.00	528.34	0.04
UBS SECURITIES LLC	10,455.00	343.56	0.03
VIRTU AMERICAS LLC	8,819.00	170.88	0.02
WELLS FARGO SECURITIES, LLC	3,760.00	145.94	0.04
WILLIAMS CAPITAL GROUP LP (THE)	33.00	0.21	0.01
TOTAL	618,067.00	15,952.34	

**Michigan Legislative Retirement System**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**

# **ACTUARIAL SECTION**



**Actuary's Certification  
Summary of Actuarial Assumptions and Methods  
Actuarial Valuation Data  
Prioritized Solvency Test  
Analysis of System Experience  
Summary of Plan Provisions**

# ACTUARIAL SECTION

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## Actuary's Certification



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December 13, 2022

Board of Trustees  
Michigan Legislative Retirement System  
124 North Capitol Avenue – Suite S0927  
Lansing, Michigan 48933

Ladies and Gentlemen:

The basic financial objective of the Tier 1 Defined Benefit Plan of the Michigan Legislative Retirement System (MLRS) is to establish and receive contributions which, when combined with present assets and future investment return, will be sufficient to meet the financial obligations of the System to present and future benefit recipients.

The purpose of the September 30, 2021 annual actuarial valuations was to determine the contribution requirements for the fiscal year ending September 30, 2022 and to measure the System's funding progress. The valuations should not be relied upon for any other purpose. The valuation process develops employer contributions that are sufficient to fund any unfunded accrued liabilities over a reasonable period. The valuation was completed based upon population data, asset data and plan provisions in effect on September 30, 2021.

The valuation was based upon information provided by the System's administrative staff concerning System benefit provisions, financial transactions, and individual members, terminated members, retirees and beneficiaries. We checked the data for internal and year-to-year consistency, but did not audit the data. As a result, we do not assume responsibility for the accuracy or completeness of the data provided by the System's administrative staff. The actuary summarizes and tabulates population data in order to analyze long-term trends. The System's external auditor audits the actuarial data annually.

Annual actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rate of investment return and payroll growth, eligibility for the various classes of benefits and longevity among retired lives. These assumptions are adopted by the Board of Trustees after considering the advice of the actuary and other professionals. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution requirements as needed. Assets are valued according to a method that fully recognizes expected investment return, and recognizes unanticipated market return over a five-year period. The assumptions and the methods comply with the disclosure requirements of GASB Statements No. 67 and No. 74.



One Towne Square | Suite 800 | Southfield, Michigan 48076-3723

# ACTUARIAL SECTION

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## Actuary's Certification (Continued)

Board of Trustees  
Michigan Legislative Retirement System  
December 13, 2022  
Page 2

The Michigan Legislative Retirement System is a closed plan consisting of only retired and inactive members. The primary assumptions which impact liabilities are the investment return and mortality assumptions. While there has not been a formal experience study performed in recent history, these assumptions are reviewed annually. All assumptions and methods comply with relevant actuarial standards of practice.

As of the valuation date, the Retirement System is 62.4% funded based upon the smoothed value of assets and 68.7% funded based upon market value. As of the valuation date, the OPEB Plan is 32.2% funded based upon market value.

The following schedules in the Actuarial Section of the Annual Comprehensive Financial Report (ACFR) were prepared based upon certain information presented in the previously mentioned funding valuation reports. MLRS Staff excerpted information from various schedules in the actuarial reports and tabulated it to produce the appropriate ACFR Schedule.

- Schedule of Active Member Pension Valuation Data
- Schedule of Changes in the Pension Retirement Rolls
- Priority Solvency Test – Pension Benefits
- Analysis of System Experience – Pension Benefits
- Schedule of Active Member OPEB Valuation Data
- Schedule of Changes in the OPEB Retirement Rolls
- Priority Solvency Test – OPEB Benefits
- Analysis of System Experience – OPEB Benefits
- Schedule of Funding Progress – Pension Plan
- Schedule of Funding Progress – Other Postemployment Benefit Plan

The current benefit structure is outlined in the Actuarial Section of the ACFR.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.



# ACTUARIAL SECTION

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## Actuary's Certification (Continued)

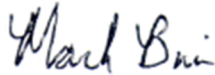
Board of Trustees  
Michigan Legislative Retirement System  
December 13, 2022  
Page 3

Based upon the results of the September 30, 2021 valuation, the actuarial liabilities are less than fully funded on a funding value of assets basis and market value of assets basis. It is most important that this plan receive contributions at least equal to the actuarial rates. Lower than recommended actual contributions will increase future required contributions or possibly lead to a depletion in fund assets.

The signing actuaries are independent of the plan sponsor.

The actuarial valuation of the Michigan Legislative Retirement System as of September 30, 2021 was performed by qualified actuaries in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with applicable State statutes. The assumptions and methods used for funding and financial reporting purposes are in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. Mark Buis and Francois Pieterse are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the calculated employer contribution meets the financial objective of the Retirement System.

Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Mark Buis, FSA, EA, FCA, MAAA



Francois Pieterse, ASA, FCA, MAAA

MB/FP:dj



# ACTUARIAL SECTION

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## Summary of Actuarial Assumptions and Methods

1. The investment return rate used in making the valuations was 7% per year, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of investment return in excess of the inflation rate. Considering other financial assumptions, this 7% investment return rate translates to an assumed real rate of return of 3%. Adopted 1987.
2. The mortality table used in evaluating allowances to be paid was the RP-2014 tables, as extended, and includes a margin for future mortality improvement projected using a fully generational improvement scale. These rates were first used for the September 30, 2018 valuation.
3. Sample probabilities of retirement with an age and service allowance are shown in Schedule 1. Adopted 1987.
4. Sample probabilities of withdrawal from service and disability, together with individual pay increase assumptions, are shown in Schedule 2. Adopted 1993, 1979, and 1987, respectively.
5. Total active member payroll is assumed to increase 4% per year. This represents the portion of the individual pay increase assumptions attributable to inflation.
6. An individual entry age actuarial cost method of valuation was used in determining age and service allowance actuarial liabilities and normal cost. Adopted 1987. Unfunded actuarial accrued liabilities, including actuarial gains and losses, are financed over a period of 10 years.
7. Effective for the September 30, 1993 valuation, valuation assets were equal to valuation assets (prior method) as of September 30, 1992, with subsequent differences between total investment income and projected investment income (actuarial assumption) being spread over a five (5) year period.
8. Member data and asset information was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.
9. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA). The assumptions used in the actuarial valuations were adopted by the board of trustees after consulting with the actuary.
10. Beginning fiscal year 2011, the System board approved using the prior year actuarial report for the System current year Annual Comprehensive Financial Report.

