

**REPORT OF**  
**MISSOURI STATE PUBLIC EMPLOYEES**  
**DEFERRED COMPENSATION PLAN**  
**JUNE 30, 2018**

## INDEPENDENT AUDITORS' REPORT

To the Trustees of the  
Missouri State Public Employees Deferred Compensation Plan

### Report on the Financial Statements

We have audited the accompanying financial statements of the Missouri State Employees Deferred Compensation Plan (the "Plan"), a component unit of the State of Missouri, which comprise the statement of fiduciary net position as of June 30, 2018, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

### *Management's Responsibility for the Financial Statements*

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

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with U.S. generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan as of June 30, 2018, and the changes in fiduciary net position for the year then ended, in conformity with U.S. generally accepted accounting principles.

### **Other Matters**

U.S. generally accepted accounting principles requires that the management's discussion and analysis be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with U.S. generally accepted auditing standards, 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 the 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.

*Williams Keepers LLC*

November 26, 2018

**MISSOURI STATE PUBLIC EMPLOYEES  
DEFERRED COMPENSATION PLAN**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

For Year Ended June 30, 2018

This discussion and analysis of the Missouri State Public Employees Deferred Compensation Plan financial performance provides an overview of the Plan's financial activities for year ended June 30, 2018. Please read it in conjunction with the Plan's financial statements, which follow this section.

**Financial Highlights**

- Assets available for plan benefits at June 30, 2018 were \$1,546,968,571, an increase of \$88,982,107 or 6.10% compared to June 30, 2017 assets available for plan benefits of \$1,457,986,464. These funds are available for distribution to plan participants in accordance with Plan provisions.
- Total additions were \$172,406,009 for the year ended June 30, 2018, resulting from positive investment income of \$111,982,094 and employee contributions of \$57,667,609. For the year ended June 30, 2017, total additions were \$187,045,358, resulting from positive investment income of \$129,982,830 and employee contributions of \$55,042,228.
- Total deductions were \$83,423,902 and \$77,644,659 for the years ended June 30, 2018 and 2017, respectively, substantially all of which were due to distributions to participants.
- At June 30, 2018, the number of active and terminated participants (those with a balance in their account) slightly increased to 61,968 compared to 61,181 at June 30, 2017. This is primarily due to the automatic enrollment feature added to the Plan effective July 1, 2012.

**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 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, 2018. This statement reflects contributions made by and benefits paid to participants during the period. Investing activities during the period are also presented which include 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 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 component unit of the State of Missouri and, therefore, the Plan is included as a pension trust fund in the State of Missouri’s Comprehensive Annual Financial Report.

### Financial Analysis

Summarized financial information is presented in the following condensed statements as of and for the years ended June 30, 2018 and 2017:

Condensed Statements of Fiduciary Net Position as of		
	June 30, 2018	June 30, 2017
Assets:		
Investments	\$ 1,541,768,738	\$ 1,452,977,649
Cash and cash equivalents	443,680	80,430
Receivables	455,014	630,782
Policyholder account and cash surrender values	4,339,419	4,370,285
Total assets	<u>1,547,006,851</u>	<u>1,458,059,146</u>
Liabilities:		
Accounts payable	<u>38,280</u>	<u>72,682</u>
Fiduciary net position held in trust for benefits	<u>\$ 1,546,968,571</u>	<u>\$ 1,457,986,464</u>

Condensed Statements of Changes in Fiduciary Net Position for the Year Ended		
	June 30, 2018	June 30, 2017
Additions:		
Employee contributions	\$ 57,667,609	\$ 55,042,228
Rollovers from other qualified plans	1,462,995	1,588,383
Investment income	111,982,094	129,982,830
Revenue sharing	1,324,177	1,259,591
Change in value of life insurance contracts	<u>(30,866)</u>	<u>(827,674)</u>
Total additions	<u>172,406,009</u>	<u>187,045,358</u>
Deductions:		
Benefits paid to participants	81,181,548	75,330,747
Life insurance premiums	176,773	206,436
Administrative expenses	<u>2,065,581</u>	<u>2,107,476</u>
Total deductions	<u>83,423,902</u>	<u>77,644,659</u>
Change in fiduciary net position	<u>\$ 88,982,107</u>	<u>\$ 109,400,699</u>

- Net assets available for plan benefits increased by approximately \$88.982 million during the year ended June 30, 2018, to approximately \$1.547 billion. Most of the increase is reflected in the investment balances offset by a decrease in policyholder account and cash surrender values. Participation in those policies has been frozen, and it is anticipated they will continue to decrease each year.

