

# 50<sup>TH</sup> COMPREHENSIVE ANNUAL FINANCIAL REPORT



## MISSOURI LAGERS

*A Secure Retirement for All*

FOR FISCAL YEAR: JULY 1, 2017 - JUNE 30, 2018



# LAGERS

FIFTIETH COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEAR ENDED JUNE 30, 2018

Robert Wilson, CEBS  
Executive Secretary

Melissa Rackers, CPA, CGFM, CEBS  
Chief Financial Officer



Missouri Local Government  
Employees Retirement System  
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Cover Photo Credit: Grand River Ambulance

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Photo Credit: City of Columbia

# SECTION 1: INTRODUCTION

# Vision, Mission, Values

At LAGERS, we believe in a secure retirement for all and strive to achieve this vision by pursuing our mission of providing secure retirement, survivor's and disability benefits to local government subdivisions in Missouri. Our mission and vision are supported by the values held in high regard by the Board of Trustees and team. The pyramid below illustrates LAGERS vision, mission and values.



# Administrative Organization

## ADMINISTRATIVE ORGANIZATION — BOARD

The board operates with the assistance of three committees, appointed by the chairperson: audit and finance, legislative and governance.

### Audit and Finance Committee

Joan Jadali \*  
J. Robert Ashcroft  
Arby Todd

### Legislative Committee

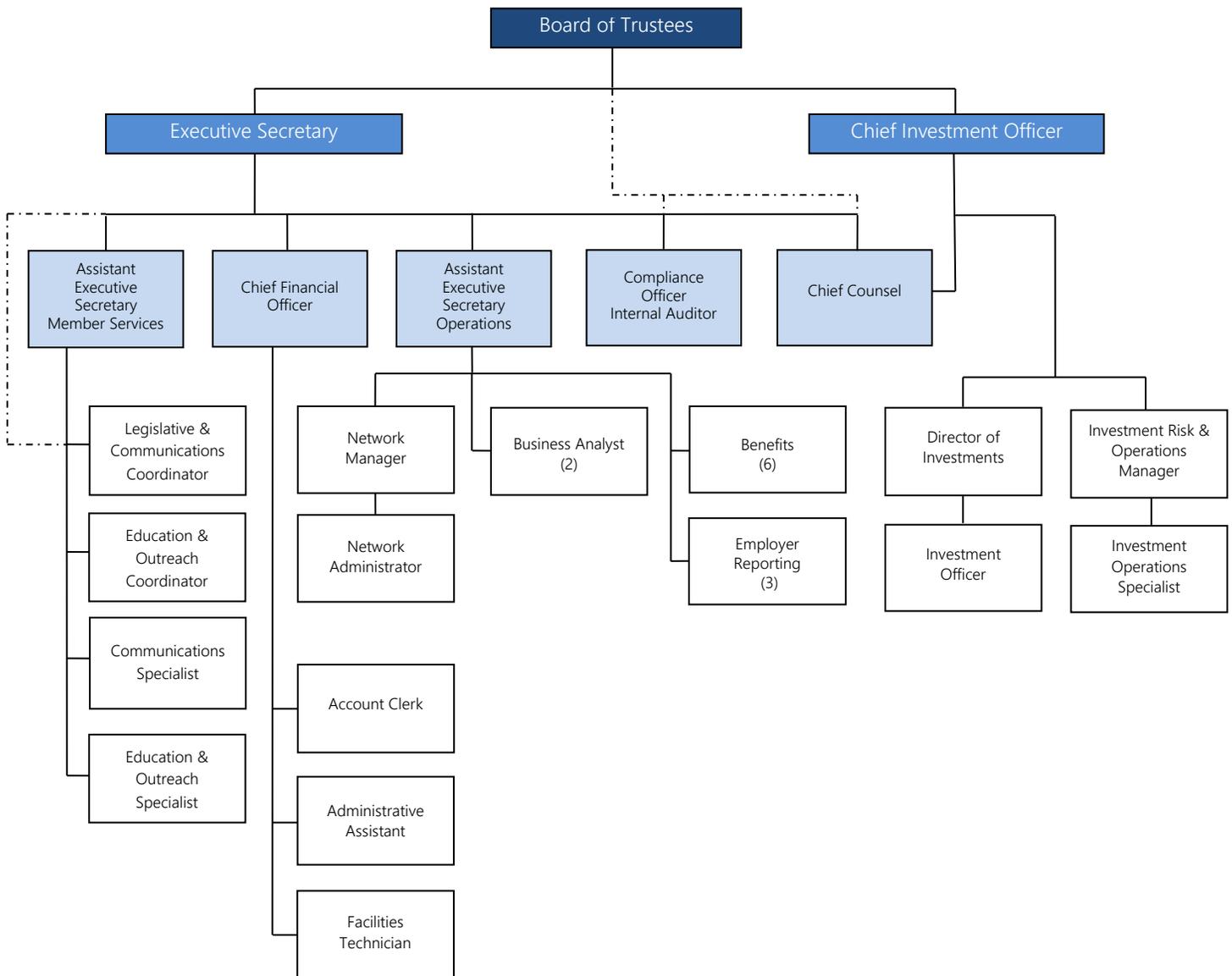
Kathy Barszczak \*  
Barry McCullough  
Claire Scoville

### Governance Committee

Frank Buck \*  
Claire Scoville  
Barry McCullough

\*Committee Chairperson

## ADMINISTRATIVE ORGANIZATION - TEAM



## Consulting Services

The following firms were retained at fiscal year-end and by the Board of Trustees to serve in professional capacities or provide consultant services. Please refer to page 61 in the Investment Section for the Schedule of Advisor Fees, page 62 for the Brokerage Commissions and page 60 for the investment professionals.

### Actuary

Gabriel, Roeder, Smith & Co.  
Mita D. Drazilov  
Judith A. Kermans  
Southfield, MI

### Auditor

Williams Keepers, LLC  
Certified Public Accountants  
Michael J. Oldelehr, CPA  
Jefferson City, MO

### Eclipse Consultant

Sagitec Solutions, LLC  
Paul Eberhart  
Little Canada, MN

### Legal Counsel

Armstrong Teasdale, LLP  
Attorneys at Law  
Sherry Doctorian  
Jefferson City, MO

### Legal Counsel

Husch Blackwell, LLP  
Attorneys at Law  
Lowell Pearson  
Jefferson City, MO

### Legal Counsel

Thompson Coburn, LLP  
Attorneys at Law  
Gregory A. Patterson  
St. Louis, MO

### Legislative Consultant

Flotron & McIntosh  
Richard McIntosh  
Jefferson City, MO

### Medical Advisor

University of Massachusetts  
Medical School  
Disability Evaluation Services  
Jody Simpson RN  
Shrewsbury, MA

## Acknowledgements

The LAGERS Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 2018, was coordinated by the Chief Financial Officer. Special thanks to the individuals who contributed significant amounts of time and energy to help complete this report.

Erin Stieferman, Investment Risk and Operations Manager

Ashley Schmitz, Investment Operations Specialist

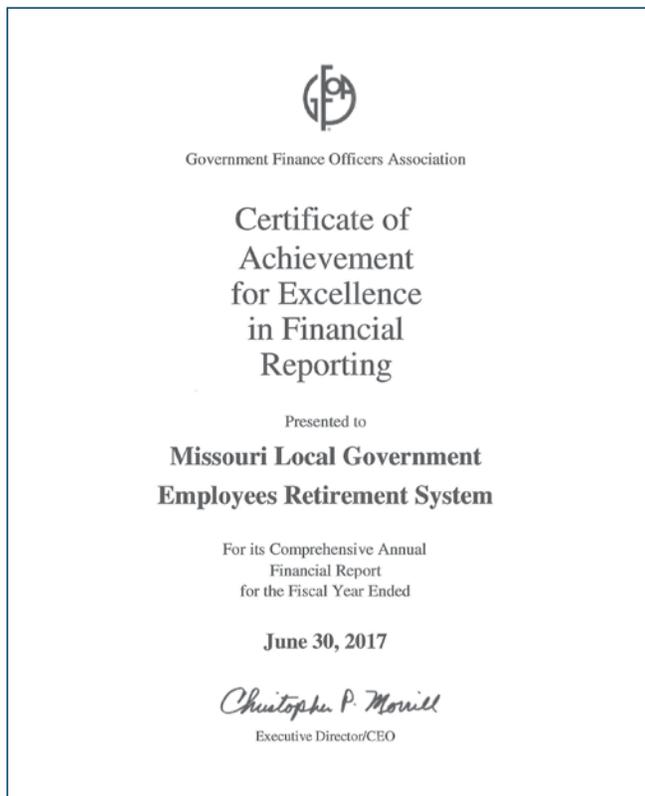
Jeffrey Pabst, CRC, Education & Outreach Coordinator

Penny Thomas, Education & Outreach Specialist

Betty Rutledge, Account Clerk

Awards

CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING



PPCC ACHIEVEMENT AWARD FOR FUNDING



## Letter of Transmittal



### MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

701 West Main, P.O. Box 1665, Jefferson City, Missouri 65102  
Telephone (573) 636-9455 • 800-447-4334 • FAX (573) 636-9671  
[www.molagers.org](http://www.molagers.org)

October 12, 2018

The Board of Trustees  
Missouri Local Government  
Employees Retirement System  
Jefferson City, MO 65102

The Annual Report of the Missouri Local Government Employees Retirement System (LAGERS) for the fiscal year ended June 30, 2018, is submitted herewith. The management of LAGERS is responsible for the compilation and accuracy of the financial, investment, actuarial and statistical information contained in this report. Responsibility for both the accuracy of the data, and completeness and fairness of the presentation, rests with the management of the system. We trust that you and the members of the system will find this annual report helpful in understanding your public employee retirement system – a system which continues to maintain a strong and positive financial future.

The LAGERS system was established in 1967 consisting of 10 employers and has subsequently expanded to include 715 political subdivisions of the state. A listing of the current employers begins on page 85.

### STRATEGIC PLANNING

In 2018 the Board of Trustees adopted a formal three-year strategic plan. The core of our strategic planning is our values. Our values are the beliefs that we hold dear and provide guidance for how we conduct ourselves. Our values provide the support for our mission and vision statements (as stated on page 6). With these three components in place we were able to develop a three-year strategic plan. The strategic plan began with a SWOT analysis which was performed by LAGERS management team and Board of Trustees. A SWOT analysis identifies strengths, weakness, opportunities and threats both within and external to the system. This is where the consensus was built about where our focus should be concentrated. The four critical success factors identified during the SWOT analysis are: funding sustainability, stakeholder service and outreach, staffing, and technology and cybersecurity. These four critical success factors then become the action items for the strategic plan. LAGERS management team developed key strategies we must achieve for success, objectives for how we will achieve the key strategies and planned actions for how we will accomplish the objectives. The strategic plan then became the basis for the annual business plan and budgeting process for the fiscal year. The development of the business plan is a coordinated effort of LAGERS management team.

### CURRENT AND FUTURE INITIATIVES

The following items provide insight on a few initiatives the LAGERS team is currently focused on:

- Enhancing and expanding our outreach to all stakeholders. We are focused on communicating at the local, state and national level the value of public service and defined benefit plans. LAGERS has focused its communication strategy on the strength and security of our system and addressing the significant challenges some public pension plans are facing. We're sharing our plan design and operation as a role model of success.
- Establishing processes, policies and procedures for effective implementation of legacy plan administration. LAGERS successfully transitioned two closed pension plans previously administered by the political subdivision into LAGERS during the 2018 fiscal year. Two additional plans are scheduled to join during the 2019 fiscal year with several more plans expressing interest in transitioning to LAGERS. This valuable work not only benefits the state and our communities; it also enhances our credibility as a strong leader providing solutions.

- Ensuring the security of the system's data and business continuity. LAGERS information security team has been focused on updating LAGERS equipment to enhance cybersecurity protection and ensure LAGERS ability to continue serving our members in the event of a disaster. We have also implemented annual training on social engineering for the entire LAGERS team.
- Pursuing a secure retirement for all. During the 2018 legislative session LAGERS worked with the Soil and Water Conservation Districts and Metro Planning Organizations to pursue legislation enabling them to be considered political subdivisions under the LAGERS statutes. Senate Bill 892 was passed into law allowing these two groups to make the election at the local level to join LAGERS. With the signing of this bill, LAGERS has been working with numerous subdivisions to begin the joining process. These efforts strengthen our reputation and network throughout the state.

## ACCOUNTING SYSTEMS AND REPORTS

The report was prepared to conform with the principles of governmental accounting and reporting as put forth by the Governmental Accounting Standards Board (GASB) and the American Institute of Certified Public Accountants.

The Government Finance Officers Association of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the LAGERS system for its comprehensive annual financial report for the fiscal year ended June 30, 2017. LAGERS has received this prestigious award for its annual report in each of the last 40 years.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, the contents of which conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. We believe this report continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the Government Finance Officers Association to determine its eligibility for another certificate.

The Financial section of the report contains the independent auditors' letter, management's discussion and analysis, the financial statements, notes and other required supplementary information. Management's discussion and analysis provides a narrative introduction and overview of the financial statements and should be read in conjunction with those statements.

Transactions of the LAGERS system are reported on the accrual basis of accounting. The management of the system is charged with maintaining a sound system of internal controls. The objectives of such a system are to provide management with reasonable assurance, rather than absolute assurance, that assets are safeguarded against loss from unauthorized use, and they are recorded properly to permit the preparation of financial statements. Even though there are inherent limitations in any system of internal controls because the cost of a control should not exceed the benefits to be derived, the management of LAGERS makes every effort to ensure that through systematic reporting and internal reviews, errors or fraud are quickly detected and corrected.

## REVENUES

The collection of employer and employee contributions, as well as income from investments, provides the reserves needed to finance retirement benefits. Contributions and investment income for fiscal year 2018 total \$1,084,079,206. This amount includes realized and unrealized gains/losses. In the upcoming year, contribution rates are beginning to stabilize with more than half decreasing or remaining unchanged due to the asset smoothing methodology utilized in the actuarial valuation process and actuarial gains related to better than expected investment returns.

## EXPENSES

The principal purpose for which LAGERS was created was to provide retirement annuities, survivor benefits, and total and permanent disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments as designated by the plan, refunds of contributions to terminated employees, and the cost of administering the system. Expenses for fiscal year 2018 totaled \$315,176,061, an increase of 8.6% over fiscal year 2017 expenses. The increase in expenses resulted primarily from monthly payments to the additional number of retirees and partial lump-sum payments to retirees.

## Letter of Transmittal (continued)

### INVESTMENTS

The investments of LAGERS are governed primarily by an investment authority known as the “prudent person rule”. The prudent person rule establishes a standard for all fiduciaries, which includes anyone that has authority with respect to the fund. The prudent person standard states that fiduciaries shall discharge their duties solely in the interest of the fund participants and beneficiaries and with the degree of diligence, care, and skill which prudent men and women would ordinarily exercise under similar circumstances in a like position. By permitting further diversification of investments within a fund, the prudent person standard may enable a fund to reduce overall risk and increase return. A summary of the asset allocation can be found on page 54 of this report.

The prudent person rule permits the fund to establish an investment policy based upon certain investment criteria and allows for the delegation of investment authority to professional investment advisors. The statement of investment policy outlines the responsibility for the investment of the fund and the degree of risk that is seemed appropriate for the fund. Investment advisors are to execute the investment policy in accordance with the statutory authority, the Board policy and their respective guidelines, but are to use full discretion within the policy and guidelines. For fiscal year 2018 investments provided a 13.70% rate of return. The longer time periods of 5, 10 and 20 years provided returns of 9.11%, 7.83% and 7.36%, respectively.

### FUNDING

A pension fund is well funded when it has enough money in reserve to meet all expected future obligations to participants. The LAGERS funding objective is to meet long term benefit promises through contributions that remain approximately level as a percent of member payroll. The greater the level of funding, the larger the ratio of assets accumulated to the actuarial accrued liability and the greater the level of investment potential. At June 30, 2018, the system has a funded status of 95.6%. The advantage of a well funded plan is that the participants can look at assets that are committed to the payment of benefits. A detailed discussion of funding is provided in the Actuarial Section of this report.

### PROFESSIONAL SERVICES

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of LAGERS. An opinion from the certified public accountant and the actuary are included in this report. The consultants appointed by the Board are listed on page 8 of this report.

### ACKNOWLEDGMENTS

The compilation of this report reflects the combined effort of the LAGERS staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship of the funds of the system.

The report is being provided electronically and by mail upon request to all employer members of the system. They form the link between LAGERS and its membership. Their cooperation contributes significantly to the success of LAGERS. We trust the employers and their employees find this report informative. An electronic version of this report is available on the LAGERS website at [www.molagers.org](http://www.molagers.org).

On behalf of the Board of Trustees, we would like to take this opportunity to express our gratitude to the staff, the advisors, and the many people who have worked so diligently to assure the successful operation of the system.

Respectfully submitted,



Robert L. Wilson, CEBS  
Executive Secretary



Melissa K. Rackers, CPA, CEBS, CGFM  
Chief Financial Officer

# Chairperson's Report

## MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

701 West Main, P.O. Box 1665, Jefferson City, Missouri 65102  
 Telephone (573) 636-9455 • 800-447-4334 • FAX (573) 636-9671  
[www.molagers.org](http://www.molagers.org)



October 12, 2018

To all LAGERS members:

The many people responsible for creating LAGERS in 1967 shared the belief that retirement security was for everyone, not just for those that worked for the largest employers in the state. Today, LAGERS Board of Trustees and staff are continuing to put this belief into action by maintaining a financially strong pension fund that is available to all local government units in Missouri, large and small.

LAGERS exists to provide a secure retirement to Missouri's local government workers. In furtherance of this mission, LAGERS' membership continues to increase with employers looking to LAGERS as the secure, efficient source for providing benefits that help stabilize Missouri communities. Last year alone, 20 new employers joined LAGERS, bringing our total membership to 715 employers. LAGERS continues to be a proven leader among public pension plans for doing things for the right reasons. Vision, superior plan design, diligence, and execution has made LAGERS one of the most respected public pension systems in America.

In order to further ensure the long-term success of the system, the Board has approved and implemented the first formal three-year strategic plan. While the LAGERS Board and staff have always had an eye toward the future, the strategic plan marks the first documented objectives and actions that further our mission and bring us closer to our vision of a secure retirement for all. This plan isn't just a piece of paper; it is an actionable, living document that we will continually re-evaluate as new risks and opportunities for improvement arise.

LAGERS continues to improve its prefunded ratio, as it increased to 95.6% in 2018. This strong prefunded ratio would rank LAGERS in the top 10% of public pension plans not only in Missouri, but across the nation. The investment markets continued performing well this year with LAGERS' portfolio returning 13.70% for the one year period. The longer time periods of 5, 10, and 20 years provided returns of 9.11%, 7.83%, and 7.36%, respectively. These long-term returns continue to surpass LAGERS' Custom Benchmark by greater than 1% for each respective period. The Board has affirmed the current risk preference of a 10% standard deviation for the investment portfolio further supporting the current portfolio allocation targeting an assumed rate of return of 7.25%. Looking forward, the investment team is looking to continue to add more to private real assets while continuing to expand its co-investment portfolio. The team is also looking to potentially add new managers in the coming year, with searches targeting new mandates in absolute return and natural resources already underway.

I would like to take this opportunity to express my gratitude to my fellow trustees for their dedication to LAGERS members. The Board's vision, guidance and support are critical to the success of LAGERS. I would like to recognize and thank Kathy Barszczak, Member Trustee from the City of Independence for her service on the LAGERS Board of Trustees since 2013. Kathy is retiring from the City of Independence after more than 37 years of dedicated service. We wish Kathy well and all the best in her retirement.

I appreciate the opportunity of serving on the LAGERS Board and as your Chairperson. Thank you for your continued interest and support of the system. Please know the LAGERS Board and staff will continue to strive to provide a quality retirement program while ensuring the financial integrity of the system.

I am pleased to present the 2018 Comprehensive Annual Financial Report. This report offers a detailed analysis of the financial, investment and actuarial performance of your retirement system and serves as evidence of our responsibility of transparency to all of our stakeholders.



Respectfully,

Arby Todd, Chairperson  
 LAGERS Board of Trustees

## Board of Trustees



From Left: J. Robert Ashcroft, Claire Scoville, Kathy Barszczak, Frank Buck, Barry McCullough, Joan Jadali, Arby Todd

**Arby Todd**  
**Member Trustee**  
**Chairperson**  
City of Lee's Summit  
Term Expires 12-31-2021

**Frank Buck**  
**Employer Trustee**  
**Vice - Chairperson**  
DeKalb County  
Term Expires 12-31-2020

**Joan Jadali**  
**Member Trustee**  
City of Webster Groves  
Term Expires 12-31-2018

**J Robert Ashcroft**  
**Employer Trustee**  
Platte County  
Term Expires 12-31-2021

**Kathy Barszczak**  
**Member Trustee**  
City of Independence  
Term Expires 12-31-2020

**Barry McCullough**  
**Employer Trustee**  
City of Gladstone  
Term Expires 12-31-2018

**Claire Scoville**  
**Citizen Trustee**  
Term Expires 12-31-2019

## LAGERS Executive Team



From Left: Robert Wilson, Brian Collett, Jason Paulsmeyer, Melissa Rackers, Jeff Kempker, Tami Jaegers, Pam Hopkins

**Robert Wilson,**  
CEBS  
Executive Secretary

**Brian Collett,**  
CFA, CAIA  
Chief Investment Officer

**Jason Paulsmeyer**  
Chief Counsel

**Melissa Rackers,**  
CPA, CGFM, CEBS  
Chief Financial Officer

**Jeff Kempker,**  
CEBS, CRC  
Asst. Executive Secretary,  
Member Services

**Tami Jaegers,**  
RPA  
Asst. Executive Secretary,  
Operations

**Pam Hopkins,**  
CPA, CIA, CRMA, RPA, CGFM,  
Compliance Officer / Internal  
Auditor

# LAGERS Team

## Benefits Team



From Left: Dana Eichholz, Tammy Burlbaw, Leslie Loar, Danielle Wilbers, Diane Towne, Stephanie Leonard

## Administrative Team



From Left: Jan Kindard, Dale Feeler, Melissa Rackers, Betty Rutledge

## Employer Reporting Team



From Left: Dennise Schaben, Paula Woolery, Miranda Fishback

## Information Technology Team



From Left: Misty Brazzell, Richard Allison, Jamie Houk, Mya Bernskoetter

## Investment Team



From Left: Justin Ellsesser, Erin Stieferman, Brian Collett, Megan Loehner, Jason Paulsmeyer, Ashley Schmitz

## Member Services Team



From Left: Penny Thomas, Jeff Kempker, Angela Lechtenberg, Elizabeth Althoff, Jeff Pabst



Photo Credit: Lake Ozark Fire Protection District

# SECTION 2: FINANCIAL

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# Independent Auditors' Report



2005 West Broadway, Suite 100, Columbia, MO 65203

OFFICE (573) 442-6171 FAX (573) 777-7800

3220 West Edgewood, Suite E, Jefferson City, MO 65109

OFFICE (573) 635-6196 FAX (573) 644-7240

www.williamskeepers.com

## INDEPENDENT AUDITORS' REPORT

The Board of Trustees  
Missouri Local Government  
Employees Retirement System

### Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Missouri Local Government Employees Retirement System (the System), as of June 30, 2018, and 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 System's basic financial statements as listed in the table of contents.

#### *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 System'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 System'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 System at 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

### *Required Supplementary Information*

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 20 through 23 and the schedules of investment returns, changes in net pension liability, changes in net OPEB liability and related ratios, and employer contributions on pages 44 through 48 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 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 Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Systems' basic financial statements. The introductory, investment, actuarial and statistical sections as listed in the table of contents and the schedule of operating expenses on page 49 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of operating expenses on page 49 is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information on page 49 has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with U.S. generally accepted auditing standards. In our opinion, the information on page 49 is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements



October 12, 2018

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

Management is pleased to present this overview and analysis of the financial activities of the Missouri Local Government Employees Retirement System (LAGERS) for the year ended June 30, 2018. We encourage readers to consider the information presented in conjunction with the Letter of Transmittal on page 10 of this report, the financial statements, required supplementary information, and supplementary information, which follow the MD&A.

## REQUIRED FINANCIAL STATEMENTS

LAGERS, an agent multiple-employer public employee retirement system, prepares its financial statements on an accrual basis in accordance with U.S. generally accepted accounting principles promulgated by the Governmental Accounting Standards Board. The Statement of Fiduciary Net Position indicates the net assets available to pay future benefits and provides a snapshot at a particular point in time. The Statement of Changes in Fiduciary Net Position provides a view of the current year's additions and deductions from net assets. The Notes to the Financial Statements are necessary for a full understanding of the financial statements. The Required Supplementary Information provides the money-weighted rate of return information. In addition, there is current and historical pension liability information for the LAGERS Staff Retirement Plan and current and historical OPEB liability information for the LAGERS Staff Retiree Healthcare Supplement. Other Supplementary Information provides detailed administrative and investment expense information.

## FINANCIAL ANALYSIS OF LAGERS

LAGERS receivables consist of investments and employer and employee contributions that settle in July 2018. LAGERS had capital assets, net of accumulated depreciation, of \$6.3 million. Of the total, \$4.6 million is comprised of software needed for pension administration as well as other equipment and furniture, and \$1.7 million is comprised of buildings and land. The net OPEB asset represents the GASB 75 measurement of the defined benefit OPEB plan provided to the employees of LAGERS. Deferred outflows and inflows relate to the separate pension and OPEB plans administered by the LAGERS Board of Trustees with the participants being the employees of LAGERS. Liabilities at year end relate to accrued investment and administrative expenses, the pension liability related to the LAGERS Staff Retirement Plan, and securities lending collateral.