# ACTUARIAL SECTION

## Summary of Actuarial Assumptions and Methods (Continued)

### SCHEDULE 1

<u>Retirement Ages</u>	<u>Percent of Eligible Active Members Retiring Within Next Year</u>
50	10 %
52	10
55	10
58	10
61	10
64	10
67	10
70	100

### SCHEDULE 2

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

<u>Years of Service<sup>#</sup></u>	<u>Percent of Active Members Withdrawing Within Next Year</u>		<u>Sample Ages</u>	<u>Percent of Active Members Becoming Disabled Within Next Year</u>		<u>Percent Increase In Pay During Next Year</u>
	<u>House</u>	<u>Senate</u>		<u>Men</u>	<u>Women</u>	
0	6 %	6 %	25	0.08 %	0.10 %	4 %
1	6	6	35	0.08	0.10	4
2	6	6	40	0.20	0.36	4
3	6	6	45	0.27	0.41	4
4	6	6	50	0.49	0.57	4
5	4	4	55	0.89	0.77	4
6	100	4	60	1.41	1.02	4
7		4	65	1.66	1.23	4
8		100				

<sup>#</sup> Years after 1992, for persons who were members on December 31, 1992

# ACTUARIAL SECTION

## Actuarial Valuation Data

### Schedule of Active Member Pension Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll	Average Annual Pay	% Increase (Decrease)	Average Age	Average Service
2012	1	\$ 71,685	\$ 71,685	0.0 %	52.3	9.8
2013	1	71,685	71,685	0.0	53.3	10.8
2014	1	71,685	71,685	0.0	54.3	11.8
2015	1	71,685	71,685	0.0	55.3	12.8
2016	1	71,685	71,685	0.0	56.3	13.8
2017	1	71,685	71,685	0.0	57.3	14.8
2018	1	71,685	71,685	0.0	58.3	15.8
2019	0	0	0	0.0	0	0
2020	0	0	0	0.0	0	0
2021	0	0	0	0.0	0	0

### Schedule of Active Member OPEB Valuation Data

Valuation Date Sept. 30	Number	Reported Annual Payroll	Average Annual Pay	% Increase (Decrease)	Average Age	Average Service
2012	48	\$ 3,515,187	\$ 73,233	0.1 %	52.6	7.7
2013	44	3,240,447	73,647	0.6	52.9	8.6
2014	34	2,497,497	73,456	(0.3)	53.4	10.2
2015	24	1,733,547	72,231	(1.7)	52.2	10.5
2016	23	1,661,862	72,255	0.0	53.7	11.4
2017	23	1,661,862	72,255	0.0	54.7	12.4
2018	24	1,733,547	72,231	0.0	56.3	13.2
2019	3	215,055	71,685	(0.8)	57.6	10.1
2020	3	215,055	71,685	0.0	58.6	11.1
2021	2	143,370	71,685	0.0	64.5	10.8

# ACTUARIAL SECTION

## Actuarial Valuation Data (Continued)

### Schedule of Changes in the Pension Retirement Rolls

Year Ended Sept. 30	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls—End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
2012	8	\$ 752,346	15	\$ 428,828	293	\$ 12,499,050	2.7 %	\$ 42,659
2013	5	631,881	8	278,216	290	12,852,715	2.8	44,320
2014	4	594,824	10	364,336	284	13,083,203	1.8	46,068
2015	5	723,413	10	391,953	279	13,414,663	2.5	48,081
2016	5	656,260	13	735,829	271	13,335,094	(0.6)	49,207
2017	13	803,468	15	540,339	269	13,598,223	2.0	50,551
2018	10	834,312	17	689,748	262	13,742,787	1.1	52,453
2019	5	729,809	8	386,757	259	14,085,839	2.5	54,385
2020	2	606,183	10	757,575	251	13,934,447	(1.1)	55,516
2021	5	789,961	13	923,533	243	13,800,875	(1.0)	56,794

### Schedule of Changes in the OPEB Retirement Rolls

Year Ended Sept. 30	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls—End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
2012	18	\$175,876	12	\$ 415,990	362	\$ 4,979,441	(4.6)	\$ 13,755
2013	16	381,825	9	61,892	369	5,299,374	6.4	14,361
2014	8	71,424	15	149,945	362	5,220,853	(1.5)	14,422
2015	16	514,854	14	163,980	364	5,571,727	6.7	15,307
2016	8	162,321	13	159,096	359	5,574,952	0.1	15,529
2017	16	904,549	17	247,893	358	6,231,608	11.8	17,407
2018	11	226,851	16	129,730	356	6,328,729	1.6	17,778
2019	17	157,370	13	485,372	360	6,000,727	(5.2)	16,669
2020	6	39,086	12	378,110	354	5,661,703	(5.6)	15,994
2021	11	213,837	20	154,957	345	5,720,583	1.0	16,581

# ACTUARIAL SECTION

## Actuarial Valuation Data (Continued)

### Schedule of Funding Progress Pension Plan

(in thousands)