- Employee contributions were approximately \$57.668 million for the year ended June 30, 2018, and approximately \$55.042 million for the year ended June 30, 2017. That reflects a relative increase of approximately \$2.626 million or 4.77%. The State of Missouri and substantially all employers participating in the related Incentive Plan stopped making contributions on behalf of employees participating in the Plan, which had a negative impact on employee contributions into the Plan. However, the Plan added an auto-enrollment feature in the year ended June 30, 2013. All eligible employees are automatically enrolled in the Plan with a contribution rate of 1.5% unless they opt out. Approximately 9.1% of eligible participants chose to opt out of the Plan.
- Rollovers from other qualified plans were approximately \$1.463 million for the year ended June 30, 2018, compared to \$1.588 million for the year ended June 30, 2017. 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 income was approximately \$111.982 million for the year ended June 30, 2018, compared to investment income of approximately \$129.983 million for the year ended June 30, 2017. Positive market conditions were experienced again during 2018; however, the market was not as strong as 2017, thus leading to a slight decrease in investment income. Investment income includes appreciation in fair value of investments of approximately \$74.835 million from the prior year.
- The change in value of universal life insurance contracts was a decrease of approximately \$31,000 for the year ended June 30, 2018, compared to a decrease of approximately \$828,000 for the year ended June 30, 2017. The decrease is due to participants leaving the Plan. No new life insurance contract enrollments are allowed.
- Distributions to participants totaled approximately \$81.182 million for the year ended June 30, 2018, compared to approximately \$75.331 million for the year ended June 30, 2017. That reflects a relative increase of approximately \$5.851 million or 7.77%. Distributions will vary year-to-year based on the number of employees leaving the Plan.
- Administrative fees were approximately \$2.066 million and \$2.107 million for of the years ended June 30, 2018 and 2017, respectively, with no significant changes.

A summary of the investment balances at June 30, 2018 and 2017 is as follows:

	<u>2018</u> Balance (in 000's)	<u>2017</u> Balance (in 000's)
<b>Stable Value Fund</b>		
Voya (ING) Stable Value Fund	\$ 469,954	\$ 480,230
<b>Bond Funds</b>		
American Funds Bond Fund of America	3,007	3,244
Vanguard Inflation Protected Securities Fund	2,271	2,407
Federated U.S. Government Securities Fund - 2-5 Years	1,917	2,276
Prudential Total Return Bond Fund	492	558
	<u>7,687</u>	<u>8,485</u>
		<i>continued</i>

<i>continued</i>	2018	2017
	Balance (in 000's)	Balance (in 000's)
<b>Large - Cap Equity Funds</b>		
Fidelity Contrafund	89,930	76,527
American Century Ultra Fund	35,707	30,823
SEI Index S&P 500 E	22,430	20,589
American Century Equity Income Fund	16,605	16,681
Fidelity Equity Income Fund	16,571	16,258
American Century Growth Fund	12,759	11,284
Vanguard Total Stock Admiral Class	11,925	11,179
Nationwide Institutional Service	7,365	6,924
Putnam Multi Cap Growth A	6,692	-
Putnam Investors A	-	6,019
	<u>219,984</u>	<u>196,284</u>
<b>Mid - Cap Equity Funds</b>		
Goldman Sachs Mid Cap Value I	9,252	9,100
Invesco Mid Cap Growth Fund	7,831	7,013
	<u>17,083</u>	<u>16,113</u>
<b>Small - Cap Equity Funds</b>		
Neuberger & Berman Genesis Fund	27,793	25,380
Janus Small Cap Value Fund	6,319	6,103
Dreyfus Small Cap Stock Index Fund	4,272	3,633
Brown Capital Small Company Institutional	3,747	2,923
	<u>42,131</u>	<u>38,039</u>
<b>International Equity Funds</b>		
T. Rowe Price International Stock Fund	8,308	7,997
Templeton Developing Markets A	5,629	5,513
Janus Global Research	5,527	5,052
	<u>19,464</u>	<u>18,562</u>
<b>Asset Allocation Investments</b>		
Vanguard Life Strategy Growth Fund	8,291	7,686
Vanguard Life Strategy Moderate Growth Fund	5,075	4,970
Vanguard Life Strategy Conservative Growth	1,183	1,202
Vanguard Life Strategy Income Fund	1,037	1,179
	<u>15,586</u>	<u>15,037</u>