COMPARATIVE FINANCIAL STATEMENTS

LAGERS provides retirement, death, and disability benefits to employees of participating political subdivisions. The table below is a summary of LAGERS' Fiduciary Net Position (in thousands) as of June 30.

Comparative Statement of Fiduciary Net Position				
	2018	2017	Increase (Decrease) Amount	Increase (Decrease) Percent
<b>Assets</b>				
Cash	\$ 6,000	\$ 2,417	\$ 3,583	148 %
Receivables and accrued income	36,824	32,884	3,940	12
Prepaid expenses	61	2,460	(2,399)	(98)
Investments	7,717,549	6,950,719	766,830	11
Invested securities lending collateral	453,305	426,771	26,534	6
Capital assets	6,321	6,830	(509)	(7)
Net OPEB asset	184		184	
Total assets	\$ 8,220,244	\$ 7,422,081	\$ 798,163	11
<b>Deferred outflow of resources</b>				
Outflows related to pensions	\$ 2,115	\$ 1,295	\$ 820	63 %
Outflows related to OPEB	145		145	
Total deferred outflow of resources	\$ 2,260	\$ 1,295	\$ 965	75
<b>Liabilities</b>				
Payables and accrued expenses	\$ 10,588	\$ 8,156	\$ 2,432	30 %
Net pension liability	1,737	417	1,320	317
Collateral for securities on loan	453,305	426,771	26,534	6
Total liabilities	\$ 465,630	\$ 435,344	\$ 30,286	7
<b>Deferred inflow of resources</b>				
Inflows related to pensions	\$ 535	\$ 689	\$ (154)	(22) %
Inflows related to OPEB	93		93	
Total deferred inflow of resources	\$ 628	\$ 689	\$ (61)	(9)
Net position restricted for pension benefits	\$ 7,756,246	\$ 6,987,343	\$ 768,903	11 %

This table presents a \$769 million increase in net position. The increase in net position reflects the investment markets this past year which resulted in a 13.7% annualized return. As a pension fund, LAGERS must retain a long-term investment horizon and the table below presents the returns for such time frames.

	<b><u>3 Years</u></b>	<b><u>5 Years</u></b>	<b><u>10 Years</u></b>	<b><u>20 Years</u></b>
Annualized Returns	8.3 %	9.1 %	7.8 %	7.4 %

# Management's Discussion & Analysis (continued)

The table below is a summary of LAGERS' Changes in Fiduciary Net Position (in thousands) for the year ended June 30.

Comparative Statement of Changes in Fiduciary Net Position				
	2018	2017	Increase (Decrease) Amount	Increase (Decrease) Percent
<b>Additions</b>				
Member contributions	\$ 19,811	\$ 20,923	\$ (1,112)	(5) %
Employer contributions	204,018	199,941	4,077	2
Net investment income	858,318	750,570	107,748	14
Net securities lending income	1,932	3,914	(1,982)	(51)
Total additions	\$ 1,084,079	\$ 975,348	\$ 108,731	11
<b>Deductions</b>				
Benefit payments	\$ 307,740	\$ 282,568	\$ 25,172	9 %
Annuities awarded	20		20	
Refunds	1,919	2,566	(647)	(25)
Expenses	5,497	5,157	340	7
Total deductions	\$ 315,176	\$ 290,291	\$ 24,885	9
Change in net position available for benefits.	\$ 768,903	\$ 685,057	\$ 83,846	12 %

Additions to fund benefits are accumulated through contributions and investment income. The decrease in member contributions is due to service purchases during the previous fiscal year. The majority of the service purchased was by employees of new political subdivisions which were unable to elect 100% prior service credit. LAGERS' net investment income reflects the investment markets for fiscal year 2018 which is up from 2017. Benefit payments continue to increase as LAGERS fulfills its mission of providing retirement benefits to the membership. As the system matures, the demographics of the LAGERS population will also mature.

## FUNDING STATUS

A pension plan is well funded when it has sufficient assets invested to meet all expected future obligations to participants. The greater the level of funding – the larger the ratio of assets to actuarial accrued liability. One goal of LAGERS' funding policy is for participating political subdivisions to be fully funded. In order to achieve this, annual contributions are made at an actuarially determined rate.

The LAGERS funding policy is designed to achieve the following objectives:

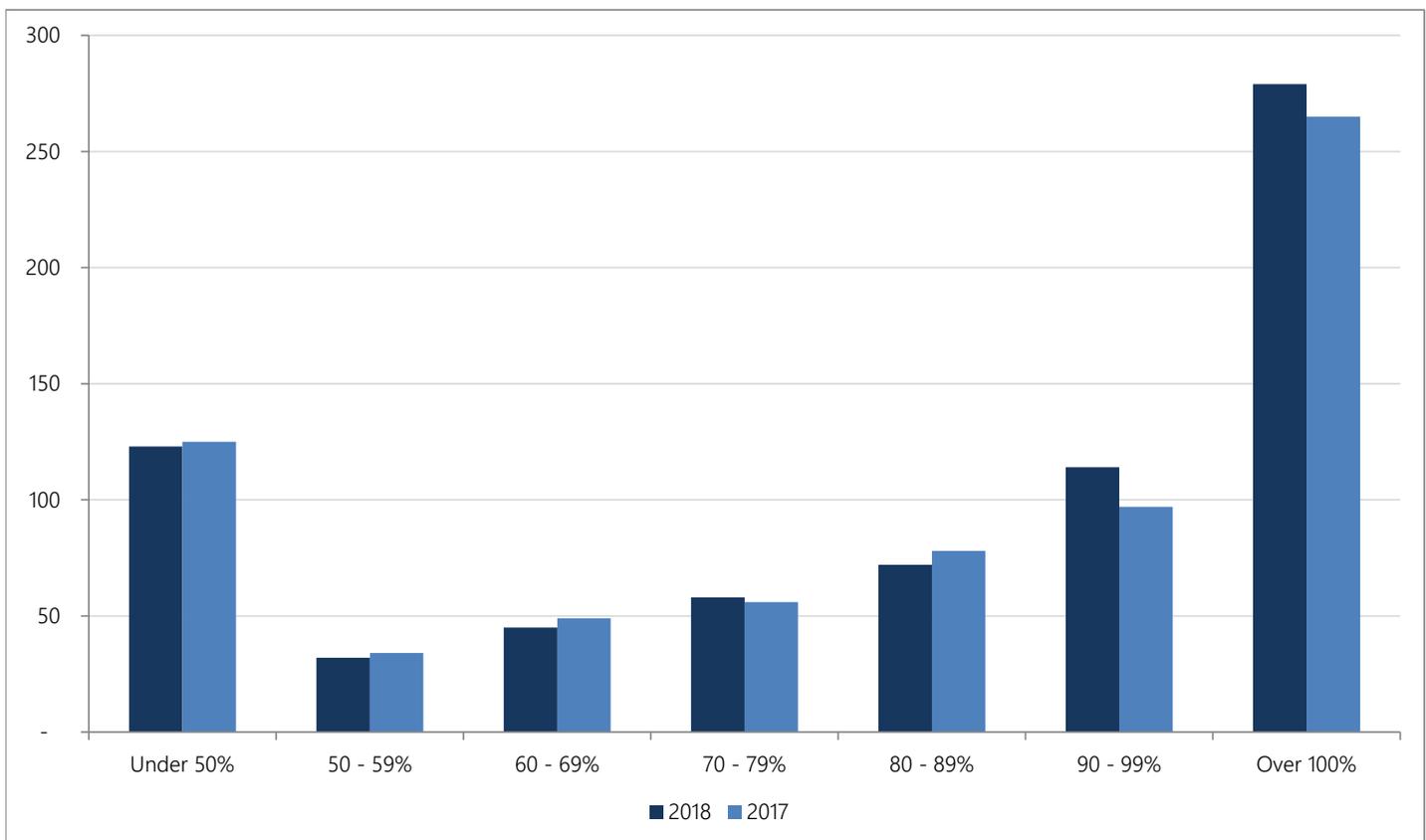
- Maintain adequate assets to fund future benefits
- Maintain stable employer contribution rates
- Maintain public policy goals of transparency and accountability
- Promote intergenerational equity

As an agent multiple-employer plan, assets are pooled for investment purposes but separate accounts are maintained for each employer. Each participating employer is responsible for its own plan liabilities; an employer cannot borrow from another employer account to pay for pension expenses. A measure of an employer's funding progress is the ratio of its actuarial assets to actuarial accrued liabilities. The funded status is determined for each employer as well as for the plan as a whole.

The most recent actuarial valuations were prepared as of February 28, 2018. At that time, the overall funded ratio of the LAGERS system was 95.6 percent. This ratio gives an indication of how well LAGERS' funding objective is being met. The change in the funding ratio is largely attributable to the investment markets of the past several years. LAGERS' actuary uses a five-year smoothed market-related value to determine the actuarial value of assets. The smoothing prevents extreme volatility in employer contribution rates due to short-term fluctuations, positive or negative, in the investment markets. A ten year schedule of funding progress is provided on the next page.

LAGERS Schedule of Funding Progress						
Valuation Date	Actuarial Value of Assets	Entry Age Actuarial Accrued Liability	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll	UAL as a % of Covered Payroll
2-28-18	\$ 7,297,699,793	\$ 7,631,702,645	\$ 334,002,852	95.6 %	\$ 1,616,895,524	20.7
2-28-17	6,764,626,389	7,135,950,253	371,323,864	94.8	1,555,729,666	23.9
2-29-16	6,320,171,438	6,671,352,337	351,180,899	94.7	1,507,588,470	23.3
2-28-15	5,972,471,342	6,324,109,191	351,637,849	94.4	1,462,218,216	24.0
2-28-14	5,388,198,677	5,873,910,959	485,712,282	91.7	1,456,008,487	33.4
2-28-13	4,692,218,862	5,423,684,243	731,465,381	86.5	1,395,261,077	52.4
2-29-12	4,274,440,345	5,120,274,198	845,833,853	83.5	1,359,655,784	62.2
2-28-11	3,945,085,880	4,837,423,311	892,337,431	81.6	1,350,646,560	66.1
2-28-10	3,592,225,739	4,432,331,886	840,106,147	81.0	1,331,226,335	63.1
2-28-09	3,330,662,923	4,161,775,258	831,112,335	80.0	1,285,952,041	64.6

The chart below represents a distribution of funded percentage of actuarial accrued liability among the participating political subdivisions as of February 28, 2017 and February 28, 2018.



## Statement of Fiduciary Net Position

June 30, 2018		
<b>Assets</b>		
Cash		\$ 6,000,471
Receivables:		
Member	\$ 1,608,620	
Employer	15,987,749	
Accrued investment income	19,227,406	
Total receivables		\$ 36,823,775
Prepaid expenses		60,836
Investments at fair value:		
Short-term investments	\$ 386,840,477	
Government bonds	607,464,291	
Corporate bonds	382,115,145	
International bonds	694,521,210	
Mortgage and asset-backed securities	207,632,424	
Domestic stocks	773,974,149	
International stocks	737,451,830	
Real estate	753,555,507	
Partnerships	2,346,515,724	
Absolute return	780,712,144	
Other alternative investments	46,765,477	
Total investments		\$ 7,717,548,378
Invested securities lending collateral		453,305,009
Capital assets, net of accumulated depreciation of \$5,506,117		6,321,147
Net OPEB asset		184,395
Total assets		\$ 8,220,244,011
<b>Deferred outflow of resources</b>		
Outflows related to pension	\$ 2,115,031	
Outflows related to OPEB	145,135	
Total deferred outflow of resources		\$ 2,260,166
<b>Liabilities</b>		
Accounts payable and accrued expenses	\$ 358,322	
Accrued investment expenses	10,229,833	
Net pension liability	1,737,291	
Collateral for securities on loan	453,305,009	
Total liabilities		\$ 465,630,455
<b>Deferred inflow of resources</b>		
Inflows related to pension	\$ 534,746	
Inflows related to OPEB	92,614	
Total deferred inflow of resources		\$ 627,360
<b>Net position - restricted for pension benefits</b>		<b>\$ 7,756,246,362</b>

See accompanying notes to financial statements.

## Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2018						
	Reserves					
	Total	Member	Employer	Benefit	Casualty	Income (Expense)
<b>Additions:</b>						
<b>Contributions:</b>						
Member	\$ 19,810,928	\$ 19,810,928				
Employer	204,018,370		\$ 195,965,735		\$ 8,052,635	
Total contributions	\$ 223,829,298	\$ 19,810,928	\$ 195,965,735		\$ 8,052,635	
<b>Investment income:</b>						
Interest income	\$ 150,401,022					\$ 150,401,022
Dividend income	41,449,247					41,449,247
Other income	62,816,851					62,816,851
Net appreciation in fair value	705,411,947					705,411,947
Total investment income	960,079,067					960,079,067
Less investment expenses	101,760,935					101,760,935
Net investment income	858,318,132					858,318,132
Securities lending income	8,780,100					8,780,100
Less securities lending expenses:						
Borrower rebates	6,848,324					6,848,324
Total securities lending expenses	6,848,324					6,848,324
Net securities lending income	1,931,776					1,931,776
Investment income allocated		657,995	446,617,228	411,997,763	1,103,768	(860,376,754)
Net additions (reductions)	\$ 1,084,079,206	\$ 20,468,923	\$ 642,582,963	\$ 411,997,763	\$ 9,156,403	\$ (126,846)
<b>Deductions:</b>						
<b>Benefits Paid:</b>						
Annuity benefits	\$ 307,740,098		\$ 4,321,081	\$ 303,419,017		
Refunds	1,919,371	\$ 1,919,371				
Net benefits paid	309,659,469	1,919,371	4,321,081	303,419,017		
Annuities awarded	20,073	12,641,232	352,602,571	(372,981,178)	7,695,950	61,498
Administrative expenses	5,576,429		3,560,722	2,015,707		
Pension expense	157,006					157,006
OPEB gain	(236,916)					(236,916)
Net deductions	315,176,061	14,560,603	360,484,374	(67,546,454)	7,695,950	(18,412)
Net increase (decrease) in net position	\$ 768,903,145	\$ 5,908,320	\$ 282,098,589	\$ 479,544,217	\$ 1,460,453	\$ (108,434)
Net position restricted for pension benefits at June 30, 2017	\$ 6,987,343,217	\$ 148,513,853	\$ 3,513,065,168	\$ 3,310,251,440	\$ 15,324,412	\$ 188,344
Net position restricted for pension benefits at June 30, 2018	\$ 7,756,246,362	\$ 154,422,173	\$ 3,795,163,757	\$ 3,789,795,657	\$ 16,784,865	\$ 79,910

See accompanying notes to financial statements.

# Notes to Financial Statements (Year Ended June 30, 2018)

## (1) Summary of Significant Accounting Policies and Plan Asset Matters

### **Basis of Accounting:**

The financial statements were prepared using the accrual basis of accounting. Employee and employer contributions are recognized in the period in which the contributions are due and for which employee services have been rendered. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

### **Use of Estimates:**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (GAAP) requires Missouri Local Government Employees Retirement System (LAGERS) to use estimates and assumptions that affect the accompanying financial statements and disclosures. Actual results could differ from those estimates.

### **Reporting Entity:**

The accompanying financial statements include only the accounts of the LAGERS retirement system pursuant to RSMo 70.605.18 which requires an audit to be performed by a certified public accountant. RSMo 70.605.21 provides the LAGERS Board of Trustees with the authority to govern its own proceedings and administer the LAGERS retirement system. The LAGERS Board of Trustees established retirement and postemployment healthcare plans (Notes (5) and (6)), for its employees who administer the LAGERS retirement system. Such plans are not considered to be part of the reporting entity and thus are not included in the accompanying financial statements beyond the employer reporting requirements of GAAP.

### **Method Used to Value Investments:**

Investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Bonds and stocks traded on a national or international exchange are valued at the reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar instruments. Fair values for alternative investments in timberland and real estate represent net asset value estimates provided by the general partner's administrators or portfolio managers and are compared to independent appraisals. Investments that do not have an established market are reported at estimated fair value. The fair value of the absolute return and partnership portfolios are based upon the valuations of the underlying companies as determined by the general partner or portfolio manager.

### **Capital Assets:**

The office building, software, equipment and fixtures, which are presented at cost, are depreciated on the straight-line method over the estimated useful lives of the related assets, which have an original cost of \$500 or greater. The estimated useful lives are as follows: building -25 years, furniture -8 years, equipment -3 years and internally generated computer software -15 years.

### **New Accounting Pronouncements:**

In June 2015, GASB issued both Statement No. 74 – Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and Statement No. 75 – Accounting and Financial Reporting for Postemployment Benefits Other Than Pension. The LAGERS retirement system does not provide other postemployment benefits; therefore, Statement No. 74 does not apply. Statement No. 75 does apply to LAGERS as an employer and requires that LAGERS records and measures their OPEB liability in a manner similar to GASB Statement No. 68. The effective date for Statement No. 75 is for fiscal years beginning after June 15, 2017. LAGERS has implemented Statement No. 75 in the 2018 report.

## (2) Plan Description

LAGERS was established in 1967 and is administered in accordance with RSMo. 70.600-70.755. LAGERS is an agent multiple-employer, statewide public employee retirement plan for units of local government which is legally separate and fiscally independent of the state of Missouri.

Responsibility for the operation and administration of the plan is vested in the LAGERS Board of Trustees consisting of seven persons. Three trustees are elected by the employees who participate in the system, three trustees are elected by the members of the governing bodies of those political subdivisions which participate in the system, and one trustee is appointed by the governor of the State of Missouri. The regular term of office for members of the LAGERS Board of Trustees is four years. Members of the LAGERS Board of Trustees serve without compensation with respect to their duties, but are reimbursed by LAGERS for their actual and necessary expenses incurred in the performance of their duties.

At June 30, 2018, there were 715 participating political subdivisions in the system. Any political subdivision in Missouri may elect to have its full-time general, police and fire employees covered by LAGERS. At June 30, 2018, LAGERS membership consisted of the following:

	General	Police	Fire	Total
Retirees and beneficiaries currently receiving benefits:	18,162	3,908	1,260	23,330
Terminated employees entitled to benefits but not yet receiving them:	5,529	1,696	295	7,520
Active employees:	25,708	6,243	2,482	34,433
<b>Total</b>	<b>49,399</b>	<b>11,847</b>	<b>4,037</b>	<b>65,283</b>

LAGERS provides retirement, death and disability benefits to employees of participating political subdivisions. All benefits vest after five years of credited service. Employees who retire on or after age 60 (55 for police and fire) with five or more years of service are entitled to an allowance for life based upon the benefit program then in effect for their political subdivision. Employees may retire with an early retirement benefit with a minimum of five years of credited service and after attaining age 55 (50 for police and fire) and receive a reduced allowance. The LAGERS Board of Trustees establishes the benefit plans and provisions that are available for adoption. The political subdivision's governing body adopts all benefits of the plan. Benefit terms provide for annual post retirement adjustments to each member's retirement allowance subsequent to the member's retirement date. The annual adjustment is based on the increase in the Consumer Price Index and is limited to 4 percent per year.

If the political subdivision participates under the contributory plan, each member contributes 4 percent of gross salary. If an employee leaves covered employment or dies before attaining five years of credited service, accumulated employee contributions are refunded to the employee or designated beneficiary. Each participating employer is required by statute to contribute the remaining amounts necessary to finance the coverage of its own employees. Benefit and contribution provisions are fixed by state statute and may be amended only by action of the state legislature.

A summary of plan provisions are discussed in more detail in the Actuarial Section. Additional information as of the February 28, 2018, actuarial valuation follows:

**Schedule of Funding Status: (in thousands)**

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll	UAL as a % of Covered Payroll
2-28-18	\$7,297,700	\$7,631,703	\$334,003	95.6%	\$1,616,896	20.7%

The actuarial assumptions used for valuation purposes were updated as a result of the five year Experience Study conducted in 2015.

Valuation date	2-28-18
Actuarial Cost Method	Individual Entry Age
Amortization method	Closed, level percent of payroll
Remaining amortization period	Varies between 0 and 30 years, by employer
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.25%
Projected salary increases*	3.25% - 7.15%
*Includes inflation component of	3.25%
Cost-of-living adjustment	Contingent upon investment return, with a maximum of the lower of 4% or cumulative CPI since retirement

# Notes to Financial Statements<sup>(continued)</sup>

## (3) Investments and Deposits

The LAGERS Board of Trustees has the fiduciary responsibility and authority to oversee the investment portfolio. The purpose of LAGERS' investment fund is to accumulate the financial reserves necessary to provide for the retirement or pensioning of employees and beneficiaries of member political subdivisions in the state of Missouri. Various professional investment managers are contracted to manage the LAGERS' assets. Investment decisions are subject to statutory regulations and the Statement of Investment Policy and Objectives adopted by the LAGERS Board of Trustees.

LAGERS' asset allocation is an important determinant of achieving the investment goals of the fund. An asset allocation study is conducted at least every five years to assess portfolio construction and design. Factors influencing the allocation include projecting actuarial liabilities, historical and expected long-term market returns and risk, future economic conditions, inflation and interest rate risks and liquidity requirements.

Investment manager selection is an important decision involving complex due diligence. Managers are selected after a lengthy and time consuming process involving a review of the quantitative and qualitative components as well as the manager's investment process. Once selected, managers are monitored and reviewed for investment performance.

Other investment processes and procedures include daily capital calls, cash flow reconciliations, trade settlements, weekly portfolio review, monthly account reconciliations, performance reporting and reviews, quarterly conference calls and asset reallocation reviews.

A summary of the investment policy can be found on pages 55-57.

The annual money weighted rate of return on pension plan investments is calculated as the internal rate of return on pension plan investments, net of investment expenses. This expresses investment performance adjusted for the changing amounts actually invested throughout the year, measured on monthly inputs with expenses measured on an accrual basis. For the fiscal year 2018, the annual money weighted rate of return net of investment expenses measured on monthly inputs was 13.70 percent.

There are no investment funds where the portfolio of the fund exceeds 5 percent of the fiduciary net position.

### **Deposits:**

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, LAGERS' deposits may not be returned. The deposits are held in one financial institution with a balance of up to \$250,000 insured by the Federal Deposit Insurance Corporation (FDIC). LAGERS mitigates custodial credit risk for deposits by requiring the bank to pledge securities in an amount over the FDIC insured amount at least equal in fair value to 100 percent of the aggregate amount of the deposits. These securities are required to be delivered to a third party institution mutually agreed upon by the bank and LAGERS.

### **Investment Policies:**

The Missouri Revised Statutes prescribe the "prudent person rule" as LAGERS investment authority. The rule requires LAGERS to make investments with the same care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims. Within the "prudent person" framework, the Board of Trustees adopts investment guidelines for LAGERS investment managers that are included within the respective management agreements. The Investment Section contains a summary of these guidelines.

**Investment Summary:**

The following table presents the summary of LAGERS investments by type at June 30, 2018.

Short-term investments	\$ 386,840,477
Government bonds	607,464,291
Corporate bonds	382,115,145
International bonds	694,521,210
Mortgages & asset backed securities	207,632,424
Domestic stocks	773,974,149
International stocks	737,451,830
Real estate	753,555,507
Partnerships	2,346,515,724
Absolute return	780,712,144
Other alternative investments	46,765,477
<b>Total</b>	<b>\$ 7,717,548,378</b>

The investments listed below are not listed on national exchanges, over-the-counter markets, nor do they have quoted market prices available.

Bank loans	\$ 156,147,326 *
Partnerships	2,346,515,724
Real estate	753,555,507
Absolute return	780,712,144
<b>Total</b>	<b>\$ 4,036,930,701</b>

\*Bank loans are included in corporate bonds in the investment summary.

LAGERS values these investments in good faith based upon audited financial statements or other information provided to LAGERS by the underlying investment managers. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

**Fair Value Measurements:**

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

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System assessment of the significance of particular inputs to these fair value measurements requires judgement and considers factors specific to each asset or liability. The table on pages 30 and 31 shows the fair value leveling of the investments for the System.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Assets classified in Level 1 of the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor. Real estate and Partnership assets classified in Level 3, due to lack of an independent pricing source, are valued using an internal fair value as provided by the investment manager.