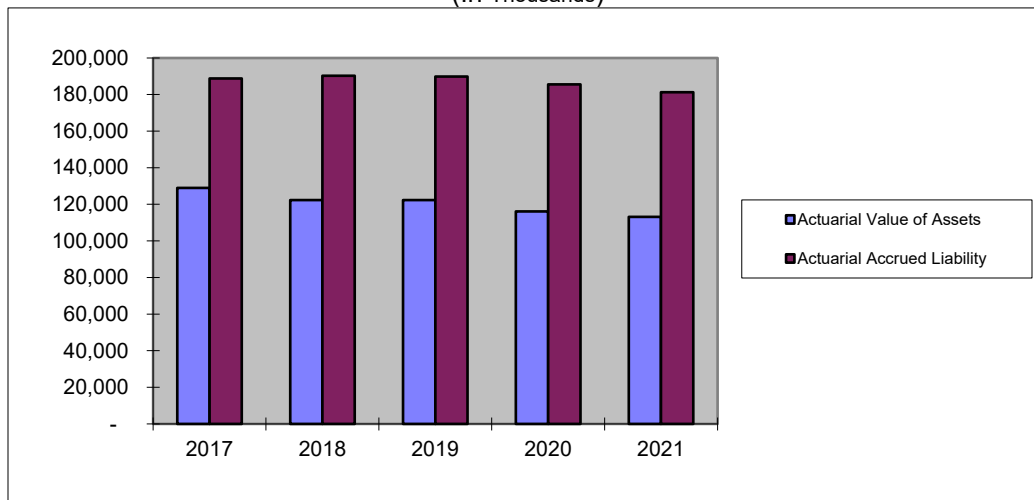
Valuation Date Sept 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) Accrued Liability (UAAL) (b-a)	Funded Ratio AAL (a/b)	Covered Payroll <sup>(1)</sup> (c)	UAAL as a % of Covered Payroll <sup>(2)</sup> ((b-a)/c)
2012	\$136,916	\$ 180,466	\$ 43,550	76 %	\$ 72	N/A
2013	134,932	180,909	45,978	75	72	N/A
2014	135,767	192,762	56,995	70	72	N/A
2015	134,049	192,642	58,593	70	72	N/A
2016	132,976	190,224	57,248	70	72	N/A
2017	128,919	188,771	59,852	68	72	N/A
2018	122,261	190,193	67,932	64	72	N/A
2019	122,266	189,784	67,518	64	0	N/A
2020	116,052	185,493	69,442	63	0	N/A
2021	113,096	181,213	68,117	62	0	N/A

<sup>(1)</sup> October based payrolls

<sup>(2)</sup> Percentage of covered payroll is not applicable (N/A) as the System is closed.

### Actuarial Value of Pension Plan Assets compared to Actuarial Accrued Pension Plan Liability Fiscal Years Ended September 30

(In Thousands)



# ACTUARIAL SECTION

## Actuarial Valuation Data (Continued)

### Schedule of Funding Progress Other Postemployment Benefit Plan<sup>(2)</sup>

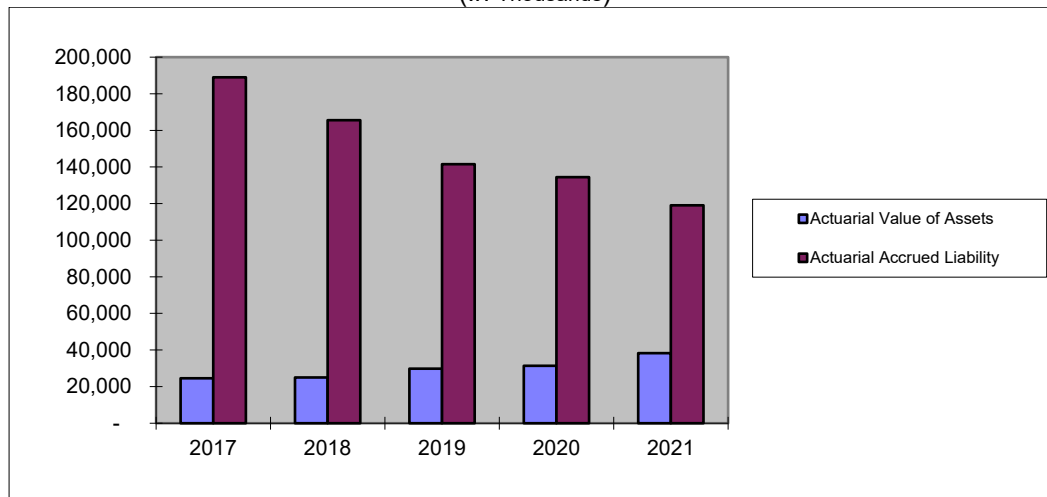
(in thousands)

Valuation Date Sept 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded (Overfunded) Accrued Liability (UAAL) (b-a)	Funded Ratio AAL (a/b)	Covered Payroll <sup>(1)</sup> (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2012	\$ 20,825	\$ 145,161	\$ 124,337	14 %	\$ 3,587	3,466 %
2013	22,806	153,666	130,860	15	3,312	3,951
2014	23,625	158,568	134,943	15	2,497	5,404
2015	21,840	174,564	152,724	13	1,734	8,810
2016	22,942	184,225	161,283	12	1,662	9,705
2017	24,507	188,991	164,484	13	1,662	9,898
2018	24,928	165,531	140,603	15	1,734	8,111
2019	29,782	141,534	111,751	21	215	51,964
2020	31,369	134,457	103,089	23	215	47,936
2021	38,280	119,066	80,786	32	143	56,494

<sup>(1)</sup> October based payrolls

<sup>(2)</sup> Includes members in both the defined benefit plan and the defined contribution plan

### Actuarial Assets compared to Actuarial Accrued OPEB Plan Liability Fiscal Years Ended September 30 (In Thousands)





# ACTUARIAL SECTION

## Prioritized Solvency Test (Continued)

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

Valuation Date Sept. 30	Actuarial Accrued Liability (AAL)			Valuation Assets	Portion of AAL Covered by Assets			
	(1)	(2)	(3)		(1)	(2)	(3)	(4) <sup>1</sup>
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)					
2012	\$ -	\$ 98,511	\$ 46,650	\$ 20,825	0 %	21 %	0 %	14 %
2013	-	103,824	49,842	22,806	0	22	0	15
2014	-	109,400	49,169	23,625	0	22	0	15
2015	-	123,962	50,602	21,840	0	18	0	13
2016	-	132,404	51,821	22,942	0	17	0	13
2017	-	136,308	52,683	24,507	0	18	0	13
2018	-	119,220	46,311	24,928	0	21	0	15
2019	-	106,669	34,865	29,782	0	28	0	21
2020	-	101,858	32,600	31,369	0	31	0	23
2021	-	90,212	28,853	38,280	0	42	0	32

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

# ACTUARIAL SECTION

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## Analysis of System Experience

**Pension Benefits**  
**Gains/Losses in Accrued Liabilities During Year Ended September 30, 2021**  
**Resulting from Differences Between Assumed Experience & Actual Experience**

