REPORT OF

MISSOURI STATE PUBLIC EMPLOYEES DEFERRED COMPENSATION PLAN

June 30, 2023



Independent Auditor's Report

To the Board of Trustees Missouri State Employees' Retirement System Jefferson City, Missouri

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Missouri State Employees' Retirement System Deferred Compensation Plan (the Plan) as of and for the year ended June 30, 2023, which includes the statement of fiduciary net position, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the Missouri State Employees' Retirement System Deferred Compensation Plan, as of June 30, 2023, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*). 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 Plan, 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 Plan's ability to continue as a going concern for 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 opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

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

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud
 or error, and design and perform audit procedures responsive to those risks. Such procedures include
 examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan'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 Plan's ability to continue as a going concern for a reasonable period of time.

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

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the Schedule of Proportionate Share of the Net OPEB Liability, and Schedule of Employer Contributions for OPEB 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.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 28, 2023, on our consideration of the Plan'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 Plan'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 Plan's internal control over financial reporting and compliance.

Boise, Idaho

November 28, 2023

Ede Sailly LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Year Ended June 30, 2023

This discussion and analysis of the Missouri State Public Employees Deferred Compensation Plan (the "Plan") financial performance provides an overview of the Plan's financial activities for the year ended June 30, 2023. Please read it in conjunction with the Plan's financial statements, which follow this section.

Financial Highlights

- Fiduciary net position held in trust for benefits at June 30, 2023 was \$2,082,899,057, an increase of \$199,570,025 or 10.60% compared to June 30, 2022, fiduciary net position held in trust for benefits of \$1,883,329,032. These funds are available for distribution to plan participants in accordance with Plan provisions.
- Total additions were a gain of \$328,856,624 for the year ended June 30, 2023, resulting primarily from investment income of \$188,260,797 and employee contributions and rollovers of \$138,939,320. For the year ended June 30, 2022, total additions (losses) were \$(57,269,004), resulting primarily from investment loss of \$(201,516,831) and employee contributions and rollovers of \$142,233,536.
- Total deductions were \$129,286,599 and \$136,676,571 for the years ended June 30, 2023 and 2022, respectively, substantially all of which were due to distributions to participants.
- At June 30, 2023, the number of active and terminated participants (those with a balance in their account) increased to 72,979 compared to 67,742 at June 30, 2022.

Overview of the Financial Statements

The Plan is a deferred compensation plan as authorized by Section 457 of the Internal Revenue Code (IRC), as amended, through which the State of Missouri and its agencies (the State) offer its employees the option to defer income in accordance with IRS and Plan guidelines. Participants may direct their contributions into available investment options offered by the Plan and are 100% vested in their accounts. Benefits are payable to participants, in accordance with Plan provisions, upon termination of employment with the State, retirement, death, or unforeseeable emergency based on the participant's account balance.

The Plan's financial statements are comprised of a *Statement of Fiduciary Net Position*, a *Statement of Changes in Fiduciary Net Position*, and notes to the financial statements.

The Statement of Fiduciary Net Position presents information on the Plan's assets and liabilities with the difference between the two reported as fiduciary net position held in trust for benefits. This statement reflects, at fair value, the participants' balances in their selected investment options, which are available to pay benefits.

The Statement of Changes in Fiduciary Net Position presents information showing how the Plan's fiduciary net position held in trust for benefits changed during the year ended June 30, 2023. This statement reflects contributions made by, and benefits paid to, participants during the period. Investing activities during the period are also presented, which includes interest and dividends added to participant accounts, and the net appreciation or depreciation in fair value of the investments. Other transfers and fees affecting participant accounts are also reported in this statement.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The Plan is considered by the Office of Administration – Division of Accounting to be a blended component unit of the State of Missouri and, therefore, the Plan is included as a pension trust fund in the State of Missouri's Annual Comprehensive Financial Report.

Financial Analysis

Summarized financial information is presented in the following condensed statements as of June 30, 2023 and 2022, and for the years then ended:

Condensed Statements of Fiduciary Net Position as of:

	2023	2022	
Assets:			
Investments	\$ 2,081,834,400	\$ 1,882,417,080	
Cash and cash equivalents	1,491,405	1,270,187	
Receivables	184,878	303,970	
Total assets	2,083,510,683	1,883,991,237	
Deferred Outflows	83,199	59,074	
Liabilities:			
Accounts payable	520,662	628,000	
Deferred Inflows	174,163	93,279	
Fiduciary net position held in trust for benefits	\$ 2,082,899,057	\$ 1,883,329,032	

Condensed Statements of Changes in Fiduciary Net Positions for the Year Ended:

	2023	2022
Additions:		
Employee contributions	\$ 83,632,445	\$ 71,068,327
Rollovers from other qualified plans	55,306,875	71,165,209
Investment income (loss)	188,260,797	(201,516,831)
Revenue sharing	1,656,507	2,014,291
Total additions (losses)	328,856,624	(57,269,004)
Deductions:		
Benefits paid to participants	126,750,407	133,762,952
Life insurance premiums	80,567	99,642
Administrative expenses	2,455,625	2,813,977
Total deductions	129,286,599	136,676,571
Change in fiduciary net position	\$ 199,570,025	\$ (193,945,575)

• Net assets available for plan benefits increased by approximately \$199.570 million during the year ended June 30, 2023, to approximately \$2.08 billion. The increase is primarily due to the positive market conditions during the year.