## Notes to Financial Statements (continued)

## Investments and Derivative Instruments Measured at Fair Value

	Fair Value	Level 1	Level 2	Level 3
<b>Investments by fair value level</b>				
<b>US government bonds</b>				
Government bonds	\$ 293,218,273		\$ 293,218,273	
Government agencies	27,041		27,041	
Municipal / provincial bonds	6,740,541		6,740,541	
Index linked government bonds	307,534,746		307,534,746	
Fixed income derivatives - options	(56,310)	\$ (23,906)	(305)	\$ (32,099)
<b>Total US government bonds</b>	<b>607,464,291</b>	<b>(23,906)</b>	<b>607,520,296</b>	<b>(32,099)</b>
<b>US corporate bonds</b>				
Bank loans	156,147,326		6,696,407	149,450,919
Corporate bonds	89,781,969		86,781,969	3,000,000
Index linked corporate bonds	846,572		846,572	
<b>Total US corporate bonds</b>	<b>246,775,867</b>		<b>94,324,948</b>	<b>152,450,919</b>
<b>International bonds</b>				
Corporate bonds	154,715,300		154,415,231	300,069
Corporate convertible bonds	2,182,292		2,182,292	
Fixed income derivatives-options	(3,110)		(3,110)	
Government agencies	27,071,581		27,071,581	
Government bonds	231,375,121		231,326,194	48,927
Index linked government bonds	270,024,365		257,762,164	12,262,201
Municipal / provincial bonds	9,155,661		9,155,661	
<b>Total international bonds</b>	<b>694,521,210</b>		<b>681,910,013</b>	<b>12,611,197</b>
<b>Mortgage &amp; asset backed securities</b>				
Asset backed securities	89,446,359		72,946,359	16,500,000
Collateralized bonds	312,587		312,587	
Commercial mortgage backed	7,117,696		7,117,696	
Government mortgage backed securities	98,546,721		98,116,548	430,173
Gov't-issued commercial mortgage backed	608,297		608,297	
Non-government backed C.M.O.s	11,600,764		11,600,764	
<b>Total mortgages and asset backed securities</b>	<b>207,632,424</b>		<b>190,702,251</b>	<b>16,930,173</b>
<b>Domestic stock</b>				
Common stock	653,484,894	647,184,292	38,912	6,261,690
Funds - equities ETF	81,386,713	81,386,713		
Preferred stock	39,102,542			39,102,542
<b>Total domestic stock</b>	<b>773,974,149</b>	<b>728,571,005</b>	<b>38,912</b>	<b>45,364,232</b>

## Investments and Derivative Instruments Measured at Fair Value (continued)

	Fair Value	Level 1	Level 2	Level 3
<b>Investments by fair value level</b>				
International stock				
Common stock	561,800,754	560,669,087	6,558	1,125,109
Funds - common stock	1,099,972	1,099,972		
Other equity assets	655,106	655,106		
Preferred stock	743,834	743,834		
Rights/warrants	76,079	76,079		
Stapled securities	(2,782,951)	(2,548,500)	(234,451)	
<b>Total international stock</b>	<b>561,592,794</b>	<b>560,695,578</b>	<b>(227,893)</b>	<b>1,125,109</b>
<b>Other alternative investments</b>				
Exchange cleared swaps - other assets	1,891,608		1,891,608	
Other options	(10,569)		(10,569)	
Settlement receivables	9,853			9,853
Swaps	5,690,789		5,689,826	963
Swap liabilities	(223,428)		(223,428)	
Miscellaneous	39,407,224	1,247,217	221,147	37,938,860
<b>Total other alternative investments</b>	<b>46,765,477</b>	<b>1,247,217</b>	<b>7,568,584</b>	<b>37,949,676</b>
<b>Real estate</b>	<b>753,555,507</b>			<b>753,555,507</b>
<b>Partnerships</b>	<b>2,346,515,724</b>			<b>2,346,515,724</b>
<b>Total investment measured at fair value level</b>	<b>\$ 6,238,797,443</b>	<b>\$ 1,290,489,894</b>	<b>\$ 1,581,837,111</b>	<b>\$ 3,366,470,438</b>
<b>Investments exempt from fair value hierarchy</b>				
Short term investments	386,840,477			
<b>Total investments exempt</b>	<b>386,840,477</b>			
<b>Investments measured at the net asset value (NAV)</b>				
US corporate bonds	135,339,278			
International stocks	175,859,036			
Absolute return	780,712,144			
<b>Total investments measured at the NAV</b>	<b>1,091,910,458</b>			
<b>Total investments measured at fair value</b>	<b>\$ 7,717,548,378</b>			

# Notes to Financial Statements (continued)

## Investments Measured at the NAV

	Fair Value	Strategy Type	Fund Life of Non-redeemable mandates	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period	Other Redemption Restrictions	Restriction Time Remaining
US corporate bonds								
Funds - corporate bond	\$ 47,061,815	Active Global Fixed Income	N/A		Daily, Monthly	1 - 5 days	N/A	N/A
Funds - other fixed income	88,277,463	Active US Fixed Income	N/A		Daily	1 day	N/A	N/A
International stocks								
Funds - common stock	175,859,036	Active EM Equity	N/A		Daily	1 day	N/A	N/A
Absolute return								
Hedge equity	42,630,814	Market Neutral, Distressed Debt	N/A		Monthly, Quarterly	2 - 60 days	N/A	N/A
Hedge event driven	52,081,022	Multistrategy	N/A		Quarterly	60 days	1 yr initial lock-up	N/A
Hedge fund of funds	271,530	Distressed Debt	N/A		Quarterly	60 days	N/A	N/A
Hedge market dependent	133,170,403	Managed Futures, Market Neutral	N/A		Weekly, Monthly	1 - 5 days	N/A	N/A
Hedge market independent	348,896,928	Market Neutral, Long/Short	N/A		Monthly	5 - 10 days	\$1mm minimum	N/A
Hedge multi strategy	203,661,447	Market Neutral	N/A		Monthly	5 days	N/A	N/A
Total investments measured at the NAV	\$1,091,910,458							

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the table above.

- Absolute Return:** This asset class provides diversification to the total portfolio and strives to reduce total fund volatility while also enhancing the total return of the portfolio. The strategies underlying this asset class commonly are referred to as hedge funds, which are investment funds that can undertake a wider range of investment and trading activities than other mandates. Most often, hedge funds as a class will trade liquid securities on public markets but may also engage in private transactions. The following sub-asset classes contain hedge funds and their strategies are explained in greater detail on the next page:

- **Hedge Equity.** This sub-asset class contains two funds. One fund has a Managed Futures strategy, using tools like futures and options to gain the necessary exposure to equities, bonds, rates, currencies, and commodities to implement a long term trend following and directional strategy. The other fund has a Distressed Debt strategy, in which debt or equity securities of an issuer in bankruptcy or perceived to be near bankruptcy or undergoing a turnaround are purchased. These issuers tend to be good companies with a distressed financial situation and the market price may not fully reflect the intrinsic or realizable value of the enterprise going forward. The fund investor will typically seek out governance rights to guide the company out of bankruptcy or through a turnaround situation.
- **Hedge Event Driven.** This sub-asset class is a hedge fund investment strategy that seeks to exploit pricing inefficiencies that may occur before or after a corporate event, such as an earnings call, bankruptcy, merger, acquisition, or spinoff. Event-driven investing strategies are typically used only by sophisticated investors, such as hedge funds and private equity firms because traditional equity investors, including managers of equity mutual funds, do not have the expertise or access to information necessary to properly analyze the risks associated with many of these corporate events.
- **Hedge Fund of Funds.** This sub-asset class is an investment vehicle whose portfolio consists of shares in a number of hedge funds. The fund of funds strategy can be applied to any type of investment fund, from a mutual fund to a private equity fund. The fund of funds – which may also be called a collective investment or a multi-manager investment – simply holds a portfolio of other investment funds instead of investing directly in securities, such as stocks, bonds, commodities or derivatives. Funds of hedge funds simply follow this strategy by constructing a portfolio of other hedge funds. How the underlying hedge funds are chosen can vary. A fund of hedge funds may invest only in hedge funds using a particular management strategy. Or, a fund of hedge funds may invest in hedge funds using many different strategies in an attempt to gain exposure to all of them.
- **Hedge Market Dependent.** This sub-asset class contains one fund in which the strategy is considered Market Neutral. It attempts to exploit pricing inefficiencies between related securities, balancing long and short exposures helping to reduce market risk.
- **Hedge Market Independent.** This sub-asset class contains two funds both of which share the Long/Short strategy, which is a strategy designed to invest in equity and/or fixed income securities through taking long and short (using securities borrowed from others for the purpose) positions to reduce market risk exposure.
- **Hedge Multi Strategy.** This sub-asset class contains one fund which has a Global Macro strategy. A Global Macro strategy uses macroeconomic analysis based on global market events and trends to identify opportunities for investment that would profit from anticipated price movements. It may take positions in equity, bond or currency markets in anticipation of such events in order to generate a risk-adjusted return.

#### **Custodial Credit Risk for Investments:**

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, LAGERS will not be able to recover the value of investments or collateral securities that are in the possession of an outside party. LAGERS does not have a formal policy for custodial credit risk. As of June 30, 2018, investments in the amount of \$5,405,678 were uninsured and unregistered, with securities held by the counter party or by its trust department or agent but not in LAGERS name.

#### **Concentration of Credit Risk:**

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issue. External investment management firms manage the fixed income portfolio. The allocation of assets among various asset classes is set by the Board with the objective of optimizing the investment return of LAGERS with framework of acceptable risk and diversification. As of June 30, 2018, no single issue exceeded 5 percent of the portfolio, excluding U.S. government securities.

# Notes to Financial Statements (continued)

## Credit Risk:

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to LAGERS. LAGERS does not have a formal policy relating to credit risk. At June 30, 2018, 39 percent of the underlying fixed income assets represent obligations that are not guaranteed by the U.S. government. Below is a list of fixed income credit qualities.

### Quality Rating

	AAA <sup>+/-</sup>	AA <sup>+/-</sup>	A <sup>+/-</sup>	BBB <sup>+/-</sup>	Non-Investment Grade/Not Rated	Total
US corporate bonds		\$ 200,574	\$ 9,094,926	\$ 41,107,617	\$ 331,712,028 <sup>#</sup>	\$ 382,115,145
US government bonds		599,626,108		5,051,958	2,786,225	607,464,291
International bonds	\$ 61,692,343	115,301,926	124,793,349	84,779,003	307,954,589	694,521,210
Mortgage/asset backed securities		69,892	23,593,967		183,968,565	207,632,424

<sup>#</sup>Non-investment grade/not rated corporate bonds include investments in corporate bond funds, which include individually rated securities but are not rated at the fund level, as well as bank loans. As of June 30, 2018, corporate bond funds totaled \$47,061,814 and bank loans totaled \$156,147,326.

## Interest Rate Risk:

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of a debt instrument's exposure to a change in interest rates and the related sensitivity of market price to parallel shifts in the yield curve. It uses the present value of cash flows, weighted for those cash flows as a percentage of the instruments' full price. LAGERS does not have a formal policy relating to interest rate risk. LAGERS benchmarks for the fixed income portfolio include the Consumer Price Index plus 4 percent (Private Fixed Income), Barclays Capital US Aggregate Bond Index, Barclays Capital Global Aggregate Bond Index, Barclays Capital US 20+ Year Treasury Bond Index, and 33% JP Morgan EMBI Global Diversified, 33% JP Morgan GBIEM Global Diversified, 33% JP Morgan CEMBI Broad Diversified. At June 30, 2018, the effective duration for the fixed income benchmark portfolio was 4.2 years, whereas, the LAGERS fixed income portfolio had an effective duration of five years.

Investment	Fair Value	Duration Rate
Government bonds	\$ 1,145,087,909	11.3 years
Corporate bonds	539,012,737	2.7 years
Mortgage & asset - backed securities	207,632,424	2.3 years
<b>Total</b>	<b>\$ 1,891,733,070</b>	

## Foreign Currency Risk:

The international portfolio is constructed on the principles of diversification, quality, value and growth. Risk of loss arises from changes in currency exchange rates. LAGERS' external managers may or may not hedge the portfolio's foreign currency exposures with currency forward contracts depending upon their views on a specific foreign currency relative to the U.S. dollar. Currency trading may not be used for speculative purposes. LAGERS does not have a formal policy relating to foreign currency risk, as this is handled at the manager level. LAGERS exposure to foreign currency risk can be found on the next page:

Currency	Foreign		Total
	Equities	Fixed Income	
Australian dollar	\$ 7,459,837	\$ 29,620,203	\$ 37,080,040
Argentine peso		10,720,386	10,720,386
Brazilian real	11,242,514	72,647,933	83,890,447
British pound	47,739,813	76,518,503	124,258,316
Canadian dollar	20,861,773	21,449,337	42,311,110
Chilean peso	651,592	12,267,665	12,919,257
Chinese yuan renminbi (offshore)		4,590,056	4,590,056
Chinese yuan renminbi		6,285,184	6,285,184
Colombian peso		13,162,736	13,162,736
Czech koruna	27,018	540,111	567,129
Danish krone	12,058,573	3,469,203	15,527,776
Egyptian pound	27,971		27,971
Euro	(21,690,291)	336,072,610	314,382,319
Hong Kong dollar	69,980,556	9,159,392	79,139,948
Hungarian forint	692,262	377,138	1,069,400
Indonesian rupiah	4,756,532	15,011,824	19,768,356
Indian rupee	21,805,041	7,946,208	29,751,249
Israeli shekel	6,200,095	8,117,615	14,317,710
Japanese yen	73,201,002	108,849,822	182,050,824
Kazakhstan tenge		513,442	513,442
Malaysian ringgit	9,295,161	946,889	10,242,050
Mexican peso	3,153,250	65,681,209	68,834,459
New Zealand dollar	1,338,542	2,357,530	3,696,072
Nigerian naira	978,559	2,931,540	3,910,099
Norwegian krone	8,694,566	3,257,672	11,952,238
Pakistan rupee	906,950	6,633	913,583
Peruvian Nuevo sol	804,591	2,782,616	3,587,207
Philippine peso	361,551	752,764	1,114,315
Polish zloty	(1,406,498)	1,370,818	(35,680)
Qatari riyal	342,927	6	342,933
Romanian leu		(735,128)	(735,128)
Russian ruble		19,273,830	19,273,830
Singapore dollar	4,840,502	244,184	5,084,686
South African rand	4,494,285	21,701,155	26,195,440
South Korean won	39,754,978	9,215,648	48,970,626
Swedish krona	3,202,800	11,647,155	14,849,955
Swiss franc	18,203,138	8,341,938	26,545,076
Taiwan dollar	37,603,091	(1,079,664)	36,523,427
Thai baht	17,369,300	1,850,221	19,219,521
Turkish lira	4,614,357	31,984,823	36,599,180
United Arab Emirates dirham	101,314	110,055	211,369
Uruguayan peso		4,456,972	4,456,972
Vietnamese dong		496,085	496,085
<b>Total</b>	<b>\$ 409,667,652</b>	<b>\$ 924,914,319</b>	<b>\$ 1,334,581,971</b>

# Notes to Financial Statements (continued)

## Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indexes. They include futures contracts, swap contracts, options contracts, and forward foreign currency exchange contracts. The tables below summarize the various contracts in the portfolio as of June 30, 2018.

Through LAGERS external managers, LAGERS holds investments in futures contracts, swap contracts, option contracts, and forward foreign currency exchange contracts. LAGERS enters futures and swaps contracts to gain exposure to certain markets and to manage interest rate risk and enters into forward foreign exchange contracts primarily to hedge foreign currency exposure.

The notional values associated with these derivative instruments are generally not recorded in the financial statements; however, the amounts for the exposure of these instruments are recorded in the Statement of Fiduciary Net Position and the total changes in fair value for the year are included as investment income in the Statement of Changes in Fiduciary Net Position. For the year ended June 30, 2018, the change in fair value in futures contracts resulted in \$78.1 million of investment income, options contracts resulted in \$753 thousand of investment income, swaps contracts resulted in \$59.5 million of investment income, and forwards contracts resulted in \$17.4 million of investment loss. LAGERS does not anticipate additional significant market risk from the swap arrangements.

	Notional Value	Unrealized Gain (Loss)
<b>Futures</b>	\$ 1,849,688,288	
<b>Swaps</b>	931,770,461	\$ 8,532,959
<b>Forwards</b>		
Foreign exchange contracts	1,080,161,991	(4,702,313)
<b>Options</b>		
Margined options	120,550	
Caps and floors	30,200,000	85,813
Options	16,723,000	35,516
Options on futures	6,320,000	14,230
Swaptions	29,400,000	7,130
	\$ 3,944,384,290	\$ 3,973,335

LAGERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. LAGERS anticipates that the counterparties will be able to satisfy their obligations under the contracts.

At June 30, 2018, the counterparties' credit ratings for futures, forwards, swaps, and options are subject to credit risk as shown in the table below. Derivative instruments traded on the exchange are not subject to counterparty risk and therefore are not included in the table below.

## Derivatives Counterparty Credit Ratings

Quality	Forwards	Swaps	Options	Total
AA-		\$ 694,980	\$ 51,044	\$ 746,024
A+		16,795,137	(20,548)	16,774,589
A		528,683	1,410	530,093
A-		(6,966)		(6,966)
BBB+		13,974	3,130	17,104
Not available or not rated	\$ (4,702,313)	(10,357,269)	(54,887)	(15,114,469)
<b>Total subject to credit risk</b>	<b>\$ (4,702,313)</b>	<b>\$ 7,668,539</b>	<b>\$ (19,851)</b>	<b>\$ 2,946,375</b>

**Securities Lending Program:**

LAGERS participates in a securities lending program administered by Northern Trust Company (the custodian) in accordance with the provisions of RSMo. 70.745. A firm chosen to lend financial securities of the fund has full discretion over the selection of borrowers and shall continually review credit worthiness of potential borrowers through adequate analysis of all material provided to them. The securities lending program shall in no way inhibit the trading activities of the investment managers of the System. The securities lending agent and Investment Team have created separate investment guidelines for the investment of cash collateral to adhere to the Statement of Investment Policy and Objectives.

LAGERS or the borrower can terminate any security loan on demand. Though any loaned security can be sold and reclaimed at any time from the borrower, the weighted average loan life of overall loans was 156 days as of June 30, 2018. Cash collateral is invested in a custom collateral account through Northern Trust Company with a weighted average life of 38 days. LAGERS cannot pledge or sell non-cash collateral unless the borrower defaults. The following table represents the balances relating to the securities lending transactions (in thousands) at June 30, 2018.

Securities on Loan	Underlying Securities	Securities Collateral Value	Cash Collateral Value
U.S. government & agency securities	\$ 285,483	\$ 1,353	\$ 289,734
International bonds	56,972	46,585	7,245
U.S. corporate bonds	16,643		17,115
U.S. equities	130,747	1,202	133,092
Global equities	71,203	60,863	6,119
<b>Total</b>	<b>\$ 561,048</b>	<b>\$ 110,003</b>	<b>\$ 453,305</b>

The lending agent provides indemnification if the borrowers fail to return the underlying securities (and if the collateral is inadequate to replace the securities lent) or fails to pay income distributions. There were no violations of legal or contractual provisions and no borrower or lending agent default losses to the security lending agent. LAGERS had no credit risk as a result of its securities lending program as the collateral held exceeded the fair value of securities lent.

**(4) Contributions**

(a) Each participating unit of local government is obligated by state law to make all required contributions to the plan based upon an annual actuarial valuation.

(b) LAGERS is a pension plan covering substantially all employees of participating units of local government in the state. Each participating unit of government is obligated by state law to make all required contributions to the plan. The required contributions are actuarially determined using the individual entry-age actuarial cost method. There are no long-term contracts for contributions to the plan. All liabilities are amortized over a period of 30 years or less. Assumed administrative expenses are added to the Normal Cost and were 0.4 percent of payroll.

(c) Employee contributions are determined at the election of the governing body of the local subdivision. Should the governing body elect to participate in the contributory plan, all employees shall contribute 4 percent of gross salary. The governing body may elect to participate in the non-contributory plan which would result in no employee contributions.

(d) The state statutes require LAGERS to maintain five separate reserves which are funded and described below:

Member Reserve Fund — The fund in which member contributions and interest credits are accumulated, and from which transfers are made for retirements and refunds, as applicable. The balance at June 30, 2018, was \$154,422,173.

Employer Reserve Fund — The fund in which employer contributions and interest credits are accumulated, and from which transfers are made to pay applicable benefits. The fund from which contributions are accumulated and benefit payments in excess of IRC Section 415 are made. The balance at June 30, 2018, was \$3,795,163,757.

# Notes to Financial Statements (continued)

**Benefit Reserve Fund** — The fund from which all retirement, disability, survivor and certain deferred retirants due to Legacy Plans benefits are paid. At the time of retirement, this fund receives the necessary transfers to pay such benefits. All retired individuals and the assets of this fund become the sole responsibility of the LAGERS Board of Trustees and result in no further liabilities to the previous employers. The balance at June 30, 2018, was \$3,789,795,657.

**Casualty Reserve Fund** — The fund in which the employer contributions and interest credits are accumulated and from which transfers are made to pay for members retired as a result of disability. The balance at June 30, 2018, was \$16,784,865.

**Income-Expense Reserve Fund** — The fund which accumulates the investment income and pays the administrative expenses of the system. This fund provides for the transfer of administrative expenses and investment credits to the other reserves of the system. The remaining balance at June 30, 2018 was \$79,910, which is equal to the net of the current year pension expense and OPEB gain for the LAGERS Staff Retirement Plan and LAGERS Postemployment Benefit Plan, respectively.

## (5) LAGERS Staff Retirement Plan

### Summary of Significant Accounting Policies

**Pensions.** For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the LAGERS Staff Retirement Plan (LSRP) and additions to/deductions from LSRP fiduciary net position have been determined on the same basis as they are reported by the LSRP. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

### General Information about the Pension Plan

**Plan description.** The LSRP is a single-employer defined benefit pension plan administered by the LAGERS Board of Trustees. The plan provides retirement, death and disability benefits to LAGERS employees and beneficiaries. The plan document is controlled by the LAGERS Board of Trustees.

**Benefits provided.** The LSRP provides retirement, death and disability benefits. Benefit provisions are adopted by the LAGERS Board of Trustees. All benefits vest after five years of credited service. Employees who retire on or after age 60 with five or more years of service are entitled to an allowance for life based upon the benefit program information provided below. Employees may retire with an early retirement benefit with a minimum of five years of credited service and after attaining age 55 and receive a reduced allowance.

Benefit Multiplier	2 %
Final Average Salary	3 Years
Member Contributions	0 %

Benefit terms provide for annual post retirement adjustments to each member’s retirement allowance subsequent to the member’s retirement date. The annual adjustment is based on the increase in the Consumer Price Index and is limited to 4 percent each year.

**Employees covered by benefit terms.** At June 30, 2018, the following employees were covered by the benefit terms:

Retirees or beneficiaries currently receiving benefits	10
Inactive employees entitled to but not yet receiving benefits	1
Active employees	30
Total	41

**Contributions.** LAGERS is required to contribute amounts at least equal to the actuarially determined rate. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance an unfunded accrued liability. Full-time employees do not contribute to the pension plan. The employer contribution rate was 12.44 percent of annual covered payroll.

**Net Pension Liability.** The employer's net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2018.

**Actuarial assumptions.** The total pension liability in the June 30, 2018, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.25 %, including price inflation
Salary Increase	3.25 % to 6.55%, including wage inflation
Investment rate of return	7.25 %

Mortality rates were based on the RP-2014 mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006.

The actuarial assumptions used in the June 30, 2018, valuation were based on the results of an actuarial experience study for the period March 1, 2010, through February 28, 2015.

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Equity	48.00 %	4.81 %
Fixed Income	28.50 %	1.72 %
Real Assets/Real Return	23.50 %	3.42 %

**Discount rate.** The discount rate used to measure the total pension liability is 7.25 percent. The projection of cash flows used to determine the discount rate assumes that employer contributions will be made at the actuarially determined rates. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payment to determine the total pension liability.

#### Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances at 6/30/2017</b>	\$ 11,304,541	\$ 10,887,320	\$ 417,221
<b>Changes for the year</b>			
Service cost	338,728		338,728
Interest	817,596		817,596
Difference between expected and actual experience	1,307,186		1,307,186
Contributions - employer		363,705	(363,705)
Net investment income		779,735	(779,735)
Benefit payments including refunds	(393,426)	(393,426)	
Net changes	2,070,084	750,014	1,320,070
<b>Balances at 6/30/2018</b>	<b>\$ 13,374,625</b>	<b>\$ 11,637,334</b>	<b>\$ 1,737,291</b>

**Sensitivity of the net pension liability to changes in the discount rate.** The following presents the Net Pension Liability of the employer, calculated using the discount rate of 7.25 percent, as well as what the employer's Net Pension Liability would be using a discount rate that is 1 percentage point lower (6.25%) or one percentage point higher (8.25%) than the current rate.

Current Single Discount		
1% Decrease	Rate Assumption	1% Increase
6.25%	7.25%	8.25%
\$3,977,853	\$1,737,291	\$(65,553)

**Plan fiduciary net position.** Detailed information about the plan's fiduciary net position is available in the separately issued financial statements. The LAGERS Board of Trustees issues a publicly available audited financial report that includes financial statements and required supplementary information for the LSRP. This report can be obtained by contacting the LAGERS office.

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

For the year ended June 30, 2018, the employer recognized pension expense of \$157,006. The employer reported deferred outflows and inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference in experience	\$ 1,616,675	\$ 277,806
Difference in assumptions	215,858	
Excess investment returns	282,498	256,940
<b>Total</b>	<b>\$ 2,115,031</b>	<b>\$ 534,746</b>

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

Year Ending	
2019	\$ 340,984
2020	212,336
2021	138,816
2022	224,462
2023	289,184
Thereafter	374,503
	<b>\$1,580,285</b>

### Payable to the Pension Plan

As of June 30, 2018, there are no payables for the outstanding amount of contributions to the pension plan required for the year ended June 30, 2018.

## (6) Staff Postemployment Healthcare Supplement

### Summary of Significant Accounting Policies

**Postemployment Benefits Other Than Pensions (OPEB).** For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the LAGERS Staff Retiree Healthcare Supplement (LSRHS) and additions to/deductions from LSRHS fiduciary net position have been determined on the same basis as they are reported by LSRHS. For this purpose, LSRHS recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at a fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

**General Information about the OPEB Plan**

**Plan description.** LSRHS is a single-employer defined benefit healthcare supplement administered by the LAGERS Board of Trustees. The LSRHS provides a healthcare subsidy to eligible staff retirees, spouse and minor children. The supplement does not provide access to retiree health coverage but will pay for a portion of a retiree’s health premium (subsidy) based upon coverage the retiree is able to obtain through the open market. To be eligible for the subsidy a retiree must have at least 10 years of service credit and retire from active status.

**Benefits provided.** The subsidy is equal to 2.5 percent multiplied by years of credited service (maximum 30 years) multiplied by healthcare premium. Under no circumstances can the healthcare premium exceed the premium LAGERS would pay for an active member of the same age participating in the LAGERS Staff healthcare plan.

Inactive employees or beneficiaries currently receiving benefit payments	8
Inactive employees entitled to but not yet receiving benefits	0
Active employees	30
<b>Total</b>	<b>38</b>

**Employees covered by benefit terms.** At June 30, 2018, the following employees were covered by the benefit terms:

**Contributions.** The Board establishes rates based on an actuarially determined rate. For the year ended June 30, 2018, the contribution rate was 1.79 percent of covered payroll. Employees are not required to contribute to the plan.