<u>Type of Activity</u>	<u>Gain/(Loss)</u>
1. <b>Retirements (including Disability Retirement).</b> If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	\$
2. <b>Withdrawals From Employment.</b> (including death-in-service) If more liabilities are released by withdrawals and deaths than assumed, there is a gain. If smaller releases, a loss.	
3. <b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	
4. <b>Investment Income.</b> If there is greater investment income than assumed, there is a gain. If less income, a loss.	4,024,902
5. <b>Death After Retirement.</b> If retirants live longer than assumed, there is a loss. Of not as long, a gain.	1,856,725
6. <b>New Entrants/Rehires.</b>	
7. <b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	<u>303,636</u>
8. <b>Composite Gain (or Loss) During Year</b>	<u><u>\$ 6,185,263</u></u>

# ACTUARIAL SECTION

## Analysis of System Experience (Continued)

### OPEB Benefits

#### Gains/Losses in Accrued Liabilities During Year Ended September 30, 2021 Resulting from Differences Between Assumed Experience & Actual Experience

##### A. Derivation of Actuarial Gain/(Loss):

1. <b>Unfunded Actuarial Accrued Liability (UAAL)</b> - Previous Valuation	\$ 103,088,779
2. <b>Total Normal Cost</b> (employer plus member) for Year Ending 9/30/2018	94,043
3. <b>Total Contributions</b> (employer plus member) for Year Ending 9/30/2018	4,838,367
4. <b>Interest on:</b>	
a. UAAL: .04 x (1)	4,123,551
b. Normal Cost and Contributions: .04 x [(2) - (3)]	(94,886)
c. Net Total: (a) + (b)	4,028,665
5. <b>Change in UAAL due to Benefit Changes</b>	
6. <b>Change in UAAL due to Assumptions/Methods</b> (i.e., Trend/Discount Rate)	2,214,930
7. <b>Expected UAAL Current Year:</b>	
(1) + (2) - (3) + (4c) + (5) + (6)	104,588,050
8. <b>Actual UAAL Current Year</b>	80,785,913
9. <b>Experience Gain/(Loss): (7) - (8)</b>	23,802,137

B. **Approximate Portion of Gain/(Loss) due to Investments** 5,837,239

C. **Approximate Portion of Gain/(Loss) due to Liabilities: (A.9) - (B)** 17,964,898

Type of Activity	Gain/(Loss)
1. <b>Premiums.</b> Gains and losses resulting from actual premiums in valuation year versus that assumed from prior valuation	\$ 15,914,939
2. <b>Investment Income.</b> If there is greater investment income than assumed, there is a gain. If less income, a loss.	5,837,239
3. <b>Demographic and Other.</b> Gains and losses resulting from demographic experience, data adjustments, timing of financial transactions, etc.	2,049,959
4. <b>Composite Gain/(Loss) During Year.</b>	<u>\$ 23,802,137</u>

# ACTUARIAL SECTION

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## Summary Of Plan Provisions

### Membership

Legislators who first become legislators after March 30, 1997, will *not* be members of the Tier 1 defined benefit plan. This summary of benefits applies only to persons who first became legislators on or before March 30, 1997, and who did not elect to transfer to Tier 2, the defined contribution plan.

### Term Limits

For terms of office beginning on or after January 1, 1993, no person shall be elected to the House of Representatives (House) more than three (3) times and no person shall be elected to the Senate more than two (2) times. With the exception of persons who fill vacancies for partial terms and persons who serve in both the House and the Senate, the normal service limits are:

House - 6 years (three 2-year terms)  
Senate - 8 years (two 4-year terms)

### Regular Retirement

**Eligibility** - At least age 50 with age plus service equal to or exceeding 70; or at least age 55 with 5 or more years service if seated either: a) 3 times in the House or b) 2 times in the Senate or c) 1 time in the House and 1 time in the Senate.

**Annual Amount** - Persons who first became members on or before January 1, 1995: 20% of the highest salary earned for the first 5 years of service, plus 4% of highest salary for each of the next 11 years of service, plus 1% of highest salary for each additional year of service.

Persons who first became members after January 1, 1995: 3% of highest salary for each year of service.

### Deferred Retirement (Vested Benefit)

**Eligibility** - 5 or more years of service if seated either: a) 3 times in the House or b) 2 times in the Senate or c) 1 time in the House and 1 time in the Senate. Benefit begins at age 55 (as early as age 50 if age plus service equals or exceeds 70). Member may delay commencement of benefits to an age not greater than age 70-1/2.

**Annual Amount** - Computed as regular retirement benefit based on service and highest salary at termination. For persons who first became members on or before January 1, 1995, the benefit is increased 4% annually (compounded) between termination of membership and the earlier of a) benefit commencement or b) age 55. Benefits delayed beyond age 55 are actuarially equivalent to the age 55 benefit.

### Disability Retirement

**Eligibility** - Disability before becoming eligible to retire or during a benefit deferral period.

**Annual Amount** - Computed as a regular retirement benefit based on service and highest salary at time of disability.

# ACTUARIAL SECTION

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## **Summary Of Plan Provisions (Continued)**

### **Death Benefit**

**Eligibility** - 5 or more years of service if seated either: a) 3 times in the House or b) 2 times in the Senate or c) 1 time in the House and 1 time in the Senate. Benefit is paid immediately.

**Annual Amount** - Surviving spouse receives 66 2/3% of the retirement allowance earned as of the date of death of the member. If there are eligible dependent children in his or her care, the surviving spouse receives 75% of the retirement allowance earned as of the date of death until the children are no longer dependent, at which time 66-2/3% then becomes payable. Special conditions apply if there is no surviving spouse, or if the eligible children are not under the care of the surviving spouse.

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

The annual retirement allowance payable to a retirant or survivor is increased by 4% per year, compounded annually (non-compounded for persons first becoming members after January 1, 1995), each January 1.

### **Life Insurance**

Life insurance coverage is provided from the Insurance Revolving Fund for active members, retirants, and deferred vested members. Coverage varies from \$2,500 to \$150,000 depending on premium payments, board policy, and statutory provisions in place at deferral and/or retirement.