- Employee contributions were approximately \$83.632 million for the year ended June 30, 2023, and approximately \$71.068 million for the year ended June 30, 2022. That reflects a relative increase of approximately \$12.564 million or 17.68%, which can be explained by the state of Missouri resuming employer matching contributions of up to \$75 per month. This is an incentive for employees to begin or increase their contributions to the Plan. Additionally, the Plan added an auto-enrollment feature in the fiscal year ended June 30, 2013 in which all eligible employees are automatically enrolled in the Plan with a contribution rate of 1.0% unless they opt out. Approximately 2.6% of eligible participants chose to opt out of the Plan in fiscal year 2023 which is an improvement from the fiscal year 2022 opt-out rate of 4.3%.
- Rollovers from other qualified plans were approximately \$55.307 million for the year ended June 30, 2023, compared to \$71.165 million for the year ended June 30, 2022. Participants are allowed to rollover their account balances in other qualified plans into the Plan in accordance with Plan provisions. These amounts will vary each year, depending on the specific participants making this election.
- Investment gains were approximately \$188.261 million for the year ended June 30, 2023, compared to investment losses of approximately \$(201.517) million for the year ended June 30, 2022. The first half of the fiscal year saw investment losses, but the second half produced positive income, ending the year with an increase.
- Distributions to participants totaled approximately \$126.750 million for the year ended June 30, 2023, compared to approximately \$133.763 million for the year ended June 30, 2022. That represents a relative decrease of approximately \$7.013 million or (5.24)%. Distributions will vary year-to-year based on the number of employees leaving the Plan.
- Administrative expenses decreased by \$358,352, which was the result of an adjustment in fiscal year 2022
 for State Retiree Welfare Benefit Trust (SRWBT) Plan OPEB liability allocations that was not affected in
 fiscal year 2023. This decrease was partially offset by increases in recordkeeping expense, plan service
 fees, and personal services and fringe benefits for employees.

A summary of the investment balances at June 30, 2023, and 2022, is as follows:

	2023 Balance (in thousands)		ance	
Stable Value Fund	\$	573,862	\$	570,914
Bond Mutual Funds		6,726		7,000
Large-Cap Equity Funds		294,648		251,335
Mid-Cap Equity Funds		20,775		18,686
Small-Cap Equity Funds		48,257		42,897
International Equity Funds		20,546		18,136
Asset Allocation Funds		18,278		16,826
Self-Managed Accounts		80,377		63,700
Target Date Funds		1,015,284		889,767
Other		3,081		3,156
Total	\$	2,081,834	\$	1,882,417

During the years ended June 30, 2023, and 2022, Plan participants elected to allocate their employee contributions and rollovers as follows:

Allocations of Contributions

	2023	2022
Stable Value Fund	32.0%	12.1%
Bond Funds	0.2%	0.3%
Large-Cap Equity Funds	3.5%	3.7%
Mid-Cap Equity Funds	0.5%	0.5%
Small-Cap Equity Funds	0.7%	1.1%
International Equity Funds	0.5%	0.6%
Asset Allocation Funds	0.7%	0.9%
Self-Managed Accounts	1.1%	1.7%
Target Date Funds	60.7%	78.9%
Life Insurance Contracts	0.1%	0.1%
Other	0.0%	0.1%
	100.0%	100.0%

Other

Other than changes in the fair value of investment assets, as may be impacted by the stock and bond markets, along with changes in interest rates, no other matters are known by management to have a significant impact on the operations or financial position of the Plan.

Requests for Information

This financial report is designed to provide a general overview of the Plan's finances for all those with an interest. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Plan Administrator, c/o MOSERS, P.O. Box 209, Jefferson City, MO 65102-0209.

STATEMENT OF FIDUCIARY NET POSITION June 30, 2023

Assets	
Investments	\$ 2,081,834,400
Cash and cash equivalents	1,491,405
Revenue share receivable	184,878
Total assets	2,083,510,683
Deferred outflows of resources	83,199
Liabilities	
Accounts payable	520,662
Deferred inflows of resources	174 162
Deferred inflows of resources	174,163
Net Position	
Fiduciary net position held in trust for benefits	\$ 2,082,899,057

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

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION For the Year Ended June 30, 2023

Contributions:	
Employees	\$ 83,632,445
Rollovers	55,306,875
Total contributions	 138,939,320
Investment income:	
Net appreciation in the fair value of investments	148,368,455
Interest and dividends	39,892,342
Total investment income	 188,260,797
Revenue sharing	1,656,507
Total additions	328,856,624
DEDUCTIONS	
Benefits paid to participants	126,750,407
Life insurance premiums	80,567
Administrative expenses	2,455,625
Total deductions	 129,286,599
Change in fiduciary net position	 199,570,025
Fiduciary net position held in trust for benefits, beginning of year	1,883,329,032
Fiduciary net position held in trust for benefits, end of year	\$ 2,082,899,057

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

NOTES TO FINANCIAL STATEMENTS

1. DESCRIPTION OF THE PLAN

The following description of the Missouri State Public Employees Deferred Compensation Plan (the "Plan"), which is administered by the Missouri State Employees' Retirement System ("MOSERS"), is provided for general information purposes only. For a more complete description of the Plan provisions, refer to the detailed plan documents or the Revised Statutes of the State of Missouri.