**Net OPEB Liability.** The employer’s net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of June 30, 2018.

**Actuarial assumptions.** The total OPEB liability in the June 30, 2018, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.25%, including price inflation
Salary Increase	3.25 % to 6.55%, including wage inflation
Investment rate of return	7.25 %
Healthcare cost trend rates	9% for 2019, decreasing .75% per year until 2024 then decreasing .50% until 2028 to an ultimate rate of 3.25% for 2028 and later years

Mortality rates were based on the RP-2014 mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006.

The actuarial assumptions used in the June 30, 2018, valuation were based on the results of an actuarial experience study for the period March 1, 2010, through February 28, 2015.

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Equity	48.00 %	4.80 %
Fixed Income	28.50 %	1.84 %
Real Assets/Real Return	23.50 %	3.91 %

**Discount rate.** The discount rate used to measure the total OPEB liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumes that employer contributions will be made at the actuarially determined rates. Based on these assumptions, the OPEB plan’s fiduciary net position was projected to be available to pay all projected future benefit payments of current active employees. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payment to determine the total OPEB liability.

## Changes in Net OPEB Liability

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (Asset) (a) - (b)
<b>Balances at 6/30/2017</b>	\$ 1,554,845	\$ 1,780,465	\$ (225,620)
<b>Changes for the year</b>			
Service cost	49,231		49,231
Interest	113,349		113,349
Difference between expected and actual experience	(104,764)		(104,764)
Changes of assumptions*	148,738		148,738
Contributions - employer		52,560	(52,560)
Net investment income		112,769	(112,769)
Benefit payments including refunds	(32,053)	(32,053)	
Net changes	174,501	133,276	41,225
<b>Balances at 6/30/2018</b>	<b>\$ 1,729,346</b>	<b>\$ 1,913,741</b>	<b>\$ (184,395)</b>

\* The health care trend rates were reset to the rates used in the previous OPEB valuation.

**Sensitivity of the net OPEB liability to changes in the discount rate and healthcare cost trend rates.** The following presents the net OPEB liability (asset) of LAGERS as well as what LAGERS' net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current discount rate:

Current Single Discount Rate Assumption		
1% Decrease		1% Increase
<b>6.25%</b>	<b>7.25%</b>	<b>8.25%</b>
\$117,890	\$(184,395)	\$(426,825)

The following presents the net OPEB liability (asset) of LAGERS as well as what LAGERS' net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate:

Healthcare Cost Trend Rate Assumption		
1% Decrease		1% Increase
\$(423,413)	\$(184,395)	\$104,697

**OPEB plan fiduciary net position.** Detailed information about the OPEB plan's fiduciary net position is available in the separately issued financial statements. The LAGERS Board of Trustees issues a publicly available audited financial report that includes financial statements and required supplementary information for the LSRHS. This report can be obtained by contacting the LAGERS office.

**OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

For the year ended June 30, 2018, LAGERS recognized an OPEB gain of \$236,916. The employer reported deferred outflows and deferred inflows of resources related to OPEB from the following sources

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience		\$ 92,614
Changes of assumptions	\$ 131,488	
Net difference between projected and actual earnings on OPEB plan investments	13,646	
<b>Total</b>	<b>\$ 145,134</b>	<b>\$ 92,614</b>

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

Year Ending	
2019	\$ 8,512
2020	8,512
2021	8,512
2022	8,510
2023	5,100
Thereafter	13,374
	<b>\$ 52,520</b>

**Payable to the OPEB Plan**

At June 30, 2018, there are no payables for the outstanding amount of contributions to the OPEB plan required for the year ended June 30, 2018.

**(7) Commitments and Contingencies**

LAGERS has committed \$4,913,320,142, of which \$3,070,107,120 has been invested, leaving total unfunded commitments to real estate, private equity, and other alternative investments of \$1,843,213,022 as of June 30, 2018. The total unfunded investment commitments are not recorded in the accompanying Statement of Fiduciary Net Position.

**(8) Risk Management**

LAGERS is exposed to various risks of loss related to natural disasters, errors and omissions, loss of assets, torts, etc. LAGERS has chosen to cover such losses through the purchase of commercial insurance. There have been no material insurance claims filed or paid during the past three years.

LAGERS has a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal operations.

## Required Supplementary Information

Schedule of Investment Returns					
	2018	2017	2016	2015	2014
Annual money weighted rate of return (IRR) net of investment expenses	13.70 %	12.44 %	(.22) %	2.07 %	19.03 %

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

## LAGERS STAFF RETIREMENT PLAN

Schedule of Changes in Net Pension Liability					
Fiscal Year Ending June 30	2018	2017	2016	2015	2014
<b>Total pension liability</b>					
Service cost	\$ 338,728	\$ 279,933	\$ 269,096	\$ 248,381	\$ 233,620
Interest on total pension liability	817,596	722,819	643,321	635,359	575,236
Difference between expected and actual experience	1,307,186	586,625	63,013	(553,190)	313,742
Assumption changes			341,762		
Benefit payments	(393,426)	(229,584)	(222,579)	(239,592)	(361,806)
Net change in total pension liability	2,070,084	1,359,793	1,094,613	90,958	760,792
Total Pension Liability - Beginning	11,304,541	9,944,748	8,850,135	8,759,177	7,998,385
Total Pension Liability - Ending (a)	13,374,625	11,304,541	9,944,748	8,850,135	8,759,177
<b>Pension fiduciary net position</b>					
Employer contributions	\$ 363,705	\$ 318,068	\$ 371,358	\$ 372,741	\$ 769,001
Pension plan net investment income	779,735	1,132,266	305,689	18,466	1,365,280
Benefit payments	(393,426)	(229,584)	(222,579)	(239,592)	(361,806)
Net change in fiduciary net position	750,014	1,220,750	454,468	151,615	1,772,475
Plan Fiduciary Net Postion - Beginning	10,887,320	9,666,570	9,212,102	9,060,487	7,288,012
Plan Fiduciary Net Postion - Ending (b)	11,637,334	10,887,320	9,666,570	9,212,102	9,060,487
Net pension liability (asset) - Ending (a-b)	1,737,291	417,221	278,178	(361,967)	(301,310)
Fiduciary net position as a percentage of total pension liability	87.01%	96.31%	97.20%	104.09%	103.44%
Covered employee payroll	2,895,457	\$ 2,862,600	\$ 2,372,202	\$ 2,253,365	\$ 2,074,725
Net Pension liability (asset) as a percentage of covered employee payroll	60.00%	14.57%	11.73%	(16.06)%	(14.52)%

*This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years where information is available.*

# Required Supplementary Information (continued)

## LAGERS Staff Retirement Plan (continued)

Schedule of Employer Contributions					
Year Ended June 30	Actuarial Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2018	\$ 304,693	\$ 363,705	\$ (59,012)	\$ 2,895,457	12.56
2017	295,261	318,068	(22,807)	2,862,600	11.11
2016	336,059	371,358	(35,299)	2,372,202	15.65
2015	351,076	372,741	(21,665)	2,253,365	16.54
2014	314,407	740,127	(425,720)	2,074,725	35.67
2013	293,419	342,575	(49,156)	1,837,069	18.65
2012	348,479	936,857	(588,378)	1,672,378	56.02
2011	313,225	1,563,687	(1,250,462)	1,453,875	107.55
2010	201,988	222,160	(20,172)	1,553,466	14.30
2009	174,918	195,439	(20,521)	1,380,333	14.16

Valuation date ..... June 30, 2016

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

Actuarial cost method.....Entry Age Normal  
 Amortization method .....Closed, level percent of payroll  
 Remaining amortization period .....Varies between 13 to 21 years  
 Asset valuation method.....5-year smoothed market; 20% corridor  
 Inflation.....3.25%; including price inflation assumption of 2.5%  
 Salary increases.....3.25% - 6.55% including inflation  
 Retirement age.....Experience-based table of rates that are specific to the type of eligibility condition  
 Last updated for 2016 valuation pursuant to an experience study of the period 2010 - 2015

Mortality.....RP-2014 mortality table for males and females, adjusted for improvement back to the observation period base year of 2006. The base year for males was then established to be 2017. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale.

The mortality table was established based on the experience of the Missouri LAGERS membership total. Based on the experience observed during the most recent 5 year period study.

**Other Information**

Notes..... There were no benefit changes during the year.

## LAGERS Staff Retiree Healthcare Supplement

Schedule of Changes in Net OPEB Liability		
Fiscal Year Ending June 30	2018	2017
<b>Total OPEB liability</b>		
Service cost	\$ 49,231	\$ 47,681
Interest	113,349	104,515
Difference between expected and actual experience	(104,764)	
Changes of assumptions	148,738	
Benefit payments	(32,053)	(30,195)
Net change in total OPEB liability	174,501	122,001
<b>Total OPEB Liability - Beginning</b>	<b>1,554,845</b>	<b>1,432,844</b>
<b>Total OPEB Liability - Ending (a)</b>	<b>1,729,346</b>	<b>1,554,845</b>
<b>OPEB fiduciary net position</b>		
Employer contributions	52,560	121,994
Net investment income	112,769	183,168
Benefit payments	(32,053)	(30,195)
Net change in plan fiduciary net position	133,276	274,967
<b>Plan fiduciary net position - beginning</b>	<b>1,780,465</b>	<b>1,505,498</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>1,913,741</b>	<b>1,780,465</b>
<b>Net OPEB liability (asset) - Ending (a-b)</b>	<b>(184,395)</b>	<b>(225,620)</b>
Plan fiduciary net position as a Percentage of total OPEB liability	110.66%	114.51%
<b>Covered employee payroll</b>	<b>2,895,457</b>	<b>2,372,202</b>
<b>Net OPEB liability (asset) as a percentage of covered employee payroll</b>	<b>-6.37%</b>	<b>-9.51%</b>

*This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, information is presented for those years where information is available.*



# Supplementary Information

<b>OPERATING EXPENSES</b>		
<b>Administrative Expenses</b>		
Year Ended June 30, 2018		
<b>Personnel Services:</b>		
Staff salaries	\$ 1,951,133	
Social Security	149,101	
Staff retirement plan	303,458	
OPEB	34,514	
Insurance	352,015	
Professional development	41,216	
Total Personnel Services		\$ 2,831,437
<b>Professional Services:</b>		
Actuarial services	\$ 473,154	
Data processing	528,506	
Audit	81,762	
General counsel	35,671	
Legislative	54,000	
Medical advisors	47,465	
Other	6,572	
Total Professional Services		\$ 1,227,130
<b>Communications:</b>		
Public information	\$ 54,700	
Printing	46,123	
Telephone	53,383	
Postage	105,058	
Meetings and travel	126,009	
Total Communications		\$ 385,273
<b>Miscellaneous:</b>		
Utilities	\$ 35,675	
Insurance premiums	90,964	
Equipment maintenance	213,425	
Office supplies	50,551	
Building maintenance	36,646	
Depreciation	705,328	
Total Miscellaneous		\$ 1,132,589
<b>Total Administrative Expenses</b>		<b>\$ 5,576,429</b>
<b>Investment Expenses</b>		
Year Ended June 30, 2018		
<b>Investment Manager Fees:</b>		
Equity managers	\$ 35,782,284	
Fixed income managers	16,733,250	
Real asset managers	42,577,596	
Strategic managers	4,611,672	
Securities lending managers	7,116,999	
Total Investment Manager Fees		\$ 106,821,801
<b>Other Investment Expenses:</b>		
Investment custodial services	\$ 417,196	
Internal investment expenses	1,370,262	
Total Other Investment Expenses		\$ 1,787,458
<b>Total Investment Expenses</b>		<b>\$ 108,609,259</b>

# Notes

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Photo Credit: Rolla Municipal Utilities

# SECTION 3: INVESTMENTS

# Chief Investment Officer's Report



## MISSOURI LOCAL GOVERNMENT EMPLOYEES RETIREMENT SYSTEM

701 West Main, P.O. Box 1665, Jefferson City, Missouri 65102  
 Telephone (573) 636-9455 • 800-447-4334 • FAX (573) 636-9671

[www.molagers.org](http://www.molagers.org)

Brian K. Collett, CFA, CAAA, Chief Investment Officer

October 12, 2018

The fiscal year ending June 30, 2018 was a good year for the markets overall, but an even better year for the LAGERS' portfolio. The portfolio returned +13.70% net of fees for the year, a +5.77% outperformance relative to the Total Policy Benchmark return of +7.93%. The outperformance by the portfolio was broad based, with each category outperforming its respective benchmark. These returns drove the overall portfolio value to \$7.7 billion, up from roughly \$7.0 billion at the end of last fiscal year. This one-year outperformance feeds into the portfolio's long term returns below:

- +8.33% net of fees annualized return over three years
- +9.11% net of fees annualized return over five years
- +7.83% net of fees annualized return over ten years
- +7.36% net of fees annualized return over twenty years

These returns were calculated by LAGERS' custodian, Northern Trust.

All time frames exceeded LAGERS' assumed rate of return and Total Policy Benchmark return, with the 1, 3, 5, and 10 year returns all outperforming the benchmark by more than +2%. This continues to translate into downward pressure on employer contributions and a higher funding status, creating a more secure retirement for our members.

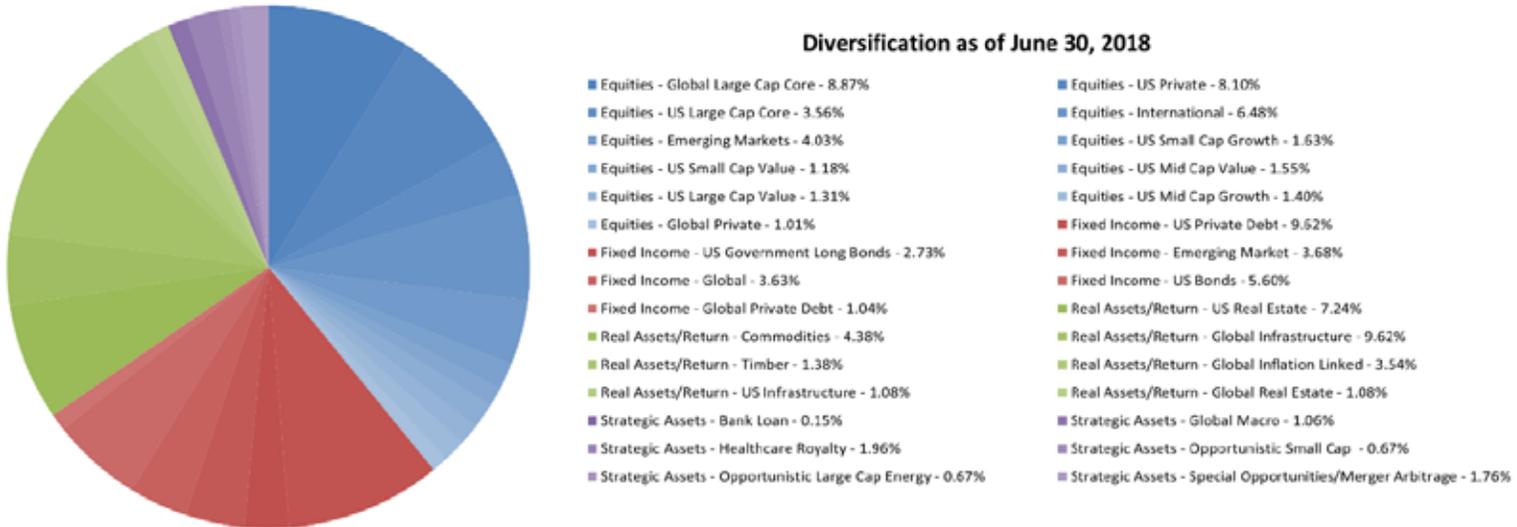
Public equities continued to rise during the year as positive consumer spending, along with tax cuts, helped boost corporate earnings. LAGERS' private equity managers were the primary source of outperformance in equities, as they saw increased valuations for the companies they held, and sold, resulting in +14.18% return for the year. The equity bucket overall returned +13.13% net of fees, a +2.06% outperformance over the Total Equity Benchmark.

LAGERS' Fixed Income portfolio returned +8.81% net of fees compared to LAGERS' Fixed Income Benchmark of +3.76%. As the Federal Reserve System continues to raise interest rates to keep pace with the improving economy, bonds are expected to underperform. As a result, the public fixed income allocation was essentially flat for the year, only returning +0.05%. The primary source of outperformance in fixed income came from the floating rate bonds held in the private fixed income allocation, specifically through LAGERS co-investment portfolio and fund investments. For these assets, as rates increased its corresponding coupons also increased, resulting in the rising rate environment actually contributing to the outperformance of these assets. Private Fixed Income returned +20.01% net of fees, contributing to the relative outperformance of +5.05% of the bucket as a whole.

LAGERS' Real Assets/Real Return portfolio returned +16.75% net of fees compared to LAGERS' Real Assets/Real Return Benchmark of +6.40%, a relative outperformance of +10.35% for the year. Oil and infrastructure related to its production, processing, and distribution, made a rebound during the year which lifted the valuations of LAGERS' infrastructure and commodity investments. The Real Estate allocation also contributed to outperformance, as the value-add strategies succeeded in creating value for the portfolio.

LAGERS' Strategic portfolio returned +23.96% net of fees, the best absolute performance of any bucket, compared to LAGERS' Strategic Benchmark of +8.57%, an outperformance of +15.39%. The outperformance was attributable to private royalty investments made by the fund, along with several opportunistic trades the LAGERS' investment team executed in energy, small-cap US equities, the Euro, and the British Pound.

The current allocation as of June 30, 2018 for the four main buckets is Total Equities 39.12%, Fixed Income 26.29%, Real Assets/Real Return 28.31% and Strategic Assets 6.27%. However, the LAGERS' team views risk at a much more granular level than just the four main buckets listed above. Below is an in-depth chart, showing all the various sub-categories within the portfolio. These sub-categories provide a better understanding of the risks and characteristics currently in the portfolio. The current allocation as of June 30, 2018 for the four main buckets is as follows: Total Equities is 39.12%, Fixed Income is 26.29%, Real Assets/Real Return is 28.31% and Strategic Assets is 6.27%.



Generating LAGERS' assumed rate of return of +7.25% in the current environment will involve implementing our risk-aware strategy. LAGERS' strategy takes full advantage of the illiquid nature of LAGERS' long-term, perpetual, investment portfolio by having the ability to invest in private strategies such as Private Equity, Infrastructure, Real Estate, Aviation, Mining, Shipping and other Natural Resources. These private strategies are expected to earn a premium to the public market returns, while diversifying the portfolio and decreasing overall risk. The asset allocation has been developed for the purpose of meeting this assumed rate of return in all environments, including the current. LAGERS' team is continuously looking for attractive opportunities to diversify the asset base to add to the return and reducing overall risk.

The asset allocation is based on short- and long-term goals, liquidity needs, risks and return characteristics of asset types, costs associated with available assets, and market conditions. You can have confidence that the risk-aware investment strategy that LAGERS continues to use will assure that long-term obligations to our members and retirees will be achieved.

Sincerely,



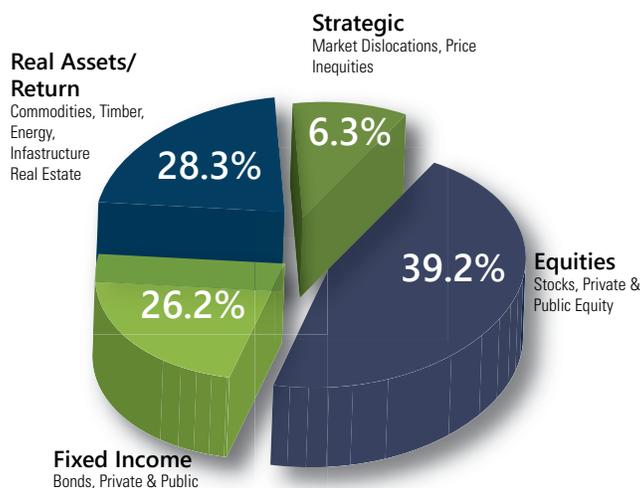
*Brian K. Collett*

Brian K. Collett, CFA, CAIA  
Chief Investment Officer

# Asset Allocation

Holdings by Asset Class	June 30, 2018		June 30, 2017	
	% of Total Fair Value	Fair Value	% of Total Fair Value	Fair Value
<b>Equities</b>				
Domestic	17.1 %	\$ 1,313,378,521	20.6 %	\$ 1,437,031,595
International	9.0	694,020,714	12.3	855,650,634
Emerging Markets	4.0	311,584,324	4.0	278,495,127
Private Equity	9.1	703,912,939	8.9	616,296,385
<b>Total Equities</b>	<b>39.2%</b>	<b>\$ 3,022,896,498</b>	<b>45.8 %</b>	<b>\$ 3,187,473,741</b>
<b>Fixed Income:</b>				
US Fixed Income	4.6 %	\$ 358,865,981	2.6 %	\$ 182,529,688
Global Fixed Income	3.8	295,355,128	3.1	215,874,223
Long Duration	2.9	225,367,861	3.0	210,127,182
Emerging Markets Debt	3.9	299,039,388	3.3	229,860,997
Private Fixed Income	11.0	852,888,753	11.3	788,148,388
<b>Total Fixed Income</b>	<b>26.2 %</b>	<b>\$ 2,031,517,111</b>	<b>23.3 %</b>	<b>\$ 1,626,540,478</b>
<b>Real Assets / Return:</b>				
Timber	1.4 %	\$106,917,967	1.5 %	\$ 103,171,337
Infrastructure	10.7	826,511,466	6.0	415,523,220
Real Estate	8.3	642,272,835	7.7	535,165,811
Commodities	4.4	338,694,563	3.0	205,774,603
Inflation Linked Bonds	3.5	273,204,786	2.9	200,464,311
<b>Total Real Assets / Return</b>	<b>28.3 %</b>	<b>\$ 2,187,601,617</b>	<b>21.1 %</b>	<b>\$ 1,460,099,282</b>
<b>Strategic:</b>				
Public Strategic	2.6 %	\$ 199,752,311	7.2 %	\$ 504,483,270
Private Strategic	3.7	284,778,414	2.6	179,995,613
<b>Total Real Assets / Return</b>	<b>6.3 %</b>	<b>\$ 484,530,725</b>	<b>9.8 %</b>	<b>\$ 684,478,883</b>
<b>Total Assets</b>	<b>100.0 %</b>	<b>\$7,726,545,951</b>	<b>100.0 %</b>	<b>\$ 6,958,592,384</b>

ASSET ALLOCATION-ASSET CLASS  
as of June 30, 2018



# Investment Policy

The LAGERS Board of Trustees, operating within the “prudent person” framework, has adopted a Statement of Investment Policy and Objectives for the investment managers and others who serve in a fiduciary capacity to the Fund. A summary of that policy follows. For a complete copy of the investment policy, please contact the LAGERS office.

## Investment Goals

The goal of the Fund shall be to achieve a rate of return net of manager fees of at least 7.25 percent per annum as measured over a full market cycle. The Trustees and Investment Staff will use the Fund’s asset allocation as the primary tool to achieve this goal. As this is a long-term projection and investments are subject to short-term volatility, the main investment focus of the Trustees and Investment Staff will be towards the Total Fund. Each asset manager, individual investment and/or security selection will be judged on performance relative to its asset class and to its relative benchmark over a full market cycle, usually 3-5 years. With respect to the given purpose, the System’s liquidity requirement, and the source and predictability of contributions, the Board elects to target portfolio risk of 10 percent standard deviation in pursuing the investment program. Thus, LAGERS actively seeks to lower/stabilize the cost of funding the System’s pension promise by prudently taking on types of risk that best serves the long-run interest of the Fund and, therefore, of the System’s participants.

The Trustees have established the following asset-mix guidelines for the Pension Fund:

<u>Asset Class</u>	<u>Pension Fund Target Guidelines</u>
Equity Investments	43.00%
Fixed Income Investments	26.00%
Real Asset/Return Investments	21.00%
Strategic Investments	10.00%

The Trustees have established the following liquidity guidelines for the Pension Fund:

<u>Liquidity Time Frame</u>	<u>Pension Fund Target Guidelines</u>
Short-Term (<1 week)	40.00%
Medium-Term (1 wk – 3yrs)	20.00%
Long-Term (>3 years)	40.00%

The Pension Fund’s total return should exceed the total return of an index composed as follows:

- 15.00% Russell 3000 Index
- 15.00% CPI + 6% (Private Equity)
- 14.00% CPI + 4% (Private Fixed Income)
- 8.00% CPI + 4% (Infrastructure)
- 7.00% CPI + 6% (Private Strategic)
- 5.00% CPI + 4% (Real Estate)
- 5.00% MSCI All Country World Index ND (non-hedged)
- 5.00% MSCI All Country World Index ex US ND (non-hedged)
- 3.00% MSCI Emerging Markets Index ND (non-hedged)
- 3.00% Barclays Capital US Aggregate Bond Index
- 3.00% Barclays Capital Global Aggregate Bond Index
- 3.00% Barclays Capital U.S. 20+ Year Treasury Bond Index
- 3.00% Barclays Capital Global Inflation-Linked Bond Index
- 3.00% 33% JP Morgan EMBI Global Div/33% JP Morgan GBIEM Global Div/33% JP Morgan CEMBI Broad Div
- 3.00% Bloomberg Commodity Index
- 3.00% CPI + 4.5% (Public Strategic Portfolio)
- 2.00% CPI + 2.5% (Timber)

# Investment Policy (continued)

## General Portfolio Guidelines

### Diversification

The diversification of securities among sectors and issuers is the responsibility of the investment manager and Investment Staff. Therefore, full discretion is delegated to the investment managers to carry out the Investment Policy within applicable general and specific guidelines agreed upon with Investment Staff for the managers' respective mandates. The Investment Staff has further diversification responsibility at the asset manager and asset class level and the Trustees have diversification responsibility at the total portfolio level. All investments made shall be subject to the quality and diversification restrictions established by Section 70.745, 70.746, 70.747, 105.687, 105.688 105.689 and 105.690 of the Revised Statutes of Missouri.