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<i>continued</i>	2018	2017
	Balance (in 000's)	Balance (in 000's)
<b>Self-Managed Accounts</b>	<u>45,760</u>	<u>39,980</u>
<b>Target Date Funds</b>		
MO 2025 Fund	138,044	125,944
MO 2020 Fund	115,269	110,734
MO 2030 Fund	118,445	104,181
MO 2035 Fund	89,558	78,358
MO 2015 Fund	67,273	68,611
MO 2040 Fund	59,273	50,855
MO 2010 Fund	26,625	28,264
MO 2045 Fund	32,081	25,299
MO 2050 Fund	19,005	14,762
MO 2005 Fund	9,915	10,424
MO 2055 Fund	12,764	9,753
Missouri Retirement Allocation	6,855	6,395
MO 2060 Fund	5,519	2,765
	<u>700,626</u>	<u>636,345</u>
<b>Other</b>		
MOSERS Investment Portfolio	3,494	3,903
	<u>3,494</u>	<u>3,903</u>
<b>Total</b>	<u>\$ 1,541,769</u>	<u>\$ 1,452,978</u>

During the year ended June 30, 2018 and 2017, Plan participants elected to allocate their contributions as follows:

	Allocation of Contributions	
	2018	2017
Stable Value Fund	18.6%	21.5%
Bond Funds	0.5%	0.6%
Large-Cap Equity Funds	5.1%	5.8%
Mid-Cap Equity Funds	0.7%	0.7%
Small-Cap Equity Funds	1.5%	1.5%
International Equity Funds	0.9%	1.0%
Asset Allocation Investments	1.0%	1.2%
Target Date Funds	70.1%	65.9%
Self-Managed Accounts	1.1%	1.1%
Life Insurance Contracts	0.3%	0.4%
Other	0.2%	0.3%
	<u>100.0%</u>	<u>100.0%</u>



**Other**

Other than changes in the fair value of Plan 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.

**MISSOURI STATE PUBLIC EMPLOYEES  
DEFERRED COMPENSATION PLAN**

**STATEMENT OF FIDUCIARY NET POSITION**

**June 30, 2018**

**ASSETS**

Investments, at fair value:	\$ 1,071,814,792
Investments, at contract value:	
Guaranteed investment contract	<u>469,953,946</u>
Total investments	1,541,768,738
Cash and cash equivalents	443,680
Due from MOSERS	253,270
Revenue share receivable	201,744
Cash surrender value of life insurance contracts	145,665
Account value of universal life insurance contracts	<u>4,193,754</u>
Total assets	<u><u>1,547,006,851</u></u>

**LIABILITIES**

Accounts payable	<u>38,280</u>
Total liabilities	<u>38,280</u>
Fiduciary net position held in trust for benefits	<u><u>\$ 1,546,968,571</u></u>

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

**MISSOURI STATE PUBLIC EMPLOYEES  
DEFERRED COMPENSATION PLAN**

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
For the Year Ended June 30, 2018**

ADDITIONS

Contributions:

Employees	\$ 57,667,609
Rollovers	1,462,995

Total contributions	59,130,604
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Investment income:

Net appreciation in fair value of investments	74,834,880
Interest and dividends	37,147,214

Total investment income	111,982,094
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Revenue sharing	1,324,177
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Decrease in value of universal life insurance contracts	(30,866)
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Total additions	172,406,009
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DEDUCTIONS

Benefits paid to participants	81,181,548
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Life insurance premiums	176,773
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Administrative expenses	2,065,581
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Total deductions	83,423,902
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Change in fiduciary net position	88,982,107
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Fiduciary net position held in trust for benefits, beginning of year	1,457,986,464
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Fiduciary net position held in trust for benefits, end of year	\$ 1,546,968,571
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The notes to financial statements are an integral part of these statements.

# MISSOURI STATE PUBLIC EMPLOYEES DEFERRED COMPENSATION PLAN

## 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 State of Missouri statutes.

*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 politic. There are currently nineteen 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 component unit of the State of Missouri and is included as a pension trust fund in the State of Missouri’s Comprehensive Annual Financial Report.

The supervisory authority for the management and operation of the Plan is held by the Board of Trustees of MOSERS. MOSERS has hired a recordkeeper to handle participant services and recordkeeping and an investment custodian to hold the Plan’s investments. ICMA-RC is recordkeeper for the Plan. State Street Investor Services is the investment custodian for the Plan’s investments in mutual funds, Target Date Funds, and 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 I 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 \$18,500 and 18,000 for calendar years 2018 and 2017, respectively. The Plan offers a catch-up program to participants who have attained the age of 50, increasing their maximum contribution to \$24,500 and \$24,000 for calendar years 2018 and 2017, respectively. 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 \$37,000 and 36,000 to the Plan for calendar years 2018 and 2017, respectively. 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 to the Plan from other qualified Plans.