General: The Plan was established by the Missouri State Public Employees' Deferred Compensation Commission (the "Commission") in December 1979, was approved by the Governor of the State of Missouri in February 1980, and enrollment in the Plan began in April 1980. The first employee contributions to the Plan were made in May 1980. The participating employers include the State of Missouri and its agencies and departments including state colleges and universities, state retirement systems, Missouri Consolidated Health Care Plan and any state agency or instrumentality defined as a body corporate and public. There are currently seventeen State of Missouri employers participating in the Plan. The Plan is available to all employees of the participating employers, as well as any elected officials receiving a salary from the State. The Plan is considered a blended component unit of the State of Missouri and is included as a pension trust fund in the State of Missouri's Annual Comprehensive Financial Report.

The supervisory authority for the management and operation of the Plan is the Board of Trustees of MOSERS. MOSERS has hired a record keeper to handle participant services and recordkeeping. MissionSquare Retirement is record keeper for the Plan. State Street Investor Services is the investment custodian for the Plan's investments in mutual funds and Target Date Funds, and Bank of New York Mellon is the investment custodian for the Plan's investments in the Voya Stable Value fund. TD Ameritrade is the custodian for the Plan's self-directed brokerage account.

The Plan is classified as a governmental plan and is not subject to Title 1 of the Employee Retirement Income Security Act of 1974 ("ERISA"). The Plan, accordingly, does not file Form 5500, which was developed by the Internal Revenue Service, Department of Labor, and the Pension Benefit Guaranty Corporation to satisfy the reporting requirements of the IRS and ERISA.

Eligibility and Contributions: Under the Plan provisions, employees of the State of Missouri are eligible to contribute into the Plan through reduction of salary. Effective July 1, 2012, newly eligible employees are automatically enrolled at 1% of gross wages unless they elect not to participate. Participants can elect to enroll in an automatic contribution increase feature. In accordance with Section 457 of the Internal Revenue Code (the "IRC"), the Plan limits the amount of an individual's annual contribution to 100% of his/her annual gross compensation, not to exceed \$22,500 for calendar year 2023. The Plan offers a catch-up program to participants who have attained the age of 50, increasing their maximum contribution to \$30,000. Additionally, the Plan offers a pre-retirement catch-up program to employees within three years prior to the year of their retirement, under which participants may be able to double the normal contribution limit and contribute \$45,000. The employee cannot contribute to the pre-retirement catch-up and the age 50 and over catch-up provision during the same tax year. Amounts contributed by employees are deferred for federal and state income tax purposes until benefits are paid to the employees. Participating employers do not make contributions to the Plan.

The Plan offers a Roth 457 option to participants. Participants can elect to make after-tax contributions to their account and may elect to make both before and after-tax contributions. Those contributions under the Roth 457 option may grow on a permanent tax-free basis.

Participants may make rollover contributions from other qualified plans into the Plan.

Under provisions of the Small Business Job Protection Act of 1996 ("SBJPA"), which became effective for Plan years beginning after December 31, 1996, assets of IRC Section 457 plans must be held in a trust, custodial account or annuity contract for the exclusive benefit of employees and beneficiaries. The Plan met the requirements of the SBJPA at June 30, 2023.

Investment Options: Participants in the Plan may invest in the following options:

- Fixed earnings investments underwritten by Voya Retirement Insurance and Annuity Company ("VRIAC")
- Self-directed brokerage options through TD Ameritrade
- Target date funds
- Mutual funds
- MOSERS Investment Portfolio ("MIP") fund

Mutual fund investment options were closed to new investors after May 1, 2009, but the allocation of future contributions is permitted for investors who designated those allocation instructions prior to May 1, 2009. Effective June 30, 2017, the option to invest in the MIP fund was no longer available to Plan participants. All participants invested in the MIP fund as of that date may continue to defer into it, but no transfers in or new elections are permitted.

Effective January 1, 1989, the option to invest in life insurance contracts underwritten by Security Benefit Life Insurance Corporation ("SBL") was no longer available to Plan participants. Participants making deferrals to SBL life insurance contracts at December 31, 1988 may continue such deferrals but may not increase the amount of such deferrals at any time. As of July 1, 2000, the option to invest in universal life insurance contracts underwritten by Transamerica Life Insurance Company was no longer available to Plan participants. No new policies were being written by Transamerica. However, the policies in existence as of June 30, 2000, continue to be serviced and are not considered material.

Participant Accounts: Each participant's account is credited with the participant's contributions and allocations of Plan earnings with an allocation of Plan expenses. Allocations are based on participant earnings or account balances, as defined. Earnings are credited to individual participant account balances based upon investment performance of the specific options selected by the participant. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting: Participants are at all times 100% vested in their account balances.

Payment of Benefits: Employees participating in the Plan and their beneficiaries may withdraw the fair value or contract value of funds contributed to the Plan upon retirement, death, qualifying hardship or separation of service from the Employer, subject to Internal Revenue Service limitations. Participants may select from various payout options, including lump sum payments, rollover to other qualified plans or individual retirement arrangements, or payments over various periods. Retiring participants have the option to annuitize their account balances as one of the payout options. The plan provides this option through an annuity that can be purchased from insurance companies available through the Plan's record-keeper. Depending upon the option selected, the payments may be actuarially determined.