### Liquidity

Individual assets and/or investment mandates will be grouped into three different liquidity classifications. These classifications are based on the time frame it takes to liquidate the investment at prevailing market prices (i.e. not at a discount) and receive cash back. The classifications include short-term, medium-term, and long-term. Illiquid assets carry a theoretical illiquidity premium that is demanded by investors for securities that cannot be easily converted into cash. Therefore, these assets that are more illiquid should earn a higher return. Consistent with LAGERS' liquidity requirements and long-term nature of the fund, LAGERS has established liquidity allocation ranges.

### Style Adherence

The most important feature any individual manager brings to a multi-manager portfolio is style adherence. At least quarterly, fundamental portfolio characteristics and style benchmark comparisons will be monitored for adherence to a manager's identified style. The Trustees and Investment Staff recognize that different maturity ranges and sectors within the broad market categories go in and out of favor. Therefore, short-term examination of each investment's performance will review style adherence relative to similar style or duration peer comparisons and style benchmarks whilst maintaining a focus on the relative long-term return objective relative to their respective style benchmark.

### Performance Objectives

Primary emphasis is to be placed on relative rates of return. Over a market cycle (usually 3-5 years), the following are the performance expectations for the portfolio:

#### Fixed Income

- The benchmark for the fixed income composite portfolio is composed as follows:
  - 54.00% CPI + 4% (Private Fixed Income)
  - 11.50% Barclays Capital US Aggregate Bond Index
  - 11.50% Barclays Capital Global Aggregate Bond Index
  - 11.50% Barclays Capital U.S. 20+ Year Treasury Bond Index
  - 11.50% 33% JP Morgan EMBI Global Div/33% JP Morgan GBIEM Global Div/33% JP Morgan CEMBI Broad Div
- The total return of the fixed income composite, net of fees, should exceed the total return of the composite benchmark outlined above.
- The total return of each underlying portfolio or mandate in the composite should exceed the total return of an index of similar mandate or style assigned. The Investment Staff will use benchmarks specific to each respective asset or manager's mandate on a quarter-by-quarter basis to monitor each investment. Currency management is at the discretion of the Non-US managers.
- The goal of the fixed income composite portfolio shall be to achieve a total annualized real rate of return net of fees of at least 3.0 percent over the CPI as measured over a market cycle, usually 3-5 years.

#### Equity

- The benchmark for the equity composite portfolio is composed as follows:
  - 35.00% Russell 3000 Index
  - 35.00% CPI + 6% (Private Equity)
  - 11.50% MSCI All Country World Index ND (non-hedged)
  - 11.50% MSCI All Country World Index ex US ND (non-hedged)
  - 7.00% MSCI Emerging Markets Index ND (non-hedged)

- The total return of the equity composite, net of fees, should exceed the total return of the composite benchmark outlined above.
- The total return of each underlying portfolio or mandate in the composite should exceed the total return of an index of similar mandate or style assigned. The Investment Staff will use benchmarks specific to each respective asset or manager's mandate on a quarter-by-quarter basis to monitor each investment. Currency management is at the discretion of the Non-US managers.
- The goal of the equity composite portfolio shall be to achieve a total annualized real rate of return net of fees of at least 5.0 percent over the CPI as measured over a market cycle, usually 3-5 years.

### **Real Assets/Real Return**

- The benchmark for the real asset/real return composite portfolio is composed as follows:
  - 38.00% CPI + 4% (Infrastructure)
  - 24.00% CPI + 4% (Real Estate)
  - 14.25% Barclays Capital Global Inflation-Linked Bond Index
  - 14.25% Bloomberg Commodity Index
  - 9.50% CPI + 2.5% (Timber)
- The total return of the real asset/real return composite, net of fees, should exceed the total return of the composite benchmark outlined above.
- The total return of each underlying portfolio or mandate in the composite should exceed the total return of an index of similar mandate or style assigned. The Investment Staff will use benchmarks specific to each respective asset or manager's mandate on a quarter-by-quarter basis to monitor each investment. Currency management is at the discretion of the Non-US managers.
- The goal of the real asset/real return composite portfolio shall be to achieve a total annualized real rate of return of at least 3.25 percent over the CPI as measured over a market cycle, usually 3-5 years.

### **Strategic Assets**

- The benchmark for the strategic asset composite portfolio is composed as follows:
  - 70.0% CPI + 6.0% (Private Strategic)
  - 30.0% CPI + 4.5% (Public Strategic Portfolio)
- The total return of the strategic asset composite, net of fees, should exceed the benchmark total return of the composite benchmark outlined above.
- The total return of each underlying portfolio or mandate in the composite should exceed the total return of an index of similar mandate or style assigned. The Investment Staff will use benchmarks specific to each respective asset or manager's mandate on a quarter-by-quarter basis to monitor each investment. Currency management is at the discretion of the Non-US managers.
- The goal of the strategic asset composite portfolio shall be to achieve a total annualized real rate of return of at least 5.6 percent over the CPI as measured over a market cycle, usually 3-5 years.

## **Securities Lending Guidelines**

A firm chosen to lend financial securities of the fund has full discretion over the selection of borrowers and shall continually review credit worthiness of potential borrowers through adequate analysis of all material provided to them. The securities lending program shall in no way inhibit the trading activities of the investment managers of the System. The securities lending agent and Investment Staff has created separate investment guidelines for the investment of cash collateral to adhere to the Statement of Investment Policy and Objectives. The Investment Staff will review, at least quarterly, the performance of the program and ensure that proper collateralization procedures are adhered to as stated in the investment guidelines.

The Investment Staff has authority to manage the Security Lending's cash collateral. This collateral will be invested at Staff's discretion in the eligible investments permitted under this Statement of Investment Policy and Objectives, while also taking into the account the liquidity needs of the Security Lending program.

# Investment Results

Periods Ending June 30, 2018					
Total Portfolio:	1 Year	3 Years	5 Years	10 Years	15 Years
LAGERS	13.70 %	8.33 %	9.11 %	7.83 %	8.65 %
LAGERS Custom Index	7.93	6.23	6.91	5.44	6.88
Actuarial Assumed Rate of Return	7.25	7.25	7.25	7.32	7.38
Median All Funds > \$1 Bil	8.37	6.90	8.08	6.75	8.69
Consumer Price Index (CPI)	2.87	1.83	1.54	1.42	2.13
<b>Equity Portfolio:</b>					
LAGERS	13.13 %	10.05 %	11.70 %	8.47 %	9.09 %
MSCI's All Country World Index	10.73	8.19	9.41	5.80	8.19
Russell 3000 Index	14.78	11.58	13.29	10.23	9.61
Standard & Poor's 500 Index	14.37	11.93	13.42	10.17	9.30
<b>Fixed Income Portfolio:</b>					
LAGERS	8.81 %	5.36 %	6.10 %	8.09 %	7.08 %
Barclay's US Aggregate Index	(0.40)	1.72	2.27	3.72	
Barclay's Global Aggregate Index	1.36	2.58	1.50	2.58	3.68
<b>Real Assets/Return Portfolio:</b>					
LAGERS	20.46 %	12.71 %	11.38 %	8.16 %	7.95 %
LAGERS Custom Real Assets/Return Benchmark	6.77	5.73	5.49	5.42	6.14
<b>Strategic Portfolio:</b>					
LAGERS	23.96 %	6.92 %	5.69 %		
LAGERS Custom Strategic Benchmark	8.57	7.39	6.87		
<i>Note: Performance calculations were prepared using time-weighted rates of return</i>					

## Largest Holdings

### Largest Bond Holdings (By Fair Value)

June 30, 2018

	Par	Bonds	Fair Value
1)	\$ 3,120,685	CF Fid Floating Rate Hi Inc Fd	\$ 58,450,423
2)	57,460,000	US Treas Bonds Dtd 05/15/2016 2.5% Due 05-15-2046 Reg	52,212,293
3)	54,620,000	US Treas Bds 2.25% Due 08-15-2046	47,041,475
4)	42,595,000	US Treas Notes 0.125% Infl Idx 04-15-2020	45,091,931
5)	41,409,000	US Treas Infl Nts 0.375% Dtd 07/15/2015 07-15-2025	42,977,067
6)	42,500,000	US Treas 2.75% 02-15-2028	42,136,413
7)	40,326,000	US Treas Notes 0.125% 04-15-2021	41,971,789
8)	46,000,000	US Treas Bds Dtd 00247 2.5% Due 02-15-2046 Reg	41,822,280
9)	39,300,000	FNMA Single Family Mortgage 3.5% 30 Years Settles July	39,115,133
10)	38,100,000	FNMA Single Family Mortgage 4% 30 Years Settles August	38,787,934

### Largest Stock Holdings (By Fair Value)

June 30, 2018

	Shares	Stock	Fair Value
1)	8,044,786	MFO DFA Dimensions Group Inc Emerging Mrkts Small Cap	\$ 175,859,036
2)	300,010	MFC SPRD S&P 500 ETF Trust Units Series 1	81,386,713
3)	10,000	PVPL Eagle Holding Company Inc Series B	12,000,000
4)	227,768	Tencent Holdings Limited	10,471,317
5)	6,017	Amazon Inc	10,227,697
6)	54,412	ADR Alibaba Group Holding Limited	10,095,058
7)	17,303	Kering	9,769,745
8)	63,052	Estee Lauder Companies Inc	8,996,890
9)	34,798	UnitedHealth Group Inc	8,537,341
10)	340,763	Discovery Inc	8,342,555

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

# Schedule of Advisors

## EQUITY

Alchemy Partners, London, England  
 AMI Asset Management Corporation, Los Angeles, CA  
 Aronson Johnson Ortiz, Philadelphia, PA  
 Brentwood Associates, Los Angeles, CA  
 Bridgewater Associates, Westport, CT  
 Catterton Partners, Greenwich, CT  
 Clearbridge Investments, Wilmington, DE  
 Dimensional Fund Advisors, Austin, TX  
 Federated MDT Advisors, Boston, MA  
 FSN Capital Partners, Oslo, Norway  
 Jennison Associates, New York, NY

Pamlico Capital, Charlotte, NC  
 Portfolio Advisors, Darien, CT  
 RFE Investment Partners, New Canaan, CT  
 The Riverside Company, New York, NY  
 Seizert Capital Partners, Birmingham, MI  
 Silvercrest Asset Management Group, New York, NY  
 Steadfast Capital, Luxembourg  
 Systematic Financial Management, Teaneck, NJ  
 Tailwind Capital, New York, NY  
 Wellington Management Company, Boston, MA  
 Winton Capital, London, England

## FIXED INCOME

Alchemy Partners, London, England  
 BlackRock, San Francisco, CA  
 Eagle Private Capital, St. Louis, MO  
 EIG Global Energy Partners, Washington D.C.  
 Fidelity, Smithfield, RI  
 Fireside Financial, Edwardsville, IL  
 Garrison Investment Group, New York, NY

Global Infrastructure Partners, New York, NY  
 Hoisington Investment Management, Austin, TX  
 Pacific Investment Management Co., Newport Beach, CA  
 Portfolio Advisors, Darien, CT  
 RFE Investment Partners, New Canaan, CT  
 Sound Mark Partners, Greenwich, CT  
 Stone Harbor, New York, New York

## REAL ASSETS / RETURN

Avenue Capital Group, New York, NY  
 BlackRock, San Francisco, CA  
 Blue Vista Capital Management, Chicago, IL  
 Bridgewater Associates, Westport, CT  
 CBRE Capital Partners, New York, NY  
 CBRE Investors, Los Angeles, CA  
 Crow Holdings, Dallas, TX  
 EIG Global Energy Partners, Washington D.C.  
 Europa Capital Partners, London, England  
 Fireside Financial, Edwardsville, IL  
 Garrison Investment Group, New York, NY  
 Global Infrastructure Partners, New York, NY

Invesco Capital Management, Atlanta, GA  
 I Squared Capital Advisors LLC, New York, NY  
 Noble Investment Group, Atlanta, GA  
 Pacific Investment Management Co., Newport Beach, CA  
 Portfolio Advisors, Darien, CT  
 Prudential Real Estate Investors, Madison, NJ  
 Resource Capital, Grand Cayman, Cayman Islands  
 Related, New York, NY  
 Sole Shipping, St Helier, Jersey  
 Sound Mark Partners, Greenwich, CT  
 Stonepeak, Wilmington, DE  
 Timberland Investment Resources, Charlotte, NC

## STRATEGIC

Allegro, Wilmington, DE  
 Avenue Capital Group, New York, NY  
 BlackRock, San Francisco, CA  
 Bridgewater Associates, Westport, CT  
 Dock Square Capital, Coral Gables, FL

Garrison Investment Group, New York, NY  
 Healthcare Royalty Partners, Stamford, CT  
 Russell, Seattle, WA  
 Sound Mark Partners, Greenwich, CT

## CUSTODIAN

Northern Trust Company, Chicago, IL

## Schedule of Advisor Fees

<b>Investment Manager Expenses:</b>		
Equity managers	\$ 35,782,284	
Fixed income managers	16,733,250	
Real asset managers	42,577,596	
Strategic managers	4,611,672	
Securities lending managers	7,116,999	
Total Investment Manager Fees		\$ 106,821,801
<b>Other Investment Expenses:</b>		
Investment custodial services	\$ 417,196	
Investment consultant/legal counsel	110,635	
Investment staff expenses	1,259,627	
Total Other Investment Expenses		\$ 1,787,458
<b>Total Investment Expenses:</b>		<b>\$ 108,609,259</b>

## Brokerage Schedule

Schedule of Brokerage Commissions			
Broker Name	Shares	Commissions	Per Share
Morgan Stanley And Co., LLC	2,801,170,796	\$ 200,490	\$ 0.00007
Sanford C. Bernstein and Co., LLC	102,159,036	190,707	0.00187
Goldman, Sachs and Co.	1,112,115,887	188,299	0.00017
Barclays Capital	163,390,794	130,523	0.00080
Merrill Lynch International Limited	13,329,240,102	91,289	0.00001
Investment Technology Group Inc.	12,135,289	91,203	0.00752
Credit Suisse Ag, New York Branch	1,556,850,894	90,113	0.00006
Instinet Europe Limited	65,311,487	74,841	0.00115
Instinet, LLC	5,042,249	70,641	0.01401
Jefferies, LLC	81,120,969	64,513	0.00080
Deutsche Bank Securities Inc.	216,460,006	62,730	0.00029
UBS Limited	52,727,724	48,689	0.00092
Citigroup Global Markets Inc.	67,235,176,703	41,574	0.00000
Citigroup Global Markets Limited	77,720,020	41,420	0.00053
ITG Canada Corp.	2,279,021	40,162	0.01762
J.P. Morgan Securities Plc	1,348,274,697	40,152	0.00003
Cap Institutional Services Inc-Equities	1,989,021	39,780	0.02000
J.P. Morgan Securities LLC	328,155,453	39,242	0.00012
Credit Suisse Securities (USA) LLC	22,089,287,318	34,809	0.00000
Goldman, Sachs & Co.	1,368,764	32,995	0.02411
Subtotal (20 largest)	110,581,976,230	1,614,173	0.00450
Remaining total	333,486,641,199	566,258	0.00909
<b>Total commissions</b>	<b>444,068,617,429</b>	<b>2,180,431</b>	<b>0.00881</b>

*Note: Brokerage commissions on purchases and sales are too numerous to list; therefore, only the top 20 brokers, by amount of commission paid are presented.*



Photo Credit: City of Jefferson

# SECTION 4: ACTUARIAL

# Actuary's Certification Letter



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October 12, 2018

The Board of Trustees  
Missouri Local Government  
Employees Retirement System  
Jefferson City, Missouri 65102

The fundamental financial objective of LAGERS is to establish and receive contributions which:

- when expressed as percents of active member payroll, will remain approximately level from generation to generation of local citizens, and
- when combined with present assets and future investment return, will be sufficient to meet the financial obligations of LAGERS to present and future retirees and beneficiaries.

To test how well the fundamental objective is being achieved, annual actuarial valuations are made. These valuations adjust employer contribution rates, up or down as the case may be, for differences in the past year between assumed financial experiences and actual financial experiences. In addition, these valuations determine the reserve strength of each employer group.

Using data as of February 28, 2018, separate actuarial valuations were made for 1,116 employer groups and a compiled annual actuarial report was issued as of that date. The data was reviewed in the aggregate by the actuary for internal and year-to-year consistency and reasonableness prior to use in the actuarial valuation process, but was not audited. It was also summarized and tabulated in order to analyze trends. We are not responsible for the accuracy or completeness of the data. Summary information about the resulting new employer contribution rates is shown in the Comprehensive Annual Financial Report (CAFR).

Assumptions concerning future experience are needed for computing employer contribution rates. As time passes and actual experience develops, assumed and actual experience is compared. From time-to-time, one or more of the assumptions about the future are changed by the Board after consulting with the actuary. The last major changes were in economic assumptions and non-economic assumptions based upon an Experience Study covering the period March 1, 2010 through February 28, 2015. These assumptions were first used in the 2016 valuations. The assumptions comply with the Actuarial Standards of Practice and the applicable reporting requirements of the Governmental Accounting Standards Board (GASB).

In addition to the compiled annual actuarial valuation report, separate reports are issued to provide funding and financial reporting information for the LAGERS Staff Plan in accordance with GASB Statement Nos. 67 and 68 (pension benefits) and Statement Nos. 74 and 75 (retiree health benefits). Financial reporting information has been produced based upon a measurement date of June 30, 2018 for GASB Statement Nos. 67 and 68 and June 30, 2018 for GASB Statement Nos. 74 and 75.

The following schedules in the Actuarial Section and Financial Section of the CAFR were prepared based upon certain information presented in the previously mentioned funding and financial reporting valuation reports:

Actuarial Section

- Summary of Actuarial Assumptions
- Actuarial Valuation Data
  - Participating Employers and Active Members
  - Retirant and Beneficiary Data
- Short Condition Test
- Employer Contribution Rate Changes
- Employer Contribution Rates
- Schedule of Gains & Losses

Financial Section

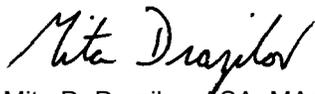
- LAGERS Schedule of Funding Progress
- LAGERS Staff Retirement Plan
  - Contributions
  - Total and Net Pension Liability
  - Sensitivity to Changes in the Discount Rate
  - Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions
  - Schedule of Changes in Net Pension Liability
  - Schedule of Employer Contributions
- LAGERS Staff Postemployment Healthcare Supplement
  - Contributions
  - Total and Net OPEB Liability
  - Sensitivity to Changes in the Discount Rate and Healthcare Trend Rates
  - OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEBs
  - Schedule of Changes in Net OPEB Liability
  - Schedule of Employer Contributions

On the basis of the 2018 valuations, it is our opinion that LAGERS continues to satisfy the actuarial principles of level cost financing.

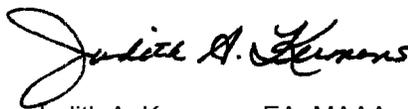
Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or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

Mita D. Drazilov and Judith A. Kermans are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

Respectfully submitted,



Mita D. Drazilov, ASA, MAAA



Judith A. Kermans, EA, MAAA

## Summary of Actuarial Assumptions

1. The investment return rate used in making the valuations was 7.25 percent per year, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the portion of total investment return which is more than the wage inflation rate. Considering wage inflation recognition of 3.25 percent, the 7.25 percent investment return rate translates to an assumed real rate of return of 4.00 percent. Adopted 2016.
2. The mortality table used to evaluate mortality among active members was the RP-2014 Employees Mortality Table for males and females, adjusted for mortality improvement back to observation period base year 2006. It was assumed that 50 percent of pre-retirement deaths would be duty related. Adopted 2016.
3. The mortality table used in evaluating allowances to be paid was the RP-2014 Healthy Annuitant mortality table for males and females, adjusted for mortality improvement back to observation period base year of 2006. Adopted 2016.
4. For both the post-retirement and pre-retirement tables, the base year for males was then established to be 2017. Mortality rates for a particular calendar year are determined by applying the MP-2015 mortality improvement scale to the above described tables. Adopted 2016.
5. The probabilities of withdrawal from service, together with individual pay increase assumptions, are shown in Schedule 1. Adopted 2016.
6. The probabilities of retirement with an age and service allowance are shown in Schedule 2. Adopted 2016.
7. Total active member payroll is assumed to increase 3.25 percent a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. In effect, this assumes no change in the number of active members per employer. Adopted 2016.
8. An individual entry-age normal cost method of valuation was used in determining age and service allowance normal costs and the allocation of actuarial present values between service rendered before and after the valuation date. Actuarial gains and losses reduce or increase the unfunded liability and are amortized over the remaining amortization period. Adopted 1987.
9. Present assets (cash and investments at February 29, 2016) are valued using smoothing techniques of fair value over a five-year period. Funding value is not permitted to deviate from fair value by more than 20 percent. Adopted 2003.
10. The data about persons now covered and about present assets were furnished by the system's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary.
11. The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (M.A.A.A.).

**Schedule 1**  
**Withdrawal From Active Employment Before Age & Service Retirement**  
**and Individual Pay Increase Assumptions**

**Percent of Active Members**  
**Separating Within Next Year**

Sample Ages	Years of Service	General Members		Police	Fire	Percent Increase In Individual's Pay During Next Year**
		Men	Women			
All	0	19.0%	22.0%	18.0%	10.0 %	
	1	17.0	20.0	17.0	8.0	
	2	15.0	17.0	16.0	7.0	
	3	13.0	14.0	13.0	6.0	
	4	11.0	13.0	12.0	6.0	
25	5 & Over	7.3	10.8	9.8	5.0	6.55 %
30		6.5	8.9	7.8	4.0	5.75
35		5.0	7.4	6.1	2.8	5.25
40		3.7	5.7	4.4	2.2	4.75
45		3.0	4.2	3.2	1.8	4.25
50		2.4	3.3	1.8	1.0	3.85
55		1.8	2.5	1.0	0.5	3.65
60		1.0	1.2	0.0	0.0	3.55
65	0.0	0.0	0.0	0.0	3.25	

\*Pay increase rates for fire employees differ slightly.  
 #Individual pay increase rates relate to all years of service.

**Withdrawal From Active Employment Before Age & Service Retirement**  
**due to Death or Disability**

Sample Ages	Death*				Disability			
	General Members		Police	Fire	General Members		Police	Fire
	Men	Women			Men	Women		
25	0.05 %	0.01 %	0.05 %	0.05 %	0.09 %	0.02 %	0.10 %	0.06 %
30	0.05	0.02	0.05	0.05	0.12	0.03	0.11	0.10
35	0.05	0.03	0.05	0.05	0.15	0.06	0.16	0.23
40	0.07	0.04	0.07	0.07	0.21	0.10	0.22	0.35
45	0.12	0.06	0.12	0.12	0.30	0.16	0.34	0.56
50	0.19	0.10	0.19	0.19	0.44	0.24	0.53	0.85
55	0.29	0.17	0.29	0.29	0.68	0.34	0.88	1.31
60	0.49	0.25			1.02	0.48		
65	0.94	0.36						

\*Applicable to calendar year 2018. Rate in future years are determined by the above rates and the MP-2015 scale.

# Summary of Actuarial Assumptions (continued)

Schedule 2 Percent of Eligible Active Members Retiring Within Next Year Without Rule of 80 Eligibility					
Retirement Ages	General Members		Retirement Ages	Police*	Fire*
	Men*	Women*			
55	3.0 %	3.0%	50	2.5 %	2.5 %
56	3.0	3.0	51	2.5	2.5
57	3.0	3.0	52	2.5	2.5
58	3.0	3.0	53	2.5	2.5
59	3.0	3.0	54	2.5	2.5
60	10.0	10.0	55	10.0	13.0
61	10.0	10.0	56	10.0	13.0
62	25.0	15.0	57	10.0	13.0
63	20.0	15.0	58	10.0	13.0
64	20.0	15.0	59	10.0	13.0
65	25.0	25.0	60	10.0	15.0
66	25.0	25.0	61	10.0	15.0
67	20.0	25.0	62	25.0	20.0
68	20.0	25.0	63	20.0	20.0
69	20.0	20.0	64	20.0	20.0
70	100.0	100.0	65	100.0	100.0

Percent of Eligible Active Members Retiring Within Next Year With Rule of 80 Eligibility				
Retirement Ages	Men	Women	Police	Fire
50	15.0 %	15.0 %	25.0 %	25.0 %
51	15.0	15.0	25.0	20.0
52	15.0	15.0	15.0	20.0
53	15.0	15.0	15.0	20.0
54	15.0	15.0	15.0	20.0
55	15.0	15.0	15.0	20.0
56	15.0	15.0	15.0	20.0
57	15.0	15.0	15.0	25.0
58	15.0	15.0	15.0	25.0
59	15.0	15.0	15.0	25.0
60	15.0	15.0	15.0	35.0
61	15.0	15.0	25.0	35.0
62	30.0	15.0	30.0	45.0
63	30.0	15.0	30.0	45.0
64	30.0	20.0	30.0	45.0
65	30.0	25.0	100.0	100.0
66	30.0	25.0		
67	30.0	25.0		
68	30.0	25.0		
69	30.0	25.0		
70	100.0	100.0		

*\*First 5 years of retirement only apply to early retirement.*

## Actuarial Valuation Data

Participating Employers and Active Members							
Valuation Date	Number of		Active Members				Inflation Increase % (CPI)
	Participating Employers	Valuation Groups	Number	Annual Payroll	Average Pay	% Increase	
2-28-18	704	1,116	34,053	\$ 1,616,895,524	\$ 47,482	2.7	2.2
2-28-17	681	1,078	33,633	1,555,729,666	46,256	2.3	2.7
2-29-16	667	1,067	33,335	1,507,588,470	45,225	2.4	1.0
2-28-15	663	1,062	33,104	1,462,218,216	44,170	0.7	0.0
2-28-14	654	1,055	33,205	1,456,008,487	43,849	3.2	1.1
2-28-13	640	1,031	32,840	1,395,261,077	42,487	2.2	2.0
2-29-12	618	1,007	32,690	1,359,655,784	41,592	1.2	2.9
2-28-11	608	995	32,851	1,350,646,560	41,114	1.8	2.1
2-28-10	597	971	32,975	1,331,226,335	40,371	1.4	2.1
2-28-09	578	945	32,291	1,285,952,041	39,824	1.6	0.2

Retirant and Beneficiary Data								
Year Ended	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances*	No.	Annual Allowances	No.	Annual Allowances		
2-28-18	1,898	\$ 30,005,238	760	\$ 7,909,356	22,918	\$ 273,607,002	8.8%	\$ 11,939
2-28-17	1,817	24,889,736	686	6,826,899	21,780	251,511,120	7.7	11,548
2-29-16	1,715	21,160,239	634	6,604,522	20,649	233,448,283	6.6	11,306
2-28-15	1,698	25,056,006	632	5,764,961	19,568	218,892,566	9.7	11,186
2-28-14	1,586	20,455,414	587	5,265,017	18,502	199,601,520	8.2	10,788
2-28-13	1,524	20,204,275	504	4,963,681	17,503	184,411,123	9.0	10,536
2-29-12	1,519	22,768,228	528	4,421,797	16,483	169,170,529	12.2	10,263
2-28-11	1,399	16,372,009	529	4,939,905	15,492	150,824,098	8.2	9,736
2-28-10	1,197	12,647,092	481	4,595,332	14,622	139,391,994	6.1	9,533
2-28-09	1,227	16,525,323	490	4,025,037	13,906	131,340,234	10.5	9,445

\*Includes post-retirement adjustments.