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. At June 30, 2018, the Plan met the requirements of the SBJPA.

*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 rollovers 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 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 Monumental Life Insurance Company (“Monumental”) was no longer available to Plan participants. No new policies were being written by Monumental. However, the policies in existence as of June 30, 2000, continue to be serviced.

*Participant Accounts:* Each participant’s account is credited with the participants’ contributions and allocations of Plan earnings and charged 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 balance.

*Payment of Benefits:* Employees participating in the Plan or their beneficiaries may withdraw the fair 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. Employees 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 their 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, 2018, the Plan's membership consisted of the following:

Active participants	35,218
Retired and inactive participants	<u>26,750</u>
	<u><u>61,968</u></u>

## 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 U.S. generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of net assets available for benefits, liabilities and changes therein. Actual results could differ from those estimates.

*Related Plan:* The Missouri State 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. Contributions receivable at June 30, 2018 were \$0.

*Revenue Share Revenue and 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.

*Due from MOSERS:* The due from MOSERS represents a cash balance held by MOSERS to pay for administrative expenses of the Plan as they arise. During the year ended June 30, 2018, a total of \$800,000 was transferred into the Due from MOSERS account to cover administrative expenses. The Plan was allocated approximately \$572,000 of that transfer amount and \$253,270 of the June 30, 2018, balance.

*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 universal life insurance contracts are reported at fair value, less any surrender charges, as reported by the life insurance company. Investments in whole life insurance contracts are valued at cash surrender value as reported by the insurance company. Investments in the MOSERS Investment Portfolio ("MIP") Fund are valued on a monthly basis based on the fair value of the underlying assets.

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 or 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, 2018 was \$460,656,683 and the contract value on June 30, 2018 was \$469,933,105. The average yield and crediting interest rates were approximately 2.29% for the year ended June 30, 2018. 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 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:* Interest income is recorded as earned for the Stable Value Fund. The interest rate for the Stable Value Fund was 2.10% at June 30, 2018. The interest rate ranged from 2.10% to 2.46% for the year ended June 30, 2018. Total interest income recognized was \$10,682,208 during the year ended June 30, 2018, 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. ICMA-RC charges annual recordkeeping and advisory fees totaling \$25 per participant, of which participants pay \$1.25 monthly and the Plans pay the remainder. This fee covers services for both this Plan and the Incentive Plan and is allocated between the two plans.

In addition, the two plans paid administrative fees of \$25,000 quarterly to MOSERS for administration services provided to the two plans. These quarterly fees are paid out of the \$25 annual per participant fee charged. These quarterly fees are also allocated between the two plans.

The Plan incurred approximately \$1,311,000 for recordkeeping fees and \$754,000 for MOSERS administration, for a total of total of approximately \$2,065,000 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 ICMA-RC. 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, 2018, the Administrative Allowance Account had a total balance of \$938,732 and is invested in the Dreyfus Cash Management Fund. Of that amount, \$495,052 is allocated to the Missouri State Employees Deferred Compensation Incentive Plan and \$443,680 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 the 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 a "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 contribute 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 earnings prior to posting to the participant accounts. The annual fees as a percentage of participating assets are .30%.

*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.

*MOSERS Investment Portfolio ("MIP") Fund:* The MIP fund is a monthly valued investment option offering participants the ability to purchase units of the MOSERS investment portfolio. MIP is an actively managed, diversified portfolio of investments including U.S. and foreign public and private equity and debt, real estate, commodities, emerging markets, timber, foreign currency transactions, derivative transactions, and hedge funds. The fund is geared toward investors seeking long-term total returns. MOSERS issues separate financial statements which include detailed information of the underlying assets.