Plan Membership: As of June 30, 2023, the Plan's membership consisted of the following:

Active participants	40,956
Retired and inactive participants	32,023
Total	72,979

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting: The accompanying financial statements have been prepared on the economic resources measurement focus and the accrual basis of accounting in accordance with U.S. generally accepted accounting principles. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental accounting and reporting principles.

Use of Estimates: The preparation of financial statements in conformity with the U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of net assets held in trust for benefits, liabilities and changes therein. Actual results could differ from those estimates.

Related Plan: The Missouri State Public Employees Deferred Compensation Incentive Plan (the "Incentive Plan") is related to the Plan through common sponsorship and administration. Both are offered by the State of Missouri to the same employees, and the operations and administration are handled together. Certain balances are allocated between the two plans based on either investment balances or number of participants. The Incentive Plan issues separate financial statements.

Contributions and Contributions Receivable: Contributions are recorded when the related deferred compensation payment is withheld from the participating employees' salary. Contributions are credited by the applicable investment custodian upon receipt from the Employer. Contributions receivable represent employee contributions withheld from participants' salaries during the fiscal year not remitted to the investment custodian at fiscal year-end. There were no contributions receivable at June 30, 2023.

Revenue Share and Revenue Share Receivable: The Plan receives shareholder service fees, 12(b)1 fees, and other commissions from individual mutual fund companies. The record keeper receives this income as the intermediary and allocates monthly revenue to the Plan based upon the balances of the assets within the mutual fund. The revenue share income is used to pay a portion of the recordkeeping fees, which reduces the actual fees paid by the participants of the Plan. The revenue for each month is allocated the following month. As of the fiscal year end, the unpaid balances have been accrued as a receivable by the Plan.

Investment Valuation: Investments in mutual funds and self-directed brokerage accounts are presented at their fair value based on published market prices. Investments in the Voya Stable Value Fund are valued at contract value as this is the value realizable by participants. Investments in the Missouri Target Date Funds are valued at fair value based on the fair value of the underlying assets comprising each Missouri Target Date Fund, as provided by the individual fund managers. Investments in the MOSERS Investment Portfolio ("MIP") Fund are valued on a monthly basis based on the fair value of the underlying assets. The underlying assets of MIP mirror the defined benefit portfolio of MOSERS.

Purchases and sales of securities are recorded on a trade date basis. Realized investment gains and losses are determined using the average cost. Dividends are recorded on the declaration date. Interest is recorded when earned.

Investment Contract with Voya Life Insurance and Annuity Company: In 2006, the Plan entered into a benefit-responsive investment contract with ING Life Insurance and Annuity Company, which was subsequently renamed Voya Retirement Insurance and Annuity Company ("VRIAC"). This benefit-responsive investment contract is the Voya Stable Value Fund. VRIAC maintains the contributions in a separate account. The value of the separate account is the fair market value of investments plus cash balances and accruals, less liabilities, in accordance with such methods as described in the contract as VRIAC may adopt from time to time. Income and gains or losses, realized or unrealized, are credited or charged directly to the separate account. The values determined may decrease or increase according to such procedure. The separate account is charged with expenses arising from the operations of the account including taxes, brokerage, commissions, and other costs. The contract value as reported to the Plan by VRIAC is the value represented in the Interest Accumulation

Fund, which is the accounting record maintained under the contract for amounts reflecting the termination value of the predecessor investment vehicle (Nationwide) plus or minus deposits received, withdrawals made, fees charged, interest at the Credited Rate and other adjustments. Participants may direct the withdrawal or transfer of all or a portion of their investment contracts.

The fair value of the investment contract as of June 30, 2023, was \$517,154,367 and the contract value on June 30, 2023, was \$573,862,060. The average yield and crediting interest rates were approximately 2.38% for the year ended June 30, 2023. The crediting interest rate is based on a formula agreed upon with the issuer. The interest rates are reviewed on a quarterly basis for resetting. The crediting interest rate formula is in part based on the fair value of the underlying securities of the investment contract.

Certain events, such as termination of the contract by the Plan or the termination of the Plan, would limit the Plan's ability to transact at the contract value with VRIAC. The plan administrator believes the occurrence of such events that would also limit the Plan's ability to transact at contract value with plan participants is not probable.

Interest Income - Stable Value Fund: Interest income is recorded as earned for the Stable Value Fund. The interest rate for the Stable Value Fund was 2.40% at June 30, 2023. The interest rate ranged from 2.20% to 2.49% for the year ended June 30, 2023. Total interest income recognized was \$13,494,483 during the year ended June 30, 2023, and is included in interest and dividends on the statement of changes in fiduciary net position.

Administrative Expenses: Expenses are recorded when the liability is incurred, regardless of when the payment is made. MissionSquare charges annual recordkeeping and advisory fees totaling \$22 per participant, of which participants pay \$1.00 monthly plus a percent of each investment option expense ratio to cover internal and external plan administration expenses. This annual record keeping fee and internal administration expense covers services for both this Plan and the Incentive Plan and is allocated between the two plans.

The Plan incurred \$1,453,147 for recordkeeping fees and \$1,002,478 for MOSERS administration, for a total of \$2,455,625 administrative expenses.

Benefits Paid: Benefits are recorded at the time withdrawals are made from the Plan participant accounts, which generally coincides with the trade date.

Rollovers: Rollovers represent contributions transferred from other qualified plans and are recorded when received.