Each employer participating in the system is financially responsible for its own liabilities. Accordingly, the aggregate numbers presented on this and the following page are indicative only of the overall condition of the system and are not indicative of the status of any one employer.

# Actuarial Valuation Data

(continued)

## SHORT CONDITION TEST

The LAGERS funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the system are level in concept and soundly executed, the system will pay all promised benefits when due — the ultimate test of financial soundness. Testing for level contribution rates is the long-term test.

A short condition test is one means of checking a system’s progress under its funding program. In a short condition test, the plan’s present assets (cash and investments) are compared with actuarial accrued liabilities for: (1) active member contributions on deposit; (2) future benefits to present retired lives; (3) service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit and the future benefits to present retired lives will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members will be at least partially covered by the remainder of present assets. The larger the funded portion of liability (3), the stronger the condition of the system.

The schedule below illustrates the most recent 10 year history of the system’s actuarial accrued liabilities and is indicative of the LAGERS policy of following the discipline of level percent of payroll financing.

Valuation Date	Entry Age Accrued Liability For			Portion of Actuarial Value of Assets	Accrued Liability Covered by Assets		
	(1) Active Member Contributions	(2) Retirants and Beneficiaries*	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
2-28-18	\$ 150,947,222	\$ 3,548,016,100	\$ 3,932,739,323	\$ 7,297,699,793	100%	100%	92%
2-28-17	144,754,979	3,195,680,396	3,795,514,878	6,764,626,389	100	100	90
2-29-16	137,652,893	2,896,669,106	3,637,030,335	6,320,171,438	100	100	90
2-28-15	133,985,740	2,797,401,342	3,392,722,109	5,972,471,342	100	100	90
2-28-14	129,399,490	2,401,194,322	3,343,317,147	5,388,198,677	100	100	85
2-28-13	107,120,593	2,132,575,405	3,183,988,245	4,692,218,862	100	100	77
2-29-12	102,637,353	1,954,579,782	3,063,057,063	4,247,440,345	100	100	72
2-28-11	98,127,911	1,737,107,211	3,002,188,189	3,945,085,880	100	100	70
2-28-10	92,054,693	1,562,886,567	2,777,390,626	3,592,225,739	100	100	70
2-28-09	86,881,969	1,473,463,652	2,601,429,637	3,330,662,923	100	100	68

\*Includes reserve for future benefit increases.

## EMPLOYER CONTRIBUTION RATE CHANGES

Annual actuarial valuations are conducted by the system to determine employer contribution rates for the ensuing fiscal year of the employer. As of February 28, 2018, there were 1,116 separate contribution rates determined for the 704 participating political subdivisions in the system. Of these new employer contribution rates, 487 were increases over the previous year and 494 were decreases from the previous year’s rate. A 10 year comparative schedule of contribution rate adjustments is shown below:

Valuation Date	Decreases	Increases	Unchanged	Total*
2-28-18	494	487	135	1,116
2-28-17	397	576	105	1,078
2-29-16	255	759	53	1,067
2-28-15	738	244	80	1,062
2-28-14	772	231	52	1,055
2-28-13	595	359	77	1,031
2-29-12	507	439	61	1,007
2-28-11	230	724	41	995
2-28-10	201	707	63	971
2-28-09	71	820	54	945

\*There are 53 groups presently without active members for which dollar contribution rates were computed. They are not included in the totals.

# Employer Contribution Rates

	Life Benefit Programs								
	Number of Valuation Groups								
	Contributory Groups				Non-Contributory Groups				Totals*
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	
<b>Benefit Program L-1</b>									
General	12	25	24	31	8	10	16	15	141
Police	5	13	9	4	3	4	7	2	47
Fire	0	2	4	3	0	0	3	1	13
<b>Total:</b>	<b>17</b>	<b>40</b>	<b>37</b>	<b>38</b>	<b>11</b>	<b>14</b>	<b>26</b>	<b>18</b>	<b>201</b>
<b>Benefit Program L-3</b>									
General	13	5	15	19	9	13	13	19	106
Police	4	6	1	3	5	5	8	7	39
Fire	1	1	2	3	1	0	2	4	14
<b>Total:</b>	<b>18</b>	<b>12</b>	<b>18</b>	<b>25</b>	<b>15</b>	<b>18</b>	<b>23</b>	<b>30</b>	<b>159</b>
<b>Benefit Program L-6</b>									
General	0	0	7	43	2	3	2	87	144
Police	5	1	5	18	1	2	7	36	75
Fire	1	1	0	11	0	0	0	16	29
<b>Total:</b>	<b>6</b>	<b>2</b>	<b>12</b>	<b>72</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>139</b>	<b>248</b>
<b>Benefit Program L-7</b>									
General	5	11	23	27	6	14	28	54	168
Police	4	9	7	10	7	11	19	15	82
Fire	1	0	2	5	1	3	3	7	22
<b>Total:</b>	<b>10</b>	<b>20</b>	<b>32</b>	<b>42</b>	<b>14</b>	<b>28</b>	<b>50</b>	<b>76</b>	<b>272</b>
<b>Benefit Program L-9</b>									
General	1	2	0	3	2	2	2	4	16
Police	1	0	0	0	1	1	2	2	7
Fire	0	0	0	0	0	0	0	0	0
<b>Total:</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>23</b>
<b>Benefit Program L-11</b>									
General	0	0	0	0	0	0	0	2	2
Police	0	0	0	2	0	0	0	1	3
Fire	0	0	0	3	0	0	0	4	7
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>12</b>
<b>Benefit Program L-12</b>									
General	1	0	4	5	1	4	9	24	48
Police	0	1	0	2	2	2	10	7	24
Fire	0	0	1	0	4	1	0	5	11
<b>Total:</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>19</b>	<b>36</b>	<b>83</b>
<b>Totals*</b>	<b>54</b>	<b>77</b>	<b>104</b>	<b>192</b>	<b>53</b>	<b>75</b>	<b>131</b>	<b>312</b>	<b>998</b>

\*There are 23 contributory groups and 30 non-contributory groups without active members for which dollar contribution rates were computed. They are not included in the totals.

# Employer Contribution Rates (continued)

	Life and Temporary Benefit Programs								
	Number of Valuation Groups								
	Contributory Groups				Non-Contributory Groups				Totals*
	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	Under 2.00%	2.00-4.99%	5.00-7.99%	Over 8.00%	
<b>Benefit Program LT-4(65)</b>									
General	1	1	1	1	0	0	1	1	6
Police	0	0	0	0	0	0	1	0	1
Fire	0	0	0	0	0	0	0	1	1
<b>Total:</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>8</b>
<b>Benefit Program LT-5(62)</b>									
General	0	0	0	0	1	0	0	0	1
Police	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Benefit Program LT-5(65)</b>									
General	0	0	0	0	0	2	2	1	5
Police	0	0	0	0	1	0	1	2	4
Fire	0	1	0	0	1	1	0	0	3
<b>Total:</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>12</b>
<b>Benefit Program LT-8(62)</b>									
General	0	1	0	0	1	1	1	0	4
Police	0	0	0	0	0	0	1	0	1
Fire	0	0	0	0	0	1	0	1	2
<b>Total:</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>7</b>
<b>Benefit Program LT-8(65)</b>									
General	1	0	2	3	1	4	12	7	30
Police	1	1	0	1	1	2	3	10	19
Fire	0	0	0	0	3	1	1	6	11
<b>Total:</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>16</b>	<b>23</b>	<b>60</b>
<b>Benefit Program LT-10(65)</b>									
General	0	0	0	2	1	1	1	6	11
Police	0	0	0	0	1	0	1	1	3
Fire	0	0	0	0	1	0	0	0	1
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>15</b>
<b>Benefit Program LT-14(65)</b>									
General	0	0	1	0	0	0	2	6	9
Police	0	0	0	0	1	0	1	2	4
Fire	0	0	0	0	0	0	1	1	2
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>15</b>
<b>Totals*</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>10</b>	<b>14</b>	<b>15</b>	<b>28</b>	<b>46</b>	<b>118</b>

\*There are 23 contributory groups and 30 non-contributory groups without active members for which dollar contribution rates were computed. They are not included in the totals.

## Schedule of Gains & Losses

in Accrued Liabilities for the Year Ended February 28, 2018

Type of Activity	Gain or (Loss) For Year Ended 2/28/2018
<b>Age &amp; Service Retirements.</b> If members retire at older ages or with lower final average pay than assumed, there is a gain. If younger ages or higher average pays, a loss.	\$ (7,548,943)
<b>Death-in-Service Benefits.</b> If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	550,454
<b>Withdrawal From Employment.</b> If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4,094,455
<b>Disability Benefits.</b> If more liabilities are released by disabilities than assumed, there is a gain. If smaller, a loss.	(543,403)
<b>Pay Increases.</b> If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	3,182,047
<b>Investment Income.</b> If there is greater investment return on assets than assumed, there is a gain. If less return, a loss.	117,843,940
<b>New Active Members.</b> Includes the hiring of existing LAGERS members by other employers.	(18,509,739)
<b>Benefit Reserve Fund.</b> Release of reserve for future experience.	(55,924,407)
<b>Other.</b> Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, valuation methods, etc.	(14,397,420)
<b>Gain or (Loss) During Year From Experience</b>	\$ 28,746,984

# Summary of Plan Provisions

## Purpose

The Missouri Local Government Employees Retirement System (LAGERS) is a body corporate created and governed by the State of Missouri to provide retirement, survivors and disability benefits to the state's local government employees in the most efficient and economical manner possible. As such, LAGERS is a non-profit entity which has the responsibility of administering the law in accordance with the expressed intent of the General Assembly and bears a fiduciary obligation to the State of Missouri, the taxpayers and the public employees who are its beneficiaries.

This summary of LAGERS plan provisions is included for informational purposes only. System eligibility requirements and benefits provisions are determined pursuant to Chapter 70, RSMo. and LAGERS Administrative Rules, 16 CSR 20. Accordingly, members, retirees, beneficiaries, and participating political subdivisions are urged to contact LAGERS before making any decisions related to matters included in the following summary.

## Administration

The statutes provide that the administration of LAGERS be vested in a seven member Board of Trustees. Three of these trustees are "Member Trustees" who must be participating members of the system. Three members of the Board are "Employer Trustees" who must be members of the governing body of a member subdivision, but who do not personally participate in LAGERS. The statutes which govern LAGERS require that an Annual Meeting be held in the last calendar quarter of each year. Each participating political subdivision is to conduct a secret ballot election allowing each member in that subdivision to vote to elect a "member" delegate to the Annual Meeting. The governing body may then select one of their own, or another person acting in their behalf, to serve as "employer" delegate for the subdivision. All Member and Employer Trustees are elected by their respective delegates at the LAGERS Annual Meeting. The remaining Board member is a "Citizen Trustee" appointed by the governor, who can be neither a member nor employer. A complete listing of the current Board of Trustees is included on page 14.

The management of LAGERS is vested in an Executive Secretary who is appointed by the Board and serves at their pleasure. The Executive Secretary acts as advisor to the Board on all matters pertaining to the system and, with the approval of the Board, contracts for professional services and employs the remaining staff needed to operate the system. A listing of the LAGERS staff and advisors is included on page 7.

## Normal Retirement

A member may retire with an age and service allowance after completing: 1.) at least five years of credited service, and 2.) attaining his minimum service retirement age. This minimum service retirement age is 60 for general members and 55 for law enforcement or fire personnel.

A participating LAGERS subdivision may, by a majority vote of the governing body, select an alternate unreduced retirement for employees whose age and service total 80 or more. This provision also requires five years of credited service.

## Final Average Salary

Final average salary is the average of a member's monthly pay during the period of 60 consecutive months of credited service producing the highest monthly average, which is contained within the 120 consecutive months of credited service immediately preceding retirement. For most members, this is the last five years of employment. A participating LAGERS subdivision may, by majority vote of the governing body, elect to have their future retirants' benefits calculated using a 36 month final average salary period.

## Credited Service

Credited service is a combination of the prior service a member accrued prior to his employer joining LAGERS and the membership service he accrues after that date. Because LAGERS is a state-wide retirement system with hundreds of member subdivisions, credited service can be a combination of service with several employers.

## Age and Service Allowance

This is the normal retirement benefit and is payable monthly for the lifetime of a member. It equals a specified percent of a member's final average salary multiplied by his number of years of credited service. Each employer elects the percent applicable to his members from 10 available programs: L-1 (1% for life); L-3 (1.25% for life); LT-4(65) (1% for life, 1% to age 65); LT-5(65) (1.25% for life, .75% to age 65); L-6 (2% for life); L-7 (1.5% for life); LT-8(65) (1.5% for life, .5% to age 65); L-12 (1.75% for life); LT-14(65) (1.75% for life, .25% to age 65); and L-11 (2.5% for life – non-OASDI coverage only). All LT programs denoted LT(62) extend temporary benefits to age 62, rather than age 65. These benefit programs can be changed by majority vote of the subdivision's governing body, but not more often than biennially.

## Early Retirement

A member in service may retire with an early retirement benefit after completing: 1.) at least five years of credited service, and 2.) attaining age 55 if a general member or age 50 for a law enforcement or fire member. The early retirement benefit is computed in the same manner as an age and service allowance but reduced by  $\frac{1}{2}$  of 1 percent for each month the retiree is younger than his minimum service retirement age.

## Deferred Retirement

If a member leaves LAGERS covered employment before attaining his early retirement age, but after completing five or more years of service, he becomes eligible for a deferred allowance; provided he lives to his early retirement age and does not withdraw his accumulated contributions, if applicable. Deferred members with less than 10 years of credited service and greater than 10 years until their minimum service retirement age may be eligible for a lump-sum payment. Any deferred benefit paid prior to the member attaining his minimum service retirement age will be reduced  $\frac{1}{2}$  of 1 percent for each month the retiree is younger than his minimum service retirement age.

## Non-Duty Disability Benefit

A member with five or more years of credited service who becomes totally and permanently disabled from performing his job from other than duty connected causes is eligible for a non-duty disability benefit computed in the same manner as an age and service allowance, based upon his service and salary to time of disability.

## Duty Disability Benefit

A member who becomes totally and permanently disabled from performing his job from a duty related injury or disease is eligible for a duty disability benefit computed in the same manner as an age and service allowance, but based upon the years of service the member would have completed had he continued in LAGERS covered employment to age 60. Continuing medical examinations are required to confirm the disability once per year for the first five years and once every three years thereafter until reaching the minimum service retirement age.

## Survivors Benefit, Non-Duty Death

Upon the death of a member who had completed at least five years of credited service, an eligible spouse will receive a non-duty death benefit computed upon the deceased member's service and salary to time of death. The surviving spouse receives an allowance equal to the Option A allowance (joint and 75 percent survivor benefits). If no spouse benefit is payable, the dependent children under age 18 (23 if they are full-time students) each receive an equal share of 60 percent of the Life allowance computed for the deceased. In the event there are no surviving spouse or dependent children, any member contributions will be distributed to the named beneficiary of record.

## Survivors Benefit, Duty Death

If a member's death was the natural and proximate result of a personal injury or disease arising out of and in the course of his actual performance of duty as an employee, the spouse is eligible for a duty death benefit computed in the same manner as an age and service allowance, but based upon the years of service the member would have completed had he continued in LAGERS covered employment to age 60. The surviving spouse receives an allowance equal to the Option A allowance (joint and 75 percent survivor benefits). If no spouse benefit is payable, the dependent children under age 18 (23 if they are full-time students) each receive an equal share of 60 percent of the life allowance computed for the deceased. In the event there are no surviving spouse or dependent children, any member contributions will be distributed to the named beneficiary of record.

## Post Retirement Adjustment

All retired members are eligible for an annual post retirement adjustment beginning the October first twelve months after the effective date of their allowance. The adjustment is based on the increase in the Consumer Price Index and is limited to 4 percent per year. The Board of Trustees determines annually the amount of the post retirement adjustment subject to the 4 percent maximum or the increase in the Consumer Price Index.

## Optional Forms of Payment

When a LAGERS member makes application for retirement, his benefits are calculated in several optional forms and he selects the one that best fits his retirement needs. This election of an optional form of payment is made immediately prior to the receipt of the first benefit check and once the election is made, it is irrevocable. The options are as follows:

**Life Option:** This is the largest payment available to a retirant. Upon the death of the retirant monthly payments cease. If the member has not withdrawn at least his accumulated contributions before death, a refund of the balance of his account is made to his beneficiary of record.

**Option A:** This is a continuing spouse option which allows the retirant to receive less (85 percent if spouse age is the same) of the Life Option with the provision that the surviving spouse will receive 75 percent of the member's benefit for the remainder of his or her lifetime.

**Option B:** This option is also a continuing spouse option similar to Option A except the percentages are slightly changed. Under Option B, the retirant would receive a higher benefit (90 percent of the Life Option if spouse is the same age) with the surviving spouse receiving 50 percent of the member's benefit for the remainder of his or her lifetime.

**Option C:** The final of the four options is referred to as a "ten-year certain" option. As with the other options, the benefit (95 percent of the Life Option) is payable for the lifetime of the member but with an added provision that the system will make at least 120 monthly payments. If the employee lives over 10 years after retirement, monthly payments will cease upon his death.

**Partial Lump Sum Feature (PLUS):** This feature provides the option to elect a partial lump sum distribution of the monthly retirement benefit, coupled with a reduced future monthly benefit. The lump sum distribution would be equal to 24 monthly payments of the life allowance amount (does not include any temporary allowance payable under a Life and Temporary plan) at time of retirement. The lump sum payment would result in a reduction (approximately 16 percent) of the retiree's future monthly benefit adjusted for age. All the current options (Life, Option A, Option B and Option C) still apply and may be elected with or without the partial lump sum feature.

## Member Contributions

Political subdivisions may participate in LAGERS under either a contributory or non-contributory plan. If the subdivision participates under the contributory plan, each member contributes 4 percent of his gross salary, beginning after he has completed sufficient employment for six months of credited service. If a member leaves LAGERS covered employment before an allowance is payable upon his behalf, his accumulated contributions are refunded to him. If he dies prior to accruing five or more years of credited service, his accumulated contributions are refunded to his designated beneficiary(s) unless a duty-related death benefit is payable. If the subdivision participates under the non-contributory plan, the employing political subdivision pays the entire cost, while the members make no contributions.

Local governments participating in LAGERS are permitted, if the governing body elects, to grant refunds of members' contributions after two years of participation in the system under the non-contributory option. The cost of this option would be borne by the governmental unit.

## Employer Contributions

The statutes require each employer to contribute the remaining amounts above that contributed by their members to finance the benefits that political subdivision has promised their employees through their participation in LAGERS. These employer contributions are determined annually by the system's retained actuary and are based upon level-percent-of-payroll funding principles so that the contribution rates do not have to increase over decades of time. A chart showing the employer contribution rates for all LAGERS employers is included on pages 71-72 of this report.



Picture Credit: City of Rolla Police Department

# SECTION 5: STATISTICAL

## Statistical Summary

The objectives of the statistical section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess LAGERS overall financial condition.

The schedules beginning on page 79 show financial trend information about the change in LAGERS' assets for the past 10 years. These schedules provide detailed information about the trends of key sources of asset additions and deductions, which assist in providing a context framing how LAGERS financial position has changed over time. The financial trend schedules presented are:

- Change in Fiduciary Net Position
- Interest Credits to Reserve Accounts

The schedules beginning on page 81 show demographic and economic information. This information is designed to assist in understanding the environment in which LAGERS operates. The demographic and economic information and the operating information presented include:

- Retired Member Data
- Benefit Expenses by Type
- Average Monthly Benefit Payments
- Participants by Classification
- Participating Political Subdivisions

## Change in Fiduciary Net Position

Additions:	2018	2017	2016	2015	2014
Member contributions	\$ 19,810,928	\$ 20,923,004	\$ 18,105,362	\$ 14,773,926	\$ 32,739,664
Employer contributions	204,018,370	199,940,705	183,363,684	190,555,456	188,500,719
Net investment income (loss)	860,249,908	754,483,948	(11,817,564)	124,483,520	999,426,063
<b>Total additions</b>	<b>\$ 1,084,079,206</b>	<b>\$ 975,347,657</b>	<b>\$ 189,651,482</b>	<b>\$ 329,812,902</b>	<b>\$ 1,220,666,446</b>
Deductions:					
Benefits	\$ 307,740,098	\$ 282,567,670	\$ 262,032,383	\$ 250,978,528	\$ 229,637,836
Refunds	1,919,371	2,565,510	1,844,175	1,861,343	2,108,951
Administrative expenses	5,576,429	5,345,355	5,184,440	5,571,466	5,243,004
Annuities awarded	20,073				
Pension expense	157,006	(188,344)	(341,406)		
OPEB expense	(236,916)				
<b>Total deductions</b>	<b>\$ 315,176,061</b>	<b>\$ 290,290,191</b>	<b>\$ 268,719,592</b>	<b>\$ 258,411,337</b>	<b>\$ 236,989,791</b>
<b>Change in fiduciary net position</b>	<b>\$ 768,903,145</b>	<b>\$ 685,057,466</b>	<b>\$ (79,068,110)</b>	<b>\$ 71,401,565</b>	<b>\$ 983,676,655</b>
Additions:	2013	2012	2011	2010	2009
Member contributions	\$ 12,884,566	\$ 12,158,422	\$ 11,603,205	\$ 10,563,158	\$ 8,132,046
Employer contributions	178,505,841	166,947,336	154,244,689	137,849,763	132,715,295
Net investment income (loss)	673,420,965	166,658,100	852,214,883	492,574,492	(731,386,113)
<b>Total additions</b>	<b>\$ 864,811,372</b>	<b>\$ 345,763,858</b>	<b>\$ 1,018,062,777</b>	<b>\$ 640,987,413</b>	<b>\$ (590,538,772)</b>
Deductions:					
Benefits	\$ 210,836,794	\$ 195,626,000	\$ 171,494,586	\$ 157,702,725	\$ 149,048,361
Refunds	2,367,537	1,745,403	1,704,094	1,563,179	2,793,448
Administrative expenses	4,459,410	4,523,397	4,945,684	3,415,311	3,402,017
Annuities awarded					
Pension expense					
OPEB expense					
<b>Total deductions</b>	<b>\$ 217,663,741</b>	<b>\$ 201,894,800</b>	<b>\$ 178,144,364</b>	<b>\$ 162,681,215</b>	<b>\$ 155,243,826</b>
<b>Change in fiduciary net position</b>	<b>\$ 647,147,631</b>	<b>\$ 143,869,058</b>	<b>\$ 839,918,413</b>	<b>\$ 478,306,198</b>	<b>\$ (745,782,598)</b>

# Interest Credits to Reserve Accounts

A retirement system acquires and invests assets as the result of following the financial objective of level contribution rates. The Board of Trustees of LAGERS has the responsibility for seeing that the assets are invested effectively and within the limits imposed by law. The Board retains professional money managers to assist in the investment process and reviews their activities throughout the year. The Board retains other professional firms to provide measurements of investment performance and their reports are also reviewed regularly.

The investment process continues to be volatile because of major disturbances in the economic environment.

Following is a table showing investment credits to the various reserves of the system for the last 5 years.