### **Post-Retirement Health Insurance**

Hospital, medical, and dental insurance shall be provided from the Health Insurance Fund for retirants, deferred vested members who first became members on or before January 1, 1995, and their survivors, and to the spouses and eligible children of retirants and of deferred vested members who first became members on or before January 1, 1995.

In addition, the System provides health insurance coverage to eligible former legislators who belong to the State's Defined Contribution Plan (Tier 2).

### **Member Contributions**

For members who first became a member on or before January 1, 1995: 9% of annual salary to the Health Insurance Fund.

For members who first became a member after January 1, 1995: 7% of annual salary to the Health Insurance Fund.

**Michigan Legislative Retirement System**

**Annual Comprehensive Financial Report  
for the Fiscal Year Ended September 30, 2022**

**STATISTICAL  
SECTION**



**Schedules of Additions by Source  
Schedules of Deductions by Type  
Schedules of Changes in Fiduciary Net Position  
Schedules of Benefit and Refund Deductions from Net Position by Type  
Schedules of Retired Members by Type of Benefit  
Schedules of Average Benefit Payments**

# STATISTICAL SECTION

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## **Narrative Explanation to Statistical Section**

The intention of this narrative description is to explain the System's financial and operating trends of the schedules in the statistical section. It is important that this section be written clearly and accurately to help improve the understandability and usefulness of the statistical information. The statistical section contains the following schedules:

### **FINANCIAL TRENDS:**

These schedules are a ten (10) year comparison of the Statement of Changes in Pension Plan and OPEB Plan Fiduciary Net Position found in the Financial Section of this report. This is to provide a longer time period for reference and show possible trends.

*Schedule of Additions by Source - Pension Plan and Other Postemployment Benefit Plan (OPEB) Plan*

*Schedule of Pension Plan Additions by Source*

*Schedule of OPEB Plan Additions by Source*

*Schedule of Deductions by Type - Pension Plan and OPEB Plan*

*Schedule of Pension Plan Deductions by Type*

*Schedule of OPEB Plan Deductions by Type*

*Schedule of Changes in Fiduciary Net Position - Pension Plan*

*Schedule of Changes in Fiduciary Net Position – OPEB Plan*

*Schedule of Benefit and Refund Deductions from Net Position by Type – Pension Plan*

*Schedule of Benefit and Refund Deductions from Net Position by Type – OPEB Plan*

### **OPERATING INFORMATION:**

These schedules contain information to show the System's financial information as it relates to the members and the benefits provided.

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

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

*Schedule of Average Benefit Payments – Pension Plan*

*Schedule of Average Benefit Payments – OPEB Plan*

# STATISTICAL SECTION

## Schedule of Additions By Source Pension Plan and Other Postemployment Benefit (OPEB) Plan

<u>Fiscal Year Ended</u>	<u>Member Contributions</u>	<u>Employer Contributions</u>	<u>Other Governmental Contributions</u>	<u>Court Fees</u>	<u>Investment &amp; Other Income(Loss)</u>	<u>Total</u>
2013	\$113,784	\$3,300,200	\$153,256	\$940,187	\$26,568,449	\$31,075,876
2014	123,791	3,451,900	167,078	871,481	17,256,085	21,870,335
2015	126,290	3,607,200	180,690	866,174	(6,908,086)	(2,127,732)
2016	135,739	3,733,500	207,065	804,133	13,785,524	18,665,961
2017	10,346	3,808,200	204,042	763,436	19,042,045	23,828,070
2018	7,450	3,884,400	270,673	772,640	10,886,576	15,821,738
2019	4,182	16,400,900	353,649	753,798	4,971,286	22,483,815
2020	1,123	4,120,900	240,272	516,899	9,285,985	14,165,179
2021	1,213	4,120,900	226,728	490,738	33,583,022	38,422,602
2022	1,284	4,182,700	281,576	478,061	(27,706,598)	(22,762,977)

## Schedule of Pension Plan Additions By Source

<u>Fiscal Year Ended</u>	<u>Member Contributions</u>	<u>Employer Contributions</u>	<u>Other Governmental Contributions</u>	<u>Court Fees</u>	<u>Investment &amp; Other Income(Loss)</u>	<u>Total</u>
2013	\$6,527	\$	\$	\$	\$23,207,036	\$23,213,563
2014	5,662				14,868,119	14,873,781
2015	3,226				(6,545,332)	(6,542,106)
2016	3,648				11,324,783	11,328,431
2017	3,895				15,847,414	15,851,310
2018	998				8,629,843	8,630,841
2019	2,445	8,063,327			3,319,925	11,385,697
2020	1,123				6,642,298	6,643,421
2021	1,213				25,587,919	25,589,132
2022	1,284				(21,847,682)	(21,846,398)

## Schedule of OPEB Plan Additions By Source

<u>Fiscal Year Ended</u>	<u>Member Contributions</u>	<u>Employer Contributions</u>	<u>Other Governmental Contributions</u>	<u>Court Fees</u>	<u>Investment &amp; Other Income(Loss)</u>	<u>Total</u>
2013	\$107,257	\$3,300,200	\$153,256	\$940,187	\$3,361,413	\$7,862,313
2014	118,129	3,451,900	167,078	871,481	2,387,966	6,996,554
2015	123,064	3,607,200	180,690	866,174	(362,754)	4,414,374
2016	132,090	3,733,500	207,065	804,133	2,460,741	7,337,529
2017	6,452	3,808,200	204,042	763,436	3,194,631	7,976,762
2018	6,452	3,884,400	270,673	772,640	2,256,733	7,190,898
2019	1,737	8,337,573	353,649	753,798	1,651,361	11,098,118
2020		4,120,900	240,272	516,899	2,643,687	7,521,758
2021		4,120,900	226,728	490,738	7,995,103	12,833,469
2022		4,182,700	281,576	478,061	(5,858,916)	(916,579)

# STATISTICAL SECTION

## Schedule of Deductions By Type Pension Plan and OPEB Plan

<b>Fiscal Year</b>		<b>Refunds</b>	<b>Administrative</b>	
<b><u>Ended</u></b>	<b><u>Benefits*</u></b>	<b><u>and Transfers</u></b>	<b><u>Expenses</u></b>	<b><u>Total</u></b>
2013	\$18,704,799	\$11,700	\$439,791	\$19,156,290
2014	19,643,402	20,911	493,883	20,158,196
2015	19,905,147	724,352	427,768	21,057,267
2016	20,015,578	72,715	471,670	20,559,964
2017	20,589,553	35,618	460,807	21,085,978
2018	21,182,711	33,623	473,073	21,689,407
2019	20,293,738	-	485,861	20,779,600
2020	20,456,577	34,924	505,696	20,997,197
2021	20,360,690	50,424	490,154	20,901,268
2022	19,880,391	101,821	502,590	20,484,802