3. TAX STATUS

The Plan is reviewed by legal counsel to ensure conformity with Section 457 of the IRC. Accordingly, any amount of compensation deferred under the Plan and any income attributable to the amounts so deferred are included in the gross income of the participant only for the taxable year in which such benefit is paid or otherwise made available to the participant or beneficiary. The Trust established under the Plan is treated as exempt from federal income taxation.

4. CASH AND CASH EQUIVALENTS

Cash and cash equivalents represent the Plan's portion of the Administrative Allowance account that is maintained by MissionSquare Retirement. Revenue share amounts are deposited into the account and used to pay Plan expenses such as record keeping fees, plan audits and financial statement preparation. The balance is allocated between the related plans based upon their respective investment balances. At June 30, 2023, the Administrative Allowance Account had a total balance of \$1,771,434 and is invested in the Fidelity Money Market Government Portfolio. Of that amount, \$723,020 is allocated to the Missouri State Employees Deferred Compensation Incentive Plan and \$1,048,414 is allocated to the Missouri State Employees Deferred Compensation Plan. An additional checking account is maintained with a balance of \$595,497 which is allocated \$152,506 to the Missouri State Employees Deferred Compensation Incentive Plan and \$442,991 is allocated to the Missouri State Employees Deferred Compensation Plan.

5. INVESTMENTS

The Plan's investment policy is to provide a user friendly mechanism for participants to accumulate and preserve assets for retirement during years of employment and beyond. Missouri Target Date Funds were added to the investment options in April 2009 to simplify retirement investing for Plan participants. New participants into the Plan after April 2009 have the choice between thirteen target date funds, a stable value fund, or a self-directed brokerage option. Effective July 1, 2012, new participants could invest in the MIP fund; however, effective June 30, 2017, the policy changed to no longer allow any new entrants into the MIP option. The self-directed brokerage option was retained for participants who prefer "hands-on" approach to retirement investing. Participants who were already contributing to one or more of the 31 mutual funds before April 2009 can continue to the same mutual fund or funds and have the choice of the investments available to new participants.

Missouri Target Date Funds: These funds were created exclusively for participants of the Plan and the Incentive Plan. Each new participant who does not make an investment selection is, by default, invested in the target date fund closest to when he or she is first eligible to retire, assumed to be age 65. Participants may choose any target date fund as their investment in the Plan. The target date funds with dates farthest in the future have the most aggressive investment approach and are more heavily invested in stocks. These funds automatically adjust from a long-term growth focus to a more conservative investment mix as the participants move closer to retirement, investing more in bonds and less in stock.

Stable Value Fund: Voya Investment Management Co., LLC is the manager of the Voya Stable Value Fund's assets. The Stable Value Fund provides a stable rate of return by investing in various types of bonds including treasuries, agencies, corporate and mortgage-backed securities. The fund is wrapped by an insurance contract, issued by VRIAC, which stabilizes the interest rate paid as well as ensuring that participants get their principal plus interest when they decide to withdraw from the fund. However, the insurance wrapper guarantee of participants' return of principal does not extend to certain employer-initiated events, such as employer decision to terminate the contract or withdrawals that might arise from mass layoffs or similar events.

In advance of each quarter, the Voya Stable Value Fund establishes a rate of return for that quarter, as described previously. Stable Value Fund investment income included in the accompanying financial statements is net of annual fees which are deducted from earning prior to posting to the participant accounts.

Mutual Funds: The Plan offers various mutual funds, along with a self-directed brokerage option through an independent broker, which allows investments not offered by the Plan. Shares of mutual funds are not insured, although some securities in which the funds invest may be insured or backed by the U.S. government or its agencies. Investment income in the accompanying financial statements is net of management and other expenses charged by the fund managers which are deducted from earnings prior to posting to the participant accounts.

Investments as of June 30, 2023, by investment type, are as follows:

Investments at fair value:	
Target Date Funds	\$ 1,015,284,280
Large-Cap Equity Funds	294,648,443
Self-Managed Accounts	80,376,839
Small-Cap Equity Funds	48,256,904
International Equity Funds	20,545,813
Mid-Cap Equity Funds	20,774,779
Asset Allocation Funds	18,278,430
Bond Mutual Funds	6,726,167
MOSERS Investment Portfolio Fund	3,080,685
Investments at fair value	1,507,972,340
Investments at contract value:	
Stable Value Fund	573,862,060
Total investments	\$ 2,081,834,400

Custodial credit risk for investments, and cash and cash equivalents, is the risk that the Plan would not be able to recover the value of investments in the event of a failure by the counterparty to a transaction. The Plan does not have any investments that are not registered in the name of the Plan and are either held by the counterparty, or the counterparty's trust department or agent, but not in the Plan's name, except for one of the underlying investments in the Target Date Funds (Vanguard High Yield Fund) which is registered in the name of the manager for benefit of the Plan.

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of the Plan's investment in a single issuer. The Plan has no formal policy because participants elect where to invest contributions. However, the investment in the Stable Value Fund represents approximately 28% of investments.