Rate of Investment Return Allocated					
Investment Credits as a Percent of Fund Balance					
Year Ended June 30	(A) Casualty Reserve	(B) Member Deposit	(C) Benefit Reserve	(D) Employer Reserve	Inflation Percent (CPI)
2018	7.25 %	0.5 %	12.4 %	12.9 %	2.9 %
2017	7.25	0.5	12.0	12.5	1.6
2016	7.25	0.5	(0.4)	(0.4)	1.0
2015	7.25	0.5	21.4	35.0	0.1
2014	7.25	0.5	14.1	14.8	2.1
5-Year Compound Average			11.7	14.4	1.5

- (A) Casualty Reserve assets are for the non-accrued service portion of disability benefits to future retired lives. The investment percent is the rate set for actuarial purposes.
- (B) Member Deposit assets are the contributions of present members. The investment percent, set by the Board, affects amounts payable to members who request a refund. The percent does not affect the monthly benefit of a retiring member.
- (C) Benefit Reserve assets are for benefits to present retired lives. The investment credit is the remainder of net investment return after crediting the Casualty Reserve assets. This revised allocation of investment credits is intended to provide the resources for additional benefit increases after retirement. The investment credit to the Benefit Reserve is limited if the funded ratio of the reserve exceeds 125 percent. In addition, interest credits to the Employer Reserve are limited if the funded ratio of the Benefit Reserves is below 75 percent.
- (D) Employer Reserve assets are for benefits to future retired lives including the accrued service portion of disability benefits. The investment credit is the remainder of the net investment return after crediting the Casualty Reserve assets, followed by a further adjustment for the investment credit to the Member Deposit assets. The Employer Reserve is responsible for covering liability increases resulting from inflation losses. For years 2014 and before, the percentages shown include net realized capital gains on sale of investments (cost value). For 2015, the percentages include a recognition of converting fund balance accounting from cost value to fair value.

# Retired Member Data

Amount of Monthly Benefit	Employee Classification			*Type of Retirement									Option Selected			
	General	Police	Fire	#40	#60	#71	#72	#73	#81	#82	#83	Life	Opt. A	Opt. B	Opt. C	
Deferred	5,529	1,696	295	7,520												
\$ 1 - \$ 100	1,220	452	70		115	37	40	17	743	633	157	798	498	198	248	
\$ 101 - \$ 200	2,110	512	51		137	25	68	19	1,354	849	221	1,300	728	225	420	
\$ 201 - \$ 300	1,915	352	52		110	24	60	30	1,249	649	197	1,171	607	237	304	
\$ 301 - \$ 400	1,556	278	47		73	16	79	30	1,113	424	146	943	456	207	275	
\$ 401 - \$ 500	1,261	266	46		66	18	53	38	924	349	125	774	383	217	199	
\$ 501 - \$ 600	1,066	203	47		51	34	40	20	771	294	106	653	345	153	165	
\$ 601 - \$ 700	928	178	36		42	16	45	21	713	219	86	549	301	161	131	
\$ 701 - \$ 800	796	155	35		36	14	47	18	635	170	66	499	243	137	107	
\$ 801 - \$ 900	729	120	39		28	25	34	10	581	141	69	398	232	149	109	
\$ 901 - \$1000	643	93	40		19	34	30	12	505	129	47	355	187	150	84	
\$ 1001 - \$1100	576	83	35		15	34	32	8	445	113	47	333	168	130	63	
\$ 1101 - \$1200	540	90	36		8	28	32	9	464	73	52	313	180	108	65	
\$ 1201 - \$1300	447	88	29		16	31	20	3	386	79	29	247	153	99	65	
\$ 1301 - \$1400	378	66	28		15	18	22	6	323	57	31	213	128	85	46	
\$ 1401 - \$1500	372	73	34		10	33	15	4	340	57	20	195	130	101	53	
\$ 1501 - \$1600	319	74	45		8	26	15	3	314	52	20	188	136	71	43	
\$ 1601 - \$1700	305	70	33		12	18	13	0	308	46	11	188	109	71	40	
\$ 1701 - \$1800	267	58	33		3	15	9	1	276	41	13	166	93	71	28	
\$ 1801 - \$1900	252	58	30		7	21	9	2	266	23	12	150	93	59	38	
\$ 1901 - \$2000	232	49	37		8	21	6	1	243	20	19	115	106	67	30	
OVER - \$2000	2,250	590	457		30	193	45	6	2,756	221	46	1,548	790	761	198	
<b>SUBTOTALS</b>	<b>23,691</b>	<b>5,604</b>	<b>1,555</b>	<b>7,520</b>	<b>809</b>	<b>681</b>	<b>714</b>	<b>258</b>	<b>14,709</b>	<b>4,639</b>	<b>1,520</b>	<b>11,096</b>	<b>6,066</b>	<b>3,457</b>	<b>2,711</b>	
	<b>30,850</b>			<b>30,850</b>									<b>23,330</b>			

\*See Summary of Plan Provisions for description of retirement and benefit options.

#40—Deferred Retirement

#73—Survivor Payment-Disability Retirement

#60—Deceased & Monthly Benefit Payable

#81—Normal Retirement

#71—Duty Disability Retirement

#82—Early Retirement

#72—Non-Duty Disability Retirement

#83—Survivor Payment-Normal Retirement

## Benefit Expenses by Type

Benefit Expenses by Type:	2018	2017	2016	2015	2014
Normal benefits	\$295,021,094	\$270,803,039	\$250,998,836	\$240,601,321	\$220,127,154
Survivor benefits	12,719,004	11,764,631	11,033,547	10,377,207	9,510,682
<b>Total benefits</b>	<b>\$307,740,098</b>	<b>\$282,567,670</b>	<b>\$262,032,383</b>	<b>\$250,978,528</b>	<b>\$229,637,836</b>
<b>Total refunds</b>	<b>\$ 1,919,371</b>	<b>\$ 2,565,510</b>	<b>\$ 1,844,175</b>	<b>\$ 1,861,343</b>	<b>\$ 2,108,951</b>
Benefit Expenses by Type:	2013	2012	2011	2010	2009
Normal benefits	\$201,911,235	\$187,148,905	\$163,723,382	\$150,404,024	\$142,028,574
Survivor benefits	8,925,559	8,477,095	7,771,204	7,298,701	7,019,787
<b>Total benefits</b>	<b>\$210,836,794</b>	<b>\$195,626,000</b>	<b>\$171,494,586</b>	<b>\$157,702,725</b>	<b>\$149,048,361</b>
<b>Total refunds</b>	<b>\$ 2,367,537</b>	<b>\$ 1,745,403</b>	<b>\$ 1,701,094</b>	<b>\$ 1,563,179</b>	<b>\$ 2,793,448</b>

# Average Monthly Benefit Payments

Retirement Effective Dates For Fiscal Years Ended June 30:		Years of Credited Service by Category					
		5-10	11-15	16-20	21-25	26-30	31 +
2018	Average Monthly Benefit	\$ 297	\$ 743	\$ 1,088	\$ 1,545	\$ 2,493	\$ 3,101
	Average Final Average Salary	3,699	3,948	3,969	4,452	5,593	5,657
	Number of Active Retirants	617	258	223	159	160	200
2017	Average Monthly Benefit	\$ 295	\$ 685	\$ 1,061	\$ 1,539	\$ 2,153	\$ 3,136
	Average Final Average Salary	3,619	3,762	4,108	4,719	5,091	5,786
	Number of Active Retirants	574	319	232	167	137	182
2016	Average Monthly Benefit	\$ 292	\$ 668	\$ 994	\$ 1,506	\$ 2,116	\$ 2,905
	Average Final Average Salary	3,552	3,760	3,931	4,602	4,960	5,435
	Number of Active Retirants	556	257	188	167	166	166
2015	Average Monthly Benefit	\$ 272	\$ 648	\$ 959	\$ 1,440	\$ 2,143	\$ 3,002
	Average Final Average Salary	3,318	3,532	3,809	4,247	5,066	5,493
	Number of Active Retirants	547	261	205	189	150	200
2014	Average Monthly Benefit	\$ 269	\$ 630	\$ 982	\$ 1,418	\$ 2,008	\$ 2,787
	Average Final Average Salary	3,226	3,398	3,832	4,171	4,830	5,362
	Number of Active Retirants	540	260	180	144	127	162
2013	Average Monthly Benefit	\$ 278	\$ 622	\$ 914	\$ 1,416	\$ 2,092	\$ 2,697
	Average Final Average Salary	3,176	3,444	3,642	4,166	4,651	5,162
	Number of Active Retirants	540	241	188	144	128	151
2012	Average Monthly Benefit	\$ 276	\$ 632	\$ 977	\$ 1,333	\$ 1,958	\$ 2,710
	Average Final Average Salary	3,128	3,302	3,729	3,941	4,522	4,922
	Number of Active Retirants	520	269	191	149	107	171
2011	Average Monthly Benefit	\$ 277	\$ 590	\$ 993	\$ 1,387	\$ 1,783	\$ 2,579
	Average Final Average Salary	3,081	3,206	3,724	4,049	4,060	4,701
	Number of Active Retirants	452	213	166	158	110	149
2010	Average Monthly Benefit	\$ 250	\$ 544	\$ 856	\$ 1,374	\$ 1,946	\$ 2,477
	Average Final Average Salary	2,787	3,348	3,370	3,954	4,354	4,589
	Number of Active Retirants	413	186	131	145	101	139
2009	Average Monthly Benefit	\$ 220	\$ 525	\$ 855	\$ 1,276	\$ 1,889	\$ 2,336
	Average Final Average Salary	2,760	3,008	3,400	3,833	4,180	4,382
	Number of Active Retirants	457	162	131	105	119	104
From July 1, 2008 through June 30, 2018							
	Average Monthly Benefit	\$ 273	\$ 629	\$ 968	\$ 1,424	\$ 2,059	\$ 2,773
	Average Final Average Salary	3,235	3,471	3,751	4,213	4,731	5,149
	Number of Active Retirants	5,256	2,426	1,835	1,527	1,305	1,624

# Participants by Classification

Political Subdivisions										
Year	Cities	Counties	Health Agencies	Special Districts	Water Districts	Road Districts	Fire Districts	Emergency Services	Libraries	Total
2018	309	60	68	57	40	27	49	58	47	715
2017	302	60	66	53	39	27	46	56	46	695
2016	299	60	66	50	39	27	43	53	45	682
2015	296	60	65	49	38	27	40	48	45	668
2014	295	60	65	48	38	27	39	47	44	663
2013	288	60	65	47	39	26	36	41	42	644
2012	285	60	62	46	39	25	32	34	39	622
2011	281	60	60	43	39	26	30	32	39	610
2010	278	60	58	59	41	27	25	14	40	602
2009	274	60	58	52	40	27	25	14	40	590

Employee Members										
Year	Cities	Counties	Health Agencies	Special Districts	Water Districts	Road Districts	Fire Districts	Emergency Services	Libraries	Total
2018	18,743	8,677	1,610	2,283	209	83	899	948	981	34,433
2017	18,544	8,546	1,621	2,303	210	84	820	910	961	33,999
2016	18,388	8,548	1,662	2,380	204	81	712	850	956	33,781
2015	18,289	8,311	1,726	2,321	204	84	684	777	914	33,310
2014	18,336	8,421	1,754	2,312	207	84	685	730	909	33,438
2013	17,959	8,336	1,855	2,272	202	82	657	680	878	32,921
2012	17,944	8,508	1,811	2,305	212	83	596	572	894	32,925
2011	18,148	8,637	1,852	2,269	211	86	572	544	922	33,241
2010	18,016	8,742	1,866	2,375	209	87	491	310	936	33,032
2009	17,911	8,684	1,913	2,307	206	84	471	324	931	32,831

# Participating Political Subdivisions

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Advance	7	L-1	no	5	no	no	10-2005
Airport Drive	1	L-7	no	3	no	no	05-2000
Albany	18	L-7	yes	3	yes	no	07-1989
Anderson	12	L-3	no	5	yes	no	06-1990
Annapolis	2	L-7	no	3	yes	no	07-2001
Arcadia	3	L-1	no	5	yes	no	08-2015
Arnold	69	L-6	yes	3	no	no	01-1984
Ash Grove	7	L-7	no	3	yes	no	04-1972
Ashland	16	L-7	no	5	yes	no	06-1970
Aurora	51	L-12	no	3	no	yes	07-1972
Auxvasse	4	L-7	yes	5	no	no	01-1994
Ava	41	L-6	yes	3	no	no	09-1997
Ballwin	138	L-3	no	3	no	yes	11-1969
Belle	7	L-7	no	5	yes	no	05-1987
Bellefontaine Neighbors	57	L-6	no	3	no	no	07-1968
Bellflower	-	L-6	no	3	yes	no	08-1990
Bel-Ridge	19	L-1	no	5	yes	no	02-2002
Belton	197	L-6	no	3	no	yes	02-1974
Berkeley	37	LT-10 (Age 65)	yes	3	no	no	07-1968
Bernie	17	L-3	no	3	no	no	08-1978
Bethany	24	L-6	no	5	yes	no	01-1976
Beverly Hills	1	L-1	no	5	yes	no	07-1991
Bevier	3	L-1	no	5	yes	no	07-1999
Bland	2	L-1	yes	5	no	no	09-1994
Bloomfield	11	L-1	no	5	no	no	10-2001
Blue Springs	264	L-7	no	3	no	yes	09-1973
Bolivar	83	L-7	no	3	yes	no	02-1973
Boonville	65	L-12	no	3	no	yes	05-1971
Bourbon	11	L-1	no	3	no	no	01-2000
Bowling Green	19	L-12	no	5	no	yes	01-1979
Branson	242	L-6	yes	3	yes	no	01-1978
Braymer	3	LT-8 (Age 62)	no	3	yes	no	12-1970
Brentwood	58	L-7	no	3	no	yes	04-1969
Brookfield	45	L-3	no	5	no	no	02-1989
Buckner	14	L-1	no	3	yes	no	10-1987
Buffalo	20	L-7	yes	3	yes	no	01-1974
Butler	51	LT-5 (Age 65)	yes	3	no	no	06-1993
Cabool	29	L-12	no	3	no	yes	10-1969
Camdenton	42	L-7	no	3	no	no	07-2008
Cameron	60	L-6	no	3	no	no	07-1968
Campbell	15	L-1	no	5	yes	no	02-2005
Canton	16	L-7	no	3	no	yes	07-1979
Cape Girardeau	384	LT-8 (Age 65)	no	3	no	yes	02-1973
Carl Junction	32	L-6	no	5	yes	no	06-1971

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

# Participating Political Subdivisions (continued)

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Carthage	54	L-6	no	3	no	no	07-1982
Caruthersville	44	L-3	no	5	no	yes	01-1979
Cassville	27	L-7	no	5	yes	no	02-2010
Centralia	29	L-7	yes	5	no	yes	07-1972
Charleston	31	L-1	no	5	no	no	05-1980
Chillicothe	69	L-12	no	3	no	yes	05-1978
Clarksville	4	L-3	no	5	no	no	10-1974
Claycomo	23	L-12	no	5	no	no	04-2007
Cleveland	2	L-3	no	5	yes	no	04-2007
Clever	7	L-1	yes	5	yes	no	07-1998
Clinton	66	L-7	no	5	no	yes	02-1972
Columbia	1,027	L-6	no	3	no	yes	02-1969
Concordia	18	L-3	no	3	yes	no	05-1978
Cool Valley	4	L-7	no	5	no	no	07-1972
Cottleville	15	L-7	yes	5	yes	no	06-2010
Crestwood	79	L-7	no	3	no	yes	07-1968
Creve Coeur	57	LT-8 (Age 65)	no	5	yes	no	08-2017
Crocker	8	L-1	no	5	no	no	09-1988
Crystal City	54	L-6	no	5	no	yes	04-1970
Cuba	38	L-6	yes	3	no	yes	04-1971
Dardenne Prairie	8	L-7	yes	5	no	no	11-2006
Dellwood	7	L-12	no	3	no	no	01-1975
De Soto	38	L-7	no	5	no	no	01-1983
Dexter	63	L-6	yes	3	no	no	08-1973
Dixon	15	L-7	no	5	yes	no	12-2000
Doniphan	19	L-7	no	5	yes	no	01-1993
Drexel	2	L-7	no	5	no	no	06-1998
Edmundson	15	L-7	no	5	yes	no	01-2012
El Dorado Springs	41	L-6	no	3	no	yes	07-1975
Eldon	40	L-1	no	5	yes	no	05-2005
Ellington	8	L-1	no	5	yes	no	07-2009
Ellisville	57	L-12	no	3	no	no	08-1971
Elsberry	5	L-3	yes	5	no	no	01-1998
Eminence	4	L-3	no	5	no	yes	09-1996
Eureka	65	L-6	yes	3	no	no	11-1973
Excelsior Springs	113	L-7	no	5	no	yes	12-1972
Fair Grove	9	L-1	no	5	yes	no	09-2005
Farmington	132	LT-8 (Age 65)	yes	3	no	no	02-1969
Fayette	19	L-7	yes	5	no	yes	07-1970
Fenton	32	LT-8 (Age 65)	no	3	no	yes	01-1971
* Festus	87	L-6	no	5	no	yes	04-1968
Foristell	8	L-3	no	3	no	no	10-2003
Forsyth	18	L-7	no	5	no	yes	07-1985
Fredericktown	44	LT-8 (Age 65)	yes	5	no	no	05-1968

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Frontenac	50	LT-8 (Age 65)	no	3	no	yes	08-1972
Fulton	169	L-6	yes	5	yes	no	08-1968
Gainesville	3	L-1	no	5	yes	no	12-1984
Garden City	8	L-1	no	5	yes	no	04-1993
Gerald	5	L-1	no	3	yes	no	04-2003
Gideon	5	L-3	yes	5	yes	no	10-1970
Gladstone	163	L-6	no	5	yes	no	09-1968
Glasgow	9	L-3	no	5	no	no	10-1974
Glendale	6	LT-8 (Age 62)	no	5	no	yes	02-1971
Golden City	4	L-1	no	5	yes	no	01-2012
Gower	7	L-7	no	5	yes	no	01-2010
Grain Valley	55	L-7	no	5	no	no	01-1999
Granby	13	L-1	no	5	yes	no	02-2014
Grandview	158	LT-5 (Age 65)	no	3	no	no	07-1971
Grant City	7	L-1	no	5	yes	no	05-1999
Green City	4	L-1	no	5	no	yes	04-1988
Hale	2	L-7	no	3	no	no	06-1998
Hannibal	63	LT-14 (Age 65)	yes	5	no	yes	11-1969
Hardin	5	L-1	no	3	yes	no	02-1997
Harrisonville	113	LT-14 (Age 65)	no	3	no	no	08-1972
Hartville	5	L-7	no	3	yes	no	07-2001
Hayti	26	L-3	no	5	yes	no	01-1994
Henrietta	3	L-1	no	3	yes	no	02-2009
Herculaneum	25	L-1	no	5	yes	no	11-2013
Hermann	37	L-1	no	3	no	no	09-1980
Higginsville	66	LT-10 (Age 65)	yes	3	no	yes	08-1970
Hillsboro	14	L-7	no	5	no	no	07-1980
Holden	8	L-9	no	5	no	no	04-1974
Hollister	37	L-6	yes	3	yes	no	05-1998
Holts Summit	28	L-3	no	5	no	no	01-1998
Hopkins	3	L-1	no	3	yes	no	02-2013
Houston	30	L-6	yes	3	no	yes	05-1971
Humansville	5	L-1	yes	5	yes	no	06-2006
Huntsville	11	L-7	no	5	no	no	05-2001
Independence	984	L-6	no	3	yes	no	11-1968
Indian Point	3	L-7	yes	5	yes	no	11-2017
Ironton	11	L-1	no	5	no	no	10-2008
* Jackson	128	L-6	no	3	no	yes	04-1968
Jamesport	4	L-1	no	5	yes	no	12-2016
Jefferson City	409	L-6	yes	3	no	yes	01-1970
Jennings	55	L-12	no	3	no	no	09-1968
Jonesburg	5	L-7	no	3	no	no	01-1997
Joplin	286	L-6	no	5	no	no	01-1973
Kearney	38	L-7	no	3	no	no	04-1992
Kennett	66	L-7	no	3	no	yes	07-1968

# Participating Political Subdivisions (continued)

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Kimberling City	13	LT-8 (Age 65)	no	3	no	no	03-1994
King City	3	L-1	no	5	yes	no	03-2018
Kingdom City	2	L-1	no	5	no	no	04-2011
Kirksville	128	L-12	no	5	no	yes	01-1977
Knob Noster	17	LT-4 (Age 65)	yes	5	no	no	02-1999
La Grange	17	L-12	no	3	no	yes	02-1977
La Plata	12	L-7	no	5	no	yes	11-1972
Lake Lotawana	8	L-1	yes	5	no	no	08-2002
Lake Ozark	30	L-3	no	3	no	no	05-2000
Lake Saint Louis	85	LT-8 (Age 65)	yes	3	no	yes	11-1985
Lake Winnebago	7	L-1	no	3	yes	no	04-1999
Lamar	72	L-7	no	5	no	no	09-1998
Lathrop	10	L-3	no	5	no	no	07-1996
Lawson	16	L-1	no	5	no	no	08-2000
Lebanon	146	L-7	no	5	no	no	11-1984
Lee's Summit	617	L-6	no	5	no	yes	04-1970
Lexington	29	L-1	no	5	yes	no	08-2013
Liberty	234	L-6	no	5	yes	no	07-1970
Licking	11	L-12	no	3	no	no	01-1985
Lincoln	5	L-1	no	5	no	no	02-2012
Linn	7	L-1	yes	5	no	no	05-2003
Lockwood	6	L-9	no	3	no	no	04-1968
Lone Jack	10	L-3	yes	3	yes	no	01-2018
Louisiana	31	L-3	no	5	no	no	07-1968
Macon	80	LT-8 (Age 65)	yes	3	no	no	06-1968
Malden	57	L-6	no	5	yes	no	07-1976
Mansfield	16	L-1	no	3	yes	no	04-2003
Maplewood	73	L-6	no	3	yes	no	04-1970
Marceline	29	L-6	no	5	yes	no	04-1981
Marionville	8	L-7	no	3	yes	no	12-1988
Marshall	177	L-12	no	5	no	no	04-1971
Marshfield	34	L-6	no	5	yes	no	01-1990
Maryland Heights	190	L-6	no	5	no	no	01-2004
Maryville	73	L-12	no	3	no	no	01-1973
Matthews	6	L-1	yes	5	no	no	08-2006
Memphis	24	L-6	yes	3	yes	no	01-1972
Mercer	2	L-3	no	3	yes	no	06-1988
Merriam Woods	3	L-1	no	5	yes	no	11-2006
* Mexico	73	L-6	yes	3	no	no	04-1968
Milan	13	L-1	no	3	no	yes	01-1987
Miner	19	L-6	yes	3	no	no	03-1995
Moberly	118	LT-8 (Age 65)	yes	3	no	yes	08-1968
Moline Acres	11	LT-5 (Age 65)	no	5	no	no	04-1974
Monett	119	L-6	yes	3	yes	no	03-1978

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Montgomery City	18	L-3	no	3	no	no	03-1971
Mound City	6	L-6	no	3	yes	no	04-1971
Mount Vernon	32	L-7	yes	5	no	yes	09-1972
Mountain Grove	46	LT-8 (Age 62)	no	5	no	no	07-1987
Mountain View	41	L-7	no	5	no	yes	07-1989
Neosho	100	LT-8 (Age 65)	yes	3	no	yes	07-1971
Nevada	75	LT-8 (Age 65)	yes	5	no	no	11-1968
New Haven	18	L-1	no	5	yes	no	01-2013
New London	5	L-3	no	5	yes	no	01-2011
New Madrid	39	L-6	no	3	no	no	08-1968
Nixa	123	L-6	no	5	yes	no	01-1990
Norborne	2	L-3	no	5	yes	no	09-1969
Normandy	35	L-7	no	5	no	no	06-1969
North Kansas City	67	L-6	yes	3	no	no	11-1969
Northwoods	28	L-6	no	5	no	no	07-1972
Oak Grove	44	L-7	no	3	no	no	08-1969
Oak Grove Village	1	L-1	no	5	yes	no	02-2012
Oakland	-	LT-8 (Age 65)	no	5	no	no	04-2004
Oakview	5	L-1	no	5	yes	no	05-2009
Odessa	30	L-7	yes	3	no	yes	07-1975
O'Fallon	421	LT-8 (Age 65)	no	5	no	yes	02-1975
Osceola	5	L-1	no	3	yes	no	09-2001
Owensville	18	L-6	yes	5	no	no	05-1972
Ozark	107	L-12	no	3	no	yes	07-1990
Pacific	43	L-6	yes	5	no	yes	04-1987
Pagedale	24	L-3	no	5	no	no	03-1972
Palmyra	34	LT-14 (Age 65)	yes	3	no	no	04-1968
Paris	11	L-7	no	3	no	no	02-1969
Parkville	31	L-7	no	5	yes	no	08-2009
Parkway	3	L-6	no	5	yes	no	01-2014
Pattonsburg	2	L-1	no	5	yes	no	06-1975
Peculiar	27	L-6	yes	3	no	yes	10-1986
Perry	7	L-6	no	3	yes	no	01-1971
Perryville	101	L-6	no	3	no	yes	03-1969
Pevely	36	L-7	no	5	yes	no	10-2015
Piedmont	18	LT-5 (Age 65)	yes	3	no	yes	08-1974
Pilot Knob	5	L-7	no	3	yes	no	06-1992
Pine Lawn	5	L-1	no	5	no	no	07-1970
Platte City	26	L-7	no	5	yes	no	05-1987
Platte Woods	1	L-6	no	5	no	no	02-2018
Plattsburg	14	L-3	no	5	no	yes	02-1972
Pleasant Hill	40	L-6	yes	3	no	yes	05-1978
Poplar Bluff	229	L-6	no	5	no	yes	02-1971
Portageville	33	L-3	no	5	no	no	09-1996