\* Includes health benefits

## Schedule of Pension Plan Deductions by Type

<b>Fiscal Year</b>	<b>Regular &amp; Survivor</b>			<b>Administrative</b>	
<b><u>Ended</u></b>	<b><u>Pension Benefits</u></b>	<b><u>Death Benefits</u></b>	<b><u>Refunds and Transfers</u></b>	<b><u>and Other Expenses</u></b>	<b><u>Total</u></b>
2013	\$12,757,228	\$134,000	\$11,700	\$372,703	\$13,275,631
2014	13,147,695	381,500	20,911	430,200	13,980,306
2015	13,394,276	376,678	724,352	362,431	14,857,738
2016	13,451,597	395,000	72,715	405,381	14,324,693
2017	13,639,606	607,000	35,618	391,937	14,674,160
2018	13,855,004	632,500	33,623	398,871	14,919,999
2019	14,008,685	121,280		405,319	14,535,284
2020	14,230,239	390,000	34,924	406,665	15,061,829
2021	13,972,963	571,280	50,424	384,369	14,979,036
2022	14,075,155	397,500	101,821	384,393	14,958,869

## Schedule of OPEB Plan Deductions by Type

<b>Fiscal Year</b>				<b>Administrative</b>	
<b><u>Ended</u></b>	<b><u>Health Benefits</u></b>	<b><u>Dental Benefits</u></b>	<b><u>Refunds and Transfers</u></b>	<b><u>and Other Expenses</u></b>	<b><u>Total</u></b>
2013	\$5,396,456	\$417,115	\$	\$67,088	\$5,880,659
2014	5,696,894	417,313		63,683	6,177,890
2015	5,724,946	409,246		65,337	6,199,529
2016	5,764,052	404,929		66,289	6,235,271
2017	5,952,317	390,630		68,871	6,411,818
2018	6,315,202	380,005		74,201	6,769,408
2019	5,791,875	371,898		80,543	6,244,315
2020	5,494,948	341,390		99,031	5,935,369
2021	5,456,860	359,587		105,785	5,922,232
2022	5,050,276	357,460		118,198	5,525,933

# STATISTICAL SECTION

## Schedule of Changes in Fiduciary Net Position Pension Plan (Ten Years)

	Fiscal Year									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Additions</b>										
Member contributions	\$ 6,527	\$ 5,662	\$ 3,226	\$ 3,648	\$ 3,895	\$ 998	\$ 2,445	\$ 1,123	\$ 1,213	\$ 1,284
Employer contributions							8,063,327			
Net Investment income	23,207,036	14,868,119	(6,545,332)	11,324,783	15,840,765	8,629,843	3,319,925	6,635,565	25,587,919	(21,847,682)
Other income					6,649			6,733		
<b>Total additions</b>	<b>23,213,563</b>	<b>14,873,781</b>	<b>(6,542,106)</b>	<b>11,328,431</b>	<b>15,851,309</b>	<b>8,630,841</b>	<b>11,385,697</b>	<b>6,643,422</b>	<b>25,589,132</b>	<b>(21,846,398)</b>
<b>Deductions</b>										
Benefit payments	12,891,228	13,529,195	13,770,955	13,846,597	14,246,606	14,487,504	14,129,965	14,620,239	14,544,243	14,472,655
Refunds	11,700	20,911	13,285	72,715	35,618	33,623		34,924	50,424	29,964
Qualified rollovers			711,067							71,857
Administrative expenses	372,703	430,200	362,431	405,381	391,937	398,871	405,319	406,665	384,369	384,393
<b>Total deductions</b>	<b>13,275,631</b>	<b>13,980,306</b>	<b>14,857,738</b>	<b>14,324,693</b>	<b>14,674,160</b>	<b>14,919,999</b>	<b>14,535,284</b>	<b>15,061,829</b>	<b>14,979,036</b>	<b>14,958,869</b>
<b>Changes in Net position</b>	<b>\$ 9,937,932</b>	<b>\$ 893,475</b>	<b>\$ (21,399,844)</b>	<b>\$ (2,996,262)</b>	<b>\$ 1,177,149</b>	<b>\$ (6,289,158)</b>	<b>\$ (3,149,587)</b>	<b>\$ (8,418,407)</b>	<b>\$ 10,610,096</b>	<b>\$ (36,805,267)</b>

## Schedule of Changes in Fiduciary Net Position OPEB Plan (Ten Years)

	Fiscal Year									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Additions</b>										
Member contributions	\$ 107,257	\$ 118,129	\$ 123,064	\$ 132,090	\$ 6,452	\$ 6,452	\$ 1,737	\$	\$	\$
Employer contributions	3,300,200	3,451,900	3,607,200	3,733,500	3,808,200	3,884,400	8,337,573	4,120,900	4,120,900	4,182,700
Other Gov't contribution	153,256	167,078	180,690	207,065	204,042	270,673	353,649	240,272	226,728	281,576
Court fees	940,187	871,481	866,174	804,133	763,436	772,640	753,798	516,899	490,738	478,061
Net Investment income	3,361,413	2,187,276	(996,079)	1,834,640	2,754,692	1,573,479	625,677	1,581,923	7,021,482	(6,759,034)
Other income		200,690	633,325	626,101	439,939	683,254	1,025,684	1,061,764	973,621	900,118
<b>Total additions</b>	<b>7,862,313</b>	<b>6,996,554</b>	<b>4,414,374</b>	<b>7,337,530</b>	<b>7,976,761</b>	<b>7,190,898</b>	<b>11,098,118</b>	<b>7,521,757</b>	<b>12,833,470</b>	<b>(916,579)</b>
<b>Deductions</b>										
Benefit payments	5,813,571	6,114,207	6,134,192	6,168,981	6,342,947	6,695,207	6,163,773	5,836,338	5,816,447	5,407,735
Administrative expenses	67,088	63,683	65,337	66,289	68,871	74,201	80,543	99,031	105,785	118,198
<b>Total deductions</b>	<b>5,880,659</b>	<b>6,177,890</b>	<b>6,199,529</b>	<b>6,235,271</b>	<b>6,411,818</b>	<b>6,769,408</b>	<b>6,244,315</b>	<b>5,935,369</b>	<b>5,922,232</b>	<b>5,525,933</b>
<b>Changes in Net position</b>	<b>\$ 1,981,654</b>	<b>\$ 818,664</b>	<b>\$ (1,785,155)</b>	<b>\$ 1,102,259</b>	<b>\$ 1,564,943</b>	<b>\$ 421,490</b>	<b>\$ 4,853,802</b>	<b>\$ 1,586,388</b>	<b>\$ 6,911,238</b>	<b>\$ (6,442,512)</b>