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation to the Plan. The Plan does not have a formal policy for credit risk. At June 30, 2023, the average credit ratings for the fixed income securities included in the bond mutual funds were as follows:

Bond Mutual Funds	Fair Value	Credit Rating
American Funds Bond Fund of America	\$ 2,632,118	AA
Vanguard Inflation Protected Securities Fund	2,005,033	AAA
Federated Hermes Short-Intermediate Government Fund	1,652,169	AAA
Prudential Total Return Bond Fund	436,847	A+
Total	\$ 6,726,167	

At June 30, 2023, the average credit rating as provided by Voya for the securities in the Stable Value Fund was AA+.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Other than the Voya Stable Value fund, whose rate is adjusted quarterly, the Plan investment guidelines include no formal policy on interest rate risk. Duration is a measure of a debt instrument's exposure to fair value charges arising from changing interest rates based upon the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price.

The average effective duration in years as of June 30, 2023, for the bond mutual funds is as follows:

		Weighted Average
Bond Mutual Funds	Fair Value	Effective Duration
American Funds Bond Fund of America	\$ 2,632,118	6.3
Vanguard Inflation Protected Securities Fund	2,005,033	6.9
Federated Hermes Short-Intermediate Government Fund	1,652,169	4.0
Prudential Total Return Bond Fund	436,847	6.1
Total	\$ 6,726,167	

At June 30, 2023, the weighted average effective duration as provided by Voya for the Stable Value Fund was 4.7 years.

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

The three levels of the fair value hierarchy are described as follows:

- Level 1 Valuation is based upon unadjusted quoted prices in active markets for identical assets or liabilities that the Plan has the ability to access.
- Level 2 Valuation is based upon quoted prices for similar assets or liabilities in active markets, quoted market prices for identical or similar assets or liabilities in inactive markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or corroborated by observable market data by correlation or other means. Observable inputs may include interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals.
- Level 3 Valuation is based on methodologies that are unobservable and significant to the fair value measure. These may be generated from model-based techniques that use at least one significant assumption based on unobservable inputs for the asset or liability, which are typically based on an entity's own assumptions, as there is little, if any, related market activity.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The Plan's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and considers factors specific to the asset or liability. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The following is a description of valuation methodologies used for assets recorded at fair value.

Mutual funds: Valued at the daily closing price as reported by the fund on an active market, which is based on the underlying net asset value ("NAV") of the shares held by the Plan at year-end. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Cash and cash equivalents: Valued at cost, which approximates fair value.

U.S. government securities: Valued at the closing price reported in the market in which the individual security is traded.

Corporate debt securities: Certain corporate bonds are valued at the closing price reported in the inactive market in which the bond is traded. Other corporate bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flows approach that maximizes observable inputs such as current yields of similar instruments.

Corporate stock: Securities that are valued at closing price reported in the active market in which the individual securities are traded are considered Level 1. Securities that were not actively traded as of the financial reporting date are considered Level 2.

MOSERS Investment Portfolio ("MIP") Fund: Valued at the NAV of the units of underlying investments held by the Plan at year-end. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. The NAV is based on the fair value of its underlying investments held by the fund less its liabilities. Participant transactions (purchases and sales) may occur monthly. The significant investment strategies are designed to achieve long-term total returns, comprised of capital appreciation and income. There are no unfunded commitments. There are generally no restrictions as to the redemption of these investments.

Missouri Target Date Funds: Valued at the NAV of the units of underlying investments held by the Plan at year-end. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. The NAV is based on the fair value of its underlying investments held by the funds less its liabilities. Participant transactions (purchases and sales) may occur daily. The significant investment strategies of the funds are to seek the highest total return over time, consistent with the fund's asset mix. The asset allocations within these target date funds adjust automatically over time. Each fund invests more aggressively in its early years and becomes more conservative as it reaches its time horizon. There are no unfunded commitments. There are generally no restrictions as to the redemption of these investments.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The tables below present the Plan's assets measured at fair value on a recurring basis as of June 30, 2023, aggregated by the level in the fair value hierarchy within which those measurements fall:

	Level 1	Level 2	Level 3	Total
Mutual funds				
Large-Cap Equity Funds	\$ 294,648,443	\$ 0	\$ 0	\$ 294,648,443
Small-Cap Equity Funds	48,256,904	0	0	48,256,904
International Equity Funds	20,545,813	0	0	20,545,813
Mid-Cap Equity Funds	20,774,779	0	0	20,774,779
Asset Allocation Funds	18,278,430	0	0	18,278,430
Bond Funds	6,726,167	0	0	6,726,167
Total mutual funds	409,230,536	0	0	409,230,536
Self-directed brokerage account				
U.S. Government securities	0	2,011,221	0	2,011,221
Mutual funds	19,803,903	0	0	19,803,903
Corporate stock	44,669,087	1,517,883	0	46,186,970
Corporate debt securities	0	636,726	0	636,726
Total self-directed	64,472,990	4,165,830	0	68,638,820
Total assets in fair value hierarchy	\$ 473,703,526	\$4,165,830	\$ 0	\$ 477,869,356
Investments measured at net asset value (NAV):				
MOSERS Investment Portfolio Fund				3,080,685
Missouri Target Date Funds				1,015,284,280
Total investments measured at NAV				1,018,364,965
Investments measured at cost:				
Self-directed cash and cash equivalents				11,738,019
Total investments at fair value				\$1,507,972,340

The following table summarizes investments for which fair value is measured using the net asset value per share practical expedient as of June 30, 2023:

			Redemption			
			Frequency (if Redempt			
		Unfunded	Currently	Notice		
	Fair Value	Commitments	Eligible)	Required		
MOSERS Investment Portfolio Fund	\$ 3,080,685	n/a	Monthly	None		
Missouri Target Date Funds	1,015,284,280	n/a	Daily	None		
Total	\$ 1,018,364,965					