Investments as of June 30, 2018, by investment type, are as follows:

Investments at fair value	
Target Date Funds	\$ 700,626,260
Large-Cap Equity Mutual Funds	219,983,089
Self-Managed Accounts	45,759,823
Small-Cap Equity Mutual Funds	42,131,739
International Equity Mutual Funds	19,463,864
Mid-Cap Equity Mutual Funds	17,082,991
Asset Allocation Mutual Funds	15,586,001
Bond Mutual Funds	7,687,045
MOSERS investment portfolio fund	3,493,980
Investments at fair value	<u>1,071,814,792</u>
Investments at contract value	
Stable Value Fund	<u>469,953,946</u>
Total investments	<u><u>\$ 1,541,768,738</u></u>

Custodial credit risk for investments 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 31% 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, 2018, the weighted average credit ratings for the fixed income securities included in the fixed income mutual funds were as follows:

<u>Fixed Income Mutual Fund</u>	<u>Value</u>	<u>Rating</u>
American Funds Bond Fund of America	\$ 3,007,072	A
Vanguard Inflation Protected Securities Fund	2,271,056	AAA
Federated U.S. Government Securities Fund - 2-5 Years	1,916,517	AAA
Prudential Total Return Bond Fund	492,400	BBB

At June 30, 2018, 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 changes 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, 2018 for fixed income mutual funds is as follows:

<u>Fixed Income Mutual Fund</u>	<u>Fair Value</u>	<u>Weighted Average Duration</u>
American Funds Bond Fund of America	\$ 3,007,072	6.14
Vanguard Inflation Protected Securities Fund	2,271,056	7.43
Federated U.S. Government Securities Fund - 2-5 Years	1,916,517	3.80
Prudential Total Return Bond Fund	492,400	6.58

At June 30, 2018, the weighted average duration as provided by Voya for the Stable Value Fund was 4.31 years.

A fair value hierarchy is used that prioritizes the inputs to valuation techniques used to measure fair value of balances that are required or permitted to be measured at fair value for reporting in financial statements. The hierarchy gives the highest priority to the unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to the 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 their 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 bonds:* 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, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks.

*Corporate stock:* Valued at closing price reported in the active market in which the individual securities are traded.

*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. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. 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 nor does the Plan have any contractual obligations to further invest in any of these funds.

*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 fund less its liabilities. This practical expedient is not used when it is determined to be probable that the fund will sell the investment for an amount different than the reported NAV. 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 nor does the Plan have any contractual obligations to further invest in any of these funds.

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, 2018 and 2017, aggregated by the level in the fair value hierarchy within which those measurements fall:

	Level 1	Level 2	Level 3	Total
<b>Mutual funds</b>				
Large-Cap Equity Funds	\$ 219,983,089	\$ -	\$ -	\$ 219,983,089
Small-Cap Equity Funds	45,759,823	-	-	45,759,823
International Equity Funds	19,463,864	-	-	19,463,864
Mid-Cap Equity Funds	17,082,991	-	-	17,082,991
Asset Allocation Investments	15,586,001	-	-	15,586,001
Bond Funds	7,687,045	-	-	7,687,045
Total mutual funds	325,562,813	-	-	325,562,813
<b>Self-directed brokerage account</b>				
Cash and cash equivalents	6,224,478	-	-	6,224,478
U.S. Government securities	18,343	-	-	18,343
Mutual funds	14,596,107	-	-	14,596,107
Corporate debt securities	-	161,193	-	161,193
Corporate stocks	24,759,702	-	-	24,759,702
Total self-directed brokerage account	45,598,630	161,193	-	45,759,823
Total assets in fair value hierarchy	\$ 371,161,443	\$ 161,193	\$ -	371,322,636
<b>Investments measured at net asset value</b>				
MOSERS investment portfolio fund				3,493,980
Missouri target date funds				700,626,260
Total investments at fair value				\$ 1,075,442,876

The following tables summarize investments for which fair value is measured using the net asset value per share practical expedient as of December 31:

	Fair Value	Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice Required
MOSERS investment portfolio fund	\$ 3,493,980	n/a	Monthly	None
Missouri target date funds	700,626,260	n/a	Daily	None

## 6. 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.

## 7. LIFE INSURANCE CONTRACTS

Monumental had 1,287 universal life insurance policies in force at June 30, 2018. The face amount of these policies was approximately \$41,541,776 at June 30, 2018. The cash surrender value and carrying value of the universal life insurance policies in force with Monumental was \$4,193,754 at June 30, 2018.

SBL had 72 life insurance policies in force at June 30, 2018. The face amount of these policies was approximately \$224,207 at June 30, 2018. The cash surrender value and carrying value of the life insurance policies in force with SBL was \$145,665 at June 30, 2018.

At the time of retirement or termination of employment from 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 Monumental, or receiving the cash surrender value of the policy.

## 8. PLAN TERMINATION

The State may amend or terminate the Plan, provided that such amendment or termination shall not impair the rights of a vested participant or beneficiary to receive any contributions, and income earned thereon, allocated to his or her active or inactive account, as the case may be, prior to the date of the termination or amendment of the Plan.