# STATISTICAL SECTION

## Schedule of Benefit and Refund Deductions from Net Position by Type Pension Plan (Ten Years)

	Fiscal Year									
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
<b>Type of Benefit</b>										
Age and service benefits:										
Retirees	\$ 10,850,420	\$ 11,137,006	\$ 11,398,185	\$ 11,398,950	\$ 11,502,955	\$ 11,457,806	\$ 11,579,049	\$ 11,709,039	\$ 11,400,941	\$ 11,184,521
Survivors	1,906,808	2,010,689	1,996,092	2,052,647	2,136,651	2,397,198	2,429,636	2,521,200	2,572,022	2,890,634
Death in service benefit	134,000	381,500	376,678	395,000	607,000	632,500	121,280	390,000	571,280	397,500
Total benefits	<u>\$ 12,891,228</u>	<u>\$ 13,529,195</u>	<u>\$ 13,770,955</u>	<u>\$ 13,846,597</u>	<u>\$ 14,246,606</u>	<u>\$ 14,487,504</u>	<u>\$ 14,129,965</u>	<u>\$ 14,620,239</u>	<u>\$ 14,544,243</u>	<u>\$ 14,472,655</u>
<b>Type of refund</b>										
Death	\$ 11,700	\$ 20,911	\$ 13,284	\$ 61,780	\$ 35,618	\$ 33,623	\$	\$ 34,924	\$ 50,424	\$ 29,964
Other			711,067	10,935						71,857
Total Refunds	<u>\$ 11,700</u>	<u>\$ 20,911</u>	<u>\$ 724,352</u>	<u>\$ 72,715</u>	<u>\$ 35,618</u>	<u>\$ 33,623</u>	<u>\$</u>	<u>\$ 34,924</u>	<u>\$ 50,424</u>	<u>\$ 101,821</u>

## Schedule of Benefit and Refund Deductions from Net Position by Type OPEB Plan (Ten Years)

	Fiscal Year									
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
<b>Type of Benefit</b>										
Healthcare benefits:										
Health benefits	\$ 5,396,456	\$ 5,696,894	\$ 5,724,946	\$ 5,764,052	\$ 5,952,317	\$ 6,315,202	\$ 5,791,875	\$ 5,494,948	\$ 5,456,860	\$ 5,050,276
Dental benefits	417,115	417,313	409,246	404,929	390,630	380,005	371,898	341,390	359,587	357,460
Total benefits	<u>\$ 5,813,571</u>	<u>\$ 6,114,207</u>	<u>\$ 6,134,192</u>	<u>\$ 6,168,981</u>	<u>\$ 6,342,947</u>	<u>\$ 6,695,207</u>	<u>\$ 6,163,773</u>	<u>\$ 5,836,338</u>	<u>\$ 5,816,447</u>	<u>\$ 5,407,735</u>

# STATISTICAL SECTION

## Schedule of Retired Members by Type of Benefit - Pension Plan As of September 30, 2022

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement*				
		1	2	3	4	5
Deferred	3	0	3	0	0	0
\$ 1 - \$ 500	1	1	0	0	0	0
501 - 1,000	3	3	0	0	0	0
1,001 - 1,500	7	2	2	2	1	0
1,501 - 2,000	22	6	4	11	1	0
2,001 - 2,500	12	5	4	3	0	0
2,501 - 3,000	21	20	0	1	0	0
3,001 - 3,500	18	13	0	5	0	0
3,501 - 4,000	23	17	0	6	0	0
4,001 - 4,500	12	4	4	4	0	0
4,501 - 5,000	19	15	0	4	0	0
Over 5,000	102	79	0	23	0	0
Total	243	165	17	59	2	0

### Notes:

#### \*Type of Retirement

- 1 - Regular retirement - first became members on or before 1/1/95
- 2 - Regular retirement - first became members after 1/1/95
- 3 - Survivor payment - survivor of type 1 regular retiree
- 4 - Survivor payment - survivor of type 2 regular retiree
- 5 - Disability Retirement

# STATISTICAL SECTION

## Schedule of Retired Members by Type of Benefit - OPEB Plan As of September 30, 2022

Amount of Monthly Pension Benefit	Number of Eligible Members	Type of Other Postemployment Benefits		
		Receiving Health*	Receiving Dental	Receiving Health and/or Dental
Defined Contribution	140	115	110	115
Deferred	0	0	0	0
\$ 1 - \$ 500	0	0	0	0
501 - 1,000	0	0	0	0
1,001 - 1,500	5	5	5	5
1,501 - 2,000	20	19	20	20
2,001 - 2,500	11	11	11	11
2,501 - 3,000	21	21	21	21
3,001 - 3,500	16	14	15	15
3,501 - 4,000	23	22	22	22
4,001 - 4,500	12	12	12	12
4,501 - 5,000	19	19	19	19
Over 5,000	101	100	101	101
Total	368	338	336	341