6. MCHCP POST-EMPLOYMENT RETIREE HEALTH CARE OPEB PROGRAM

MOSERS staff who facilitate administration of the Plan participate in a cost-sharing, multiple-employer, defined benefit, other post-employment benefits plan, the State Retiree Welfare Benefit Trust (SRWBT), operated by Missouri Consolidated Health Care Plan (MCHCP). MOSERS employees may participate at retirement if eligible to receive a monthly retirement benefit from MCHCP. The terms and conditions governing post-employment benefits are vested with the MCHCP Board of Trustees within the authority granted under Chapter 103, Sections 103.003 through 103.178, RSMo. The SRWBT does not issue a separate stand-alone financial report. Financial activity of the SRWBT is included in the *MCHCP Annual Comprehensive Financial Report* as a fiduciary fund and is intended to present only the financial position of the activities attributable to the SRWBT. Additionally, MCHCP is considered a component unit of the state of Missouri reporting entity and is included in the state's financial report.

The Plan's financial statements are available on MCHCP's website at www.mchcp.org.

Benefits

The SRWBT was established and organized on June 27, 2008, pursuant to Sections 103.003 through 103.178, RSMo, to provide health and welfare benefits for the exclusive benefit of current and future retired employees of the state and their dependents who meet eligibility requirements, except for those retired members covered by other OPEB plans of the state. MCHCP's three medical plans offer the same basic coverage such as preventative care, freedom to choose care from a nationwide network of primary care providers, specialists, pharmacies, and hospitals, usually at a lower negotiated group discount and the same covered benefits for both medical and pharmacy. Benefits are the same in all three plans; other aspects differ such as premium, deductible and out-of-pocket costs. Retiree benefits are the same as for active employees, until they are Medicare eligible.

Contributions

Contributions are established, and may be amended by the MCHCP Board of Trustees, with the authority granted under Chapter 103, Sections 103.003 through 103.178, RSMo. For the fiscal year ended June 30, 2022, employers were required to contribute 4.34% of gross active employee payroll for the period July 1, 2021, through December 31, 2021, and 4.29% for the period January 1, 2022, through June 30, 2022. Employees do not contribute to this plan.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources

At June 30, 2023, a liability of \$434,853 was allocated to the Plan for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of June 30, 2022, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of July 1, 2021. Each employer's proportionate share allocation is determined by dividing each employer's required contributions to the SRWBT during the measurement period by the percent of contributions required from all applicable employers during the measurement period. At June 30, 2022, the Plan's proportionate share was 0.03087% of the total net OPEB liability of the State Retiree Welfare Benefit Trust. For the year ended June 30, 2023, the Plan recognized OPEB expense of \$20,753. As of June 30, 2023, deferred outflows of resources and deferred inflows of resources were allocated to the Plan as shown in the table on the following page.

Deferred Outflows/Inflows of Resources Related to Post-Employment Retiree Health Care

	Γ	Deferred Outflows of Resources	Ι	Deferred Inflows of Resources
Difference between expected and actual experience	\$	18,185	\$	4,294
Changes of assumptions Net difference between projected and actual earnings on plan	\$	0	\$	153,156
investments Changes in proportion and differences between contributions	\$	3,959	\$	0
and proportionate share of contributions	\$	38,955	\$	16,713
Contributions subsequent to the measurement date	\$	22,100	\$	0
	\$	83,199	\$	174,163

The \$22,100 currently reported as deferred outflows of resources related to OPEB resulting from MOSERS' contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2024. Other amounts reported as deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Deferred Outflows/Inflows of Resources Related to Post-Employment Retiree Health Care to be Recognized in Future Years

Year	En	ding	Ju	ne	30

1 cm 2 mang cane co	
2024	\$ 17,226
2025	17,293
2026	17,544
2027	16,403
2028	17,997
Thereafter	 26,601
Total	\$ 113,064

Actuarial Assumptions

The collective total OPEB liability for the June 30, 2022, measurement date was determined by an actuarial valuation as of July 1, 2021. This actuarial valuation used the following actuarial assumptions:

Summary of MCHCP's Actuarial Assumptions for Post-Employment Retiree Health Care

	1 0
Valuation year	July 1, 2021 - June 30, 2022
Actuarial cost method	Entry age normal, level percentage of payroll
Asset valuation method	Fair value
Discount rate	5.50%
Projected payroll growth rate	4.0%
Inflation rate	3.0%
Health care cost trend rate (medical & pres	cription drugs combined)
Non-Medicare	6.5% *

* (6.50% in fiscal 2023 through 2025, then decreases by 0.25% per year until an ultimate rate of 5.0% in fiscal year 2031 and later)

Medicare 14.50% **

** (rate changes to 15.0% in fiscal year 2024, 11.5% in fiscal 2025, 10.5% in fiscal 2026, then decreases by 0.75% per year to a rate of 5.25% in fiscal 2033, then 5.0% in fiscal 2034 and after.)

Mortality: Pre-Retirement: Pri-2012 Employee Amount-weighted Mortality Table projected generationally using MP-2021.

Annuitant: Pri-2012 Retiree Amount-weighted Mortality Table projected generationally using MP-2021.

The last experience study was conducted in 2020. Termination rates and retirement rates are updated based on an experience study conducted in 2020. Participation and dependent coverage assumptions were updated based upon an experience study conducted in July 2020. Per capita claims costs, administrative expenses, and retiree contributions were updated based on analysis of 2023 rates.

Change in Assumptions and Methods Since Prior Valuation

The discount rate was changed to 5.50% from 4.50%. Per capita health costs, administrative expenses, and retiree contributions were updated based on an analysis of 2023 rates. Trend rates were updated based on anticipated future experience.

Sensitivity to Changes in the Health Care Cost Trend Rates

The following table presents MOSERS' net OPEB liability, calculated using the current trend rate, as well as what the net OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

Sensitivity of the Net MCHCP OPEB Liability to Changes in Health Care Cost Trend Rates

	1% Decrease	Current	1% Increase
	in Trend Rates	Trend Rates	in Trend Rates
Net OPEB liability	\$371,575	\$434,853	\$513,566

Discount Rate

A discount rate of 5.5% was used to measure the total OPEB liabilities. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rates and the contributions from employers will be made at statutorily required rates, actuarially determined. This discount rate was determined as the best estimate of the expected return on plan assets as of the measurement date.

Sensitivity to Changes in the MCHCP Discount Rate

The following table presents MOSERS' net OPEB liability, calculated using a discount rate of 5.5%, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percent lower or one percent higher:

Sensitivity of the Net MCHCP OPEB Liability to Changes in Discount Rate

	1% Decrease in	Current	1% Increase in
	Discount Rate (4.5%)	Discount Rate (5.5%)	Discount Rate (6.5%)
Net OPEB liability	\$512,598	\$434,853	\$372,421

Long-Term Expected Rate of Return

The target allocation and expected real rate of return for each major asset class are listed below:

MCHCP's Long-Term Expected Rate of Return

Asset Class	Target Allocation	Expected Real Rate of Return
Large cap stocks	19.0%	8.5%
Mid cap stocks	6.0	8.8
Small cap stocks	9.0	8.8
International stocks	5.0	9.0
BarCap aggregate bonds	59.0	3.9
Cash equivalents	2.0	2.8

7. RISKS AND UNCERTAINTIES

The Plan provides for various investment options in any combination of mutual funds, insurance contracts, and other investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the risks associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities may occur in the near term and that such changes could materially affect participant account balances and the amounts reported in the accompanying statement of fiduciary net position.

8. ALLOCATED LIFE INSURANCE CONTRACTS

Generally accepted accounting principles require that contracts in a participant's name be excluded from the face of the financial statements. The values of insurance contracts change daily due to premiums paid, investment return and settlements of cash surrender value. Due to the actual cash surrender value being significantly less than the policyholder account value in the early years of universal life insurance contracts, a participant may receive substantially less than the value of their account upon the withdrawal of funds from their universal life insurance contract.

Transamerica had 738 universal life insurance policies in force at June 30, 2023. The face amount of these policies was \$24,373,982 at June 30, 2023. The cash surrender value of the universal life insurance policies in force with Transamerica was \$2,781,975 at June 30, 2023.

SBL had 50 life insurance policies in force at June 30, 2023. The face amount of these policies was \$167,781 at June 30, 2023. The cash surrender value of the life insurance policies in force with SBL was \$115,904 at June 30, 2023.

At the time of retirement or termination of employment with the State of Missouri, employees have the option of transferring ownership of the policy and continuing to make the life insurance premium payments directly to SBL or Transamerica, or receiving the cash surrender value of the policy.

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Proportionate Share of the Net OPEB Liability

For Years Ended June 30, 2021 - 2023*

State Retiree Welfare Benefit Trust

	2023	2022	2021
Plan's proportion of the net OPEB liability	0.0309%	0.0290%	0.0001%
Plan's proportionate share of the net OPEB liability	\$ 434,853	\$ 491,873 \$	1,066
Plan's covered payroll	\$ 524,719	\$ 446,760 \$	473,600
Plan's proportionate share of the net OPEB liability as a percentage of its covered payroll	82.87%	110.10%	0.23%
Plan fiduciary net position as a percentage of the total OPEB liability	12.12%	10.14%	8.24%

^{*} The amounts presented in this schedule were determined as of the previous fiscal year end. Intended to show information for 10 years, data for additional years will be displayed as it becomes available.

OPEB liability was not allocated to the Plan until June 30, 2021.

Schedule of Employer Contributions for OPEB

For Years Ended June 30, 2021 - 2023*

	2023		2022		2021
Contractually required contribution	\$ 22,541	\$	22,534	\$	17,959
Contributions in relation to the contractually required contribution	\$ 22,541	\$	22,534	\$	17,959
Contribution deficiency (excess)	\$ 0	\$	0	\$	0
Covered payroll	\$ 570,557	\$	524,719	\$	446,760
Contributions as a percentage of covered payroll	3.95%	,	4.29%	,	4.02%

^{*} The amounts presented in this schedule were determined as of the previous fiscal year end. Intended to show information for 10 years, data for additional years will be displayed as it becomes available.

OPEB liability was not allocated to the Plan until June 30, 2021.

Notes to the Schedules of Required Supplementary Information

Changes of Assumptions: The discount rate changed from 4.50% to 5.50% in the July 1, 2022, valuation, and from 4.38% to 4.50% in the July 1, 2021, valuation.