\*Health includes: health, prescription, hearing and vision insurance

# STATISTICAL SECTION

## Schedule of Average Benefit Payments Pension Plan (Ten Years)

	Years of Credited Services						
	<u>0-5</u>	<u>5-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>25-30</u>	<u>30+</u>
<b>Retirement Effective Dates</b>							
Period 10/1/12 to 9/30/13							
Average monthly benefit		\$2,024	\$3,606	\$4,973	\$5,924	\$6,225	\$5,229
Average final average salary		\$49,834	\$45,365	\$48,447	\$64,790	\$69,108	\$49,120
Number of retired members		92	99	59	23	9	8
Period 10/1/13 to 9/30/14							
Average monthly benefit		\$2,135	\$3,749	\$5,185	\$6,143	\$6,714	\$5,439
Average final average salary		\$50,974	\$45,709	\$48,929	\$64,790	\$72,065	\$49,120
Number of retired members		92	96	57	23	8	8
Period 10/1/14 to 9/30/15							
Average monthly benefit		\$2,239	\$3,885	\$5,385	\$6,475	\$6,983	\$5,648
Average final average salary		\$51,004	\$46,021	\$48,929	\$66,364	\$72,065	\$50,920
Number of retired members		90	94	57	23	8	7
Period 10/1/15 to 9/30/16							
Average monthly benefit		\$2,299	\$4,075	\$5,488	\$6,690	\$7,262	\$5,729
Average final average salary		\$51,404	\$46,754	\$49,315	\$67,415	\$72,065	\$44,966
Number of retired members		91	90	55	21	8	6
Period 10/1/16 to 9/30/17							
Average monthly benefit		\$2,309	\$4,264	\$5,719	\$6,916	\$7,553	\$5,958
Average final average salary		\$52,796	\$48,174	\$49,731	\$69,236	\$72,065	\$44,966
Number of retired members		92	89	54	20	8	6
Period 10/1/17 to 9/30/18							
Average monthly benefit		\$2,358	\$4,457	\$6,133	\$7,566	\$7,527	\$6,197
Average final average salary		\$53,786	\$48,770	\$51,735	\$72,880	\$72,065	\$44,966
Number of retired members		94	84	51	19	8	6
Period 10/1/18 to 9/30/19							
Average monthly benefit		\$2,448	\$4,590	\$6,430	\$7,707	\$7,828	\$6,521
Average final average salary		\$53,786	\$49,055	\$53,983	\$70,215	\$72,065	\$44,414
Number of retired members		94	84	49	19	8	5
Period 10/1/19 to 9/30/20							
Average monthly benefit		\$2,573	\$4,772	\$6,719	\$7,965	\$7,062	\$6,328
Average final average salary		\$54,257	\$49,099	\$54,053	\$69,105	\$75,237	\$43,587
Number of retired members		93	83	48	17	6	4
Period 10/1/20 to 9/30/21							
Average monthly benefit		\$2,672	\$4,944	\$6,871	\$8,015	\$8,008	\$6,581
Average final average salary		\$54,286	\$50,332	\$54,053	\$69,105	\$71,280	\$43,587
Number of retired members		94	76	48	17	4	4
Period 10/1/21 to 9/30/22							
Average monthly benefit		\$2,741	\$5,064	\$7,047	\$8,388	\$8,328	\$6,844
Average final average salary		\$54,947	\$50,942	\$53,253	\$69,105	\$71,280	\$43,587
Number of retired members		93	75	47	17	4	4

# STATISTICAL SECTION

## Schedule of Average Benefit Payments OPEB Plan (Ten Years)

	Years of Credited Services						
	<u>0-5</u>	<u>5-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>25-30</u>	<u>30+</u>
<b>Retirement Effective Dates</b>							
Period 10/1/12 to 9/30/13							
Average monthly benefit		\$1,291	\$1,142	\$1,128	\$1,184	\$1,270	\$993
Average final average salary		\$62,059	\$48,938	\$48,101	\$62,620	\$67,516	\$50,920
Number of retired members		163	111	59	27	10	7
Period 10/1/13 to 9/30/14							
Average monthly benefit		\$1,311	\$1,152	\$1,187	\$1,278	\$1,366	\$1,009
Average final average salary		\$62,815	\$49,343	\$48,570	\$62,675	\$69,968	\$50,920
Number of retired members		163	108	57	26	9	7
Period 10/1/14 to 9/30/15							
Average monthly benefit		\$1,306	\$1,167	\$1,189	\$1,255	\$1,319	\$891
Average final average salary		\$62,272	\$51,442	\$49,322	\$67,072	\$73,193	\$50,920
Number of retired members		160	112	58	24	9	7
Period 10/1/15 to 9/30/16							
Average monthly benefit		\$1,321	\$1,215	\$1,209	\$1,301	\$1,411	\$849
Average final average salary		\$62,719	\$52,238	\$48,947	\$65,248	\$69,968	\$44,966
Number of retired members		163	108	55	22	9	6
Period 10/1/16 to 9/30/17							
Average monthly benefit		\$1,444	\$1,362	\$1,373	\$1,545	\$1,629	\$970
Average final average salary		\$63,820	\$53,951	\$49,353	\$66,859	\$69,968	\$44,966
Number of retired members		160	109	54	22	9	6
Period 10/1/17 to 9/30/18							
Average monthly benefit		\$1,529	\$1,459	\$1,464	\$1,659	\$1,624	\$1,036
Average final average salary		\$63,911	\$54,948	\$51,335	\$66,859	\$69,968	\$44,966
Number of retired members		162	105	51	22	9	6
Period 10/1/18 to 9/30/19							
Average monthly benefit		\$1,362	\$1,337	\$1,342	\$1,557	\$1,515	\$856
Average final average salary		\$63,614	\$57,108	\$53,566	\$66,613	\$69,968	\$44,414
Number of retired members		159	114	49	23	9	5
Period 10/1/19 to 9/30/20							
Average monthly benefit		\$1,338	\$1,304	\$1,273	\$1,343	\$1,392	\$816
Average final average salary		\$64,052	\$57,540	\$53,627	\$65,371	\$72,088	\$43,587
Number of retired members		159	114	48	21	7	4
Period 10/1/20 to 9/30/21							
Average monthly benefit		\$1,364	\$1,329	\$1,251	\$1,400	\$1,334	\$837
Average final average salary		\$64,162	\$59,160	\$53,627	\$65,980	\$67,663	\$43,587
Number of retired members		160	108	48	20	5	4
Period 10/1/21 to 9/30/22							
Average monthly benefit		\$1,260	\$1,260	\$1,175	\$1,332	\$1,274	\$787
Average final average salary		\$64,732	\$60,096	\$52,818	\$64,998	\$70,494	\$43,587
Number of retired members		157	108	47	19	6	4