# Participating Political Subdivisions (continued)

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Potosi	29	L-7	no	3	no	yes	04-1973
Princeton	8	L-6	no	5	yes	no	01-1973
Purdy	5	L-1	no	5	no	no	02-2017
Puxico	5	L-7	no	5	yes	no	07-2007
Ravenwood	1	L-1	no	3	yes	no	11-2000
Raymore	98	L-6	no	3	no	no	01-1990
Raytown	105	L-12	no	5	yes	no	07-2003
Republic	104	L-3	no	3	yes	no	03-2009
Richland	20	L-3	no	5	no	yes	07-1988
Richmond	46	L-3	no	3	no	no	12-1990
Richmond Heights	55	L-6	no	3	yes	no	05-1968
Riverside	75	L-6	no	5	no	no	01-1997
Riverview	13	L-3	no	5	yes	no	08-1989
Rock Hill	31	L-3	no	5	no	no	04-1968
Rogersville	18	L-1	no	3	yes	no	07-2017
Rolla	184	LT-14 (Age 65)	yes	3	no	yes	01-1969
Russellville	1	L-7	no	3	no	no	05-1999
Salem	53	L-6	yes	3	yes	no	12-1984
Salisbury	16	L-1	no	5	yes	no	07-2016
Savannah	27	L-9	no	5	no	yes	07-1976
Scott City	27	L-7	no	5	yes	no	01-1993
Sedalia	177	L-6	no	3	no	yes	08-1972
Seneca	10	L-3	no	3	no	no	05-1975
Seymour	15	L-9	no	3	no	no	04-1996
Shelbina	27	L-6	yes	3	yes	no	11-1969
Shelbyville	3	L-1	no	5	yes	no	12-2006
Sheldon	2	LT-4 (Age 65)	yes	3	yes	no	01-2008
* Shrewsbury	55	LT-8 (Age 65)	no	3	no	yes	04-1968
* Sikeston	116	LT-8 (Age 65)	no	3	no	yes	04-1968
Slater	16	L-7	no	5	no	no	02-1969
Smithton	2	L-1	no	5	yes	no	07-2017
Smithville	48	L-7	no	3	yes	no	01-2004
Sparta	5	L-7	no	3	no	no	07-2007
Springfield	1,484	L-6	no	3	no	no	06-1968
St. Ann	99	L-6	yes	3	yes	no	06-1968
* St. Charles	430	LT-8 (Age 65)	yes	3	no	yes	04-1968
St. Clair	32	L-6	no	5	no	yes	05-1980
St. James	44	L-6	no	3	yes	no	06-1974
St. John	38	L-7	no	5	no	yes	03-1970
St. Joseph	494	L-6	no	3	yes	no	04-1970
St. Mary	3	L-1	no	5	yes	no	11-2007
St. Peters	397	L-6	yes	3	yes	no	01-1976
St. Robert	74	L-7	no	3	yes	no	04-1983
Stanberry	10	L-3	no	5	yes	no	01-2015

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

City or Municipality Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Ste. Genevieve	18	LT-8 (Age 65)	no	5	yes	no	10-1984
Steelville	9	L-7	no	3	no	no	03-1997
Stockton	8	L-1	no	5	yes	no	10-1988
Strafford	15	L-3	no	3	no	no	02-2009
Sugar Creek	51	L-12	no	3	no	yes	05-1968
Sullivan	60	L-6	yes	3	no	yes	03-1972
Sunrise Beach	5	L-3	no	3	no	no	06-2005
Sunset Hills	71	L-7	no	3	no	yes	10-1972
Sweet Springs	8	L-3	yes	5	no	yes	04-1973
Thayer	26	L-1	no	5	yes	no	01-1997
Tipton	10	L-7	yes	3	yes	no	04-1981
Town And Country	50	LT-14 (Age 65)	no	3	no	no	02-2007
Trenton	36	L-6	no	5	no	yes	05-1979
Troy	55	L-3	no	5	no	no	08-2008
Twin Oaks	3	L-7	no	3	yes	no	01-2007
Union	73	L-6	no	3	no	yes	01-1974
Unionville	16	L-6	yes	5	yes	no	10-1982
Valley Park	21	L-12	no	5	yes	no	11-1972
Van Buren	6	L-1	no	5	no	no	01-2003
Vandalia	24	L-7	no	5	no	no	05-1988
Verona	3	L-1	no	5	yes	no	01-2013
Vienna	4	L-1	no	5	no	no	09-2002
Vinita Park	56	L-6	no	3	no	no	08-1971
Warrensburg	119	L-7	no	5	no	yes	07-1968
Warrenton	55	L-1	no	5	yes	no	08-2015
Warsaw	21	L-7	no	5	no	no	05-1999
Washington	115	LT-10 (Age 65)	yes	3	no	no	01-1971
Waverly	5	L-3	no	5	yes	no	10-1986
Waynesville	57	L-6	no	3	no	yes	09-1985
Webb City	92	L-7	no	3	no	no	03-1975
Webster Groves	146	L-12	no	5	yes	no	07-2013
Wellston	2	L-1	no	5	no	no	07-1971
Wentzville	212	L-7	no	5	no	no	02-1973
West Plains	194	LT-10 (Age 65)	yes	3	no	no	02-1973
Weston	12	L-3	no	3	yes	no	07-1997
Willard	37	L-7	no	5	yes	no	04-2004
Willow Springs	30	L-7	no	5	no	no	06-1993
Winchester	3	LT-5 (Age 62)	no	5	no	no	10-1982
Windsor	11	L-9	no	3	yes	no	08-1973
Winfield	7	L-1	no	5	yes	no	05-2003
Winona	7	L-1	no	3	yes	no	11-2013
Wood Heights	3	L-3	no	3	yes	no	01-1999
Woodson Terrace	32	L-7	no	5	no	yes	12-1969
Wright City	18	L-1	no	5	yes	no	02-2014

# Participating Political Subdivisions (continued)

County Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Adair County	77	L-6	no	5	no	yes	03-1977
Andrew County	68	L-6	no	3	no	no	03-1976
Atchison County	42	L-7	no	3	no	no	01-1974
Audrain County	92	L-12	no	3	no	no	04-1968
Buchanan County	241	L-6	no	5	no	yes	06-1971
Butler County	110	L-6	yes	3	no	yes	04-1968
Caldwell County	69	L-1	no	5	yes	no	01-1984
Callaway County	142	L-7	no	5	no	yes	01-1977
Camden County	273	L-6	yes	5	no	yes	02-1969
Cape Girardeau County	180	L-6	no	3	no	yes	01-1985
Cass County	215	L-3	no	3	no	yes	01-1991
Chariton County	35	L-7	no	3	yes	no	01-1988
Christian County	193	L-9	no	3	no	yes	03-1989
Clark County	35	L-1	no	5	yes	no	01-1980
Clay County	496	L-9	no	3	no	yes	11-1975
Clinton County	54	L-3	no	5	yes	no	01-1986
* Cole County	282	L-7	no	5	no	yes	04-1968
Dekalb County	27	L-3	no	3	no	no	12-1983
Dunklin County	84	L-7	no	3	yes	no	01-1969
Franklin County	307	L-6	yes	3	no	yes	01-1970
Gasconade County	44	L-7	no	5	no	yes	01-1974
Greene County	756	L-7	no	3	no	yes	01-1972
Holt County	35	L-3	no	3	yes	no	01-1974
Howard County	40	L-7	no	5	no	no	06-1976
Howell County	95	L-6	yes	3	no	yes	01-1974
Iron County	50	L-7	no	5	yes	no	01-1970
Jasper County	280	L-12	no	3	no	yes	01-1983
Jefferson County	572	L-12	no	3	no	yes	03-1969
Lafayette County	91	L-12	no	3	yes	no	01-1970
Lawrence County	79	L-7	no	3	yes	no	01-1973
Lewis County	40	LT-8 (Age 65)	no	3	no	yes	11-1974
Livingston County	35	L-3	no	3	no	yes	12-1988
Macon County	63	L-3	no	5	yes	no	01-1990
Marion County	90	L-6	no	3	no	yes	02-1972
Miller County	110	L-6	no	5	yes	no	01-1976
Mississippi County	51	L-6	no	5	yes	no	02-1973
Monroe County	43	L-7	no	3	no	no	02-1980
Montgomery County	79	LT-8 (Age 65)	no	3	yes	no	02-1973
* New Madrid County	70	L-6	yes	5	no	yes	04-1968
Nodaway County	56	L-7	no	5	yes	no	07-1973
* Pemiscot County	81	L-7	no	3	no	yes	04-1968
Perry County	87	L-12	no	3	no	yes	05-1968
Pettis County	128	L-12	no	3	no	no	10-1971
Phelps County	135	L-6	yes	3	yes	no	01-1969

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

County Name	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Pike County	74	L-6	yes	3	yes	no	12-1971
Platte County	250	L-12	no	3	no	no	01-1974
Ralls County	41	L-7	no	5	no	yes	01-1973
Randolph County	88	L-9	no	3	yes	no	04-1969
Ray County	75	L-7	no	3	no	no	04-1969
Scott County	97	L-7	no	3	no	yes	05-1969
Shannon County	36	L-1	no	5	yes	no	02-1978
St. Charles County	980	LT-8 (Age 65)	no	3	no	yes	08-1973
St. Clair County	83	L-3	no	5	yes	no	07-1979
St. Francois County	181	L-6	no	3	yes	no	10-1969
Ste. Genevieve County	107	L-7	no	3	yes	no	05-1970
Stoddard County	75	L-7	no	5	no	no	01-1969
Taney County	282	L-6	no	5	no	yes	08-1985
Texas County	43	L-9	yes	3	no	yes	09-1975
Vernon County	74	L-7	no	3	no	yes	01-1969
Wright County	59	L-12	yes	3	no	no	12-1981

Health Department Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Adair County Health Department	15	L-1	no	5	yes	no	07-1981
Andrew County Health Department	3	L-1	no	3	yes	no	01-2011
Audrain County Health Department	13	L-1	no	5	no	no	01-2013
Bates County Health Center	7	L-3	no	5	no	no	08-1992
Benton County Health Department	45	L-1	no	3	no	no	01-2018
Butler County Health Department	24	LT-8 (Age 65)	yes	5	no	yes	08-1968
Caldwell County Health Department	6	LT-8 (Age 65)	yes	5	yes	no	01-1984
Cape Girardeau County Health Department	30	L-7	no	3	no	yes	01-1985
Carter County Health Center	8	L-1	no	5	no	no	06-1978
Chariton County Health Department	4	L-1	yes	5	yes	no	05-2006
Clark County Health Department	6	L-6	no	3	no	yes	01-1981
Clay County Health Department	52	L-9	no	3	no	yes	11-1975
Clinton County Health Department	6	L-3	no	5	yes	no	01-1986
Cooper County Health Center	6	L-1	no	5	yes	no	01-2013
Dallas County Health Department	6	L-1	no	5	yes	no	01-1991
Daviess County Health Department	6	L-7	no	3	yes	no	07-2003
Dent County Health Center	5	L-3	no	3	yes	no	02-1991
Douglas County Health Department	8	L-7	no	3	yes	no	06-2010
Dunklin County Health Department	11	LT-10 (Age 65)	no	3	yes	no	02-1969
Gasconade County Health Department	4	L-1	no	5	no	yes	04-1981
Grundy Co Nursing Home District	64	L-1	no	5	no	no	07-2005
Henry County Health Department	12	L-1	yes	3	yes	no	01-2009
Iron County Health Department	6	L-3	yes	5	yes	no	03-1973
Jefferson County Health Department	51	L-7	yes	3	no	no	10-1987
Laclede County Health Center	12	L-7	no	5	yes	no	08-1991
Lafayette County Health Department	11	L-12	no	3	no	no	01-1982

# Participating Political Subdivisions (continued)

Health Department Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Lewis County Health Department	12	L-12	no	3	no	yes	05-1974
Lincoln County Health Department	20	L-7	no	3	yes	no	01-2002
Linn County Health Department	7	L-7	no	3	yes	no	05-1993
Livingston County Health Department	10	L-7	yes	3	yes	no	12-1988
Macon County Health Department	9	L-7	yes	5	no	no	08-1974
Madison County Health Department	10	L-1	no	5	yes	no	03-1998
Madison Medical Center	199	L-1	no	5	no	no	10-1972
Marion County Health Department	6	L-9	no	3	yes	no	02-1972
Miller County Health Department	9	L-3	no	5	no	no	01-1976
Mississippi County Health Department	13	L-3	no	5	no	yes	07-1977
Moniteau County Health Center	6	L-3	no	5	no	no	11-1990
Monroe County Health Department	6	L-7	no	5	no	no	04-1981
Montgomery County Health Department	10	L-3	no	3	yes	no	02-1973
Nevada City Hospital	256	L-1	no	5	no	yes	09-1970
Nevada City Nursing Home	69	L-3	no	5	no	yes	10-1978
New Madrid County Health Department	10	L-6	yes	5	no	yes	06-1968
Nodaway County Health	5	L-1	no	3	yes	no	03-2018
Pemiscot County Health Department	7	L-7	yes	3	no	yes	10-1968
Pemiscot County Memorial Hospital	235	L-7	yes	3	yes	no	02-1981
Pettis County Health Center	18	L-9	no	3	yes	no	01-1987
Pike County Health Department	26	L-6	yes	3	yes	no	12-1971
Platte County Health Department	31	L-7	no	3	no	no	01-1974
Polk County Health Center	13	L-1	no	3	yes	no	02-1991
Pulaski County Health Department	16	L-3	yes	3	yes	no	01-1979
Putnam County Health Department	5	L-7	yes	3	no	no	03-1995
Ralls County Health Department	8	L-12	no	3	no	yes	04-1973
Randolph County Health Department	22	L-7	no	5	yes	no	04-1981
Ray County Public Health Department	5	L-6	yes	3	yes	no	01-1988
Saline County Health Department	12	L-1	no	3	yes	no	03-2005
Scott County Health Department	14	L-7	yes	3	no	yes	10-1970
Shannon County Health Center	14	L-1	no	5	yes	no	07-1982
St. Clair County Health Department	7	L-3	no	5	no	no	01-1981
St. Francois County Health Department	24	L-7	yes	3	yes	no	01-1983
Ste. Genevieve County Health Department	9	L-7	no	3	yes	no	09-1982
Stone County Health Department	15	L-1	no	5	yes	no	06-2016
Sullivan Co Memorial Hospital	0	L-1	no	5	yes	no	01-2013
Sullivan County Health Department	5	LT-8 (Age 65)	no	3	no	no	04-1995
Texas County Health Department	10	L-7	no	5	no	yes	07-1987
Vernon County Health Department	8	L-6	yes	3	no	yes	05-1987
Washington County Health Department	10	L-3	yes	3	no	no	01-1991
Wayne County Health Center	6	L-7	yes	3	no	no	05-1996
Webster County Health Unit	12	L-1	no	5	yes	no	07-1999

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

Special District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Abilities First Greene County Senate Bill 40	102	L-6	no	3	no	no	01-2001
Adair Co. Senate Bill 40 Dev. Disability Board	17	L-7	no	5	no	no	10-2010
Andrew Co. Senate Bill 40 (Sunshine Factory)	2	L-1	no	3	no	no	09-2017
Audrain Developmental Disability Services	71	L-12	no	5	no	no	04-1996
Boone County Family Resources	114	L-12	no	3	yes	no	07-2004
Boonslick Regional Plan Commission	12	L-3	yes	5	yes	no	07-2006
Bootheel Regional Planning Commission	3	LT-4 (Age 65)	yes	5	yes	no	01-2005
Callaway County Special Services	17	L-6	yes	3	no	no	07-1996
Camden County Senate Bill 40	15	L-1	no	3	no	no	01-2008
Carthage Utilities	70	L-6	no	3	no	no	07-1982
Chariton County Sheltered Workshop	1	L-1	no	5	yes	no	02-2000
Chillicothe Township	3	L-7	no	3	yes	no	08-1995
Chillicothe Utilities	48	L-12	no	3	no	yes	05-1978
Christian Co. Bd. For The Dev. Disabled	13	L-6	no	3	no	no	02-2013
Daviess/Dekalb County Regional Jail	37	L-7	no	3	yes	no	11-2007
Gasconade County Senate Bill 40	4	L-1	no	5	no	no	07-2001
Green Hills Regional Planning Commission	9	L-7	no	3	yes	no	02-2011
Hannibal Public Works	69	LT-14 (Age 65)	yes	5	no	yes	11-1969
Harry S. Truman Coordinating Council	5	L-12	no	3	yes	no	07-2005
Howell County Sheltered Workshop	8	L-6	no	3	no	no	08-2013
Independence Township	3	L-1	no	3	no	no	07-2006
Jasper County Sheltered Facilities	35	L-7	no	3	no	no	01-2001
Jefferson County Public Sewer District	2	L-3	no	5	yes	no	02-2015
Kaysinger Basin Regional Planning Commission	6	L-1	yes	5	no	no	01-2012
Kennett Utilities	62	L-7	yes	3	no	yes	07-1968
Lawrence County Board For Dev. Disabled	7	L-7	no	3	no	no	01-2017
Liberty Township	14	L-6	yes	3	no	no	06-1995
Madison Co. Council For Dev. Disabled	3	L-3	no	5	no	no	04-1998
Mark Twain Regional Council of Governments	4	LT-4 (Age 65)	no	5	yes	no	04-2017
Mid-Missouri Regional Planning Commission	4	L-7	no	5	yes	no	09-2007
Missouri Joint Municipal Electric Utility Comm.	32	L-6	no	3	no	no	01-1990
Mokan Regional Council	7	L-7	no	5	yes	no	09-2017
Moniteau County Senate Bill 40 Board	14	L-1	no	5	no	no	02-2009
Montgomery County Senate Bill 40	13	L-7	no	5	no	no	08-2001
Northeast Missouri Regional Planning	5	L-1	no	5	yes	no	10-2004
Pemiscot County Port Authority	2	L-1	no	5	yes	no	08-2017
Pike County Senate Bill 40	40	LT-14 (Age 65)	yes	3	no	no	10-1998
Pike Creek Common Sewer District	4	L-1	no	3	no	no	08-2009
Platte County Regional Sewer District	6	L-3	no	5	yes	no	05-2012
Progressive Community Services	36	L-12	no	3	no	no	04-2000
Pulaski County Sewer District # 1	12	L-12	no	5	yes	no	03-2016
Randolph County Dev. Disabled Services	12	L-7	no	5	no	no	01-2018
Rock Creek Public Sewer	11	L-6	yes	3	no	no	03-2000

# Participating Political Subdivisions (continued)

Special District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Rolla Municipal Utilities	52	L-6	no	3	no	yes	01-1969
Salisbury Township	2	L-1	no	3	yes	no	04-1989
Sedalia Water Department	23	L-6	no	3	no	yes	08-1972
Sikeston Utilities	138	LT-8 (Age 65)	no	3	no	yes	04-1968
South Central Ozark Council Of Governments	7	L-6	no	3	yes	no	11-2005
Southeast Missouri Regional Planning	8	L-7	no	5	no	no	01-2005
Springfield Utilities	906	L-6	no	3	no	yes	06-1968
St. Charles County Development Handicapped	53	L-7	no	3	no	no	03-1996
St. Francois County Joint Commission Center	24	L-6	yes	3	yes	no	06-2007
St. Francois Co. Bd. For Dev. Disabled	39	L-1	no	5	yes	no	07-2005
St. Louis MR Dev. Disabled Resources	30	L-3	no	5	no	no	05-1996
Taney County Regional Sewer District	14	L-6	yes	3	no	no	02-2012
Trenton Municipal Utilities	28	L-6	no	5	no	yes	05-1979
Webster County Senate Bill 40	5	L-6	no	3	no	no	04-2017

Water District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Adair County Public Water Supply District No. 1	7	L-3	no	3	no	yes	01-1992
Audrain County Public Water Supply Dist. No. 2	2	L-7	yes	3	no	no	01-2008
Boone County Public Water District No. 4	6	L-7	no	3	no	no	08-1984
Boone County Public Water Supply Dist. No. 10	5	L-12	no	5	yes	no	01-1998
Butler County Public Water Supply District No. 1	9	L-6	no	3	yes	no	07-1995
Butler County Public Water Supply District No. 3	3	L-7	yes	3	yes	no	03-1995
Callaway 2 Water District	13	L-12	yes	3	no	yes	02-1985
Callaway County Public Water Supply Dist. No. 1	8	L-11	no	3	no	no	01-1994
Camden County Public Water Supply Dist. No. 4	7	L-1	no	3	no	no	01-2007
Carroll County Public Water Supply District No. 1	0	L-1	no	3	yes	no	06-2008
Clarence Cannon Wholesale Water Commission	4	L-7	no	3	no	no	10-2004
Clark County Public Water Supply District No. 1	6	L-3	no	3	no	no	07-2000
Clay County Water District No. 2	3	L-3	no	3	yes	no	12-1984
Cole County Water District No. 2	6	L-6	no	5	no	no	02-1974
Cole County Public Water Supply District No. 4	4	L-7	no	5	no	no	02-2001
Daviess County Public Water Supply Dist. No. 1	2	L-3	no	5	no	no	06-2000
Greene County Public Water District No. 5	1	L-6	no	3	yes	no	08-1991
Harrison Co. Public Water Supply Dist. No. 2	4	LT-10 (Age 65)	no	3	no	no	08-1998
Jackson County Public Water District No. 1	15	L-6	no	3	no	yes	03-1969
Jasper County Public Water No. 1	3	L-3	no	5	yes	no	01-2002
Jefferson Co. Public Water Supply Dist. No. 12	4	L-1	no	5	no	no	06-2000
Jefferson County Water District No. 1	11	L-6	no	5	yes	no	04-1972
Jefferson County Water District No. 2	14	L-6	no	5	yes	no	01-1983
Jefferson County Water District No. 5	6	L-7	no	3	no	no	01-1987
Jefferson County Public Water Supply Dist. No. 6	6	L-3	no	3	yes	no	08-1997
Jefferson County Water District No. 7	6	L-12	no	3	no	yes	06-1975
Jefferson County Water District No. 10	4	L-3	no	5	yes	no	02-1989

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

Water District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Laclede Co. Public Water Supply Dist. No. 3	6	L-1	yes	5	yes	no	03-2016
Lewis County Public Water Supply District No. 1	2	L-9	no	5	yes	no	09-1997
Linn-Livingston Public Water Supply Dist. No. 3	3	L-1	no	3	yes	no	08-1999
Livingston Co. Public Water Supply Dist. No. 2	3	L-3	no	5	no	no	09-2007
Livingston Co. Public Water Supply Dist. No. 3	3	L-7	no	3	no	no	05-1991
Macon County Public Water District No. 1	7	LT-8 (Age 65)	yes	5	no	no	11-1990
Madison Co. Public Water Supply Dist. No. 1	2	L-7	no	3	no	no	07-2002
Monroe Co. Public Water Supply Dist. No. 2	5	L-3	no	5	no	no	02-2008
North Central Missouri Regional Water Comm.	4	L-1	no	3	no	no	06-2007
Platte Co. Public Water Supply Dist. No. 4	5	L-7	no	5	no	no	07-2003
Putnam Co. Public Water Supply Dist. No. 1	5	L-1	no	3	yes	no	02-2001
Stoddard Co. Public Water Supply Dist. No. 1	3	L-1	no	5	yes	no	07-2009
Wayne & Butler Co. Pub. Water Supp Dist. No. 4	2	L-7	yes	5	yes	no	05-2009

Road District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Audrain County Special Road District No. 13	2	L-7	no	5	yes	no	01-2013
Cameron Special Road District	2	L-12	yes	5	no	no	11-2000
Cape Special Road District	10	L-6	no	5	no	yes	09-1981
Carl Junction Special Road District	1	L-1	no	5	yes	no	04-2001
Carthage Special Road District	9	L-3	no	3	yes	no	05-2000
Eldorado Springs Spec Road District	2	L-1	no	5	no	no	04-1982
Farley Special Road District	2	L-3	yes	3	no	no	07-1999
Festus Special Road District	4	L-6	no	3	no	yes	02-1969
Higginsville Special Road District	1	L-7	no	3	no	no	05-1970
Horseshoe Bend Spec Rd District No. 1	10	L-1	no	5	yes	no	05-2008
Hudson Township Special Road District	2	LT-10 (Age 65)	yes	5	no	no	04-1990
La Plata Township Special Road District	1	L-1	no	5	yes	no	10-1991
Lexington Special Road District	2	L-1	no	5	yes	no	06-2000
Marshall Special Road District	3	L-7	no	3	yes	no	09-1998
Moberly Special Road District	5	L-3	no	5	yes	no	01-2001
Monett Special Road District	1	L-7	no	3	yes	no	05-2014
Neosho Special Road District	6	LT-10 (Age 65)	no	3	no	no	04-1997
Odessa Special Road District	6	L-7	no	3	no	no	09-1999
Osceola Special Road District	1	L-1	no	5	yes	no	03-2002
Platte City Special Road District	4	L-6	no	5	no	no	01-1998
Plattsburg Special Road District	1	L-3	no	3	yes	no	02-1991
Richmond Special Road District	1	L-9	no	5	yes	no	03-2001
Slater Special Road District	1	L-7	yes	3	no	no	11-2006
Ste. Genevieve Special Road District A	3	L-3	no	3	yes	no	07-1990
Union Special Road District	1	L-7	no	5	yes	no	09-1978
Washington Special Road District	0	L-3	yes	3	no	no	05-1974
Weston Special Road District	2	L-3	no	5	yes	no	07-1997

# Participating Political Subdivisions (continued)

Fire District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Antonia Fire Protection District	26	L-6	no	3	no	no	07-2012
Battlefield Fire Protection District	39	L-7	no	5	yes	no	01-2013
Boles Fire Protection District	26	L-1	no	3	yes	no	05-2018
Boone County Fire Protection District	22	L-6	no	5	no	no	02-2012
Butler County Fire Protection District	7	LT-5 (Age 65)	no	3	yes	no	11-1994
Central Crossing Fire Protection District	1	L-6	no	5	yes	no	01-2014
Central Jackson County Fire District No. 5	130	L-6	no	3	no	yes	09-1973
Desoto Rural Fire Protection District	16	L-12	no	3	no	no	04-2014
Ebenezer Fire Protection District	12	L-1	no	5	yes	no	01-2013
Fair Grove Fire Protection District	8	L-3	no	3	yes	no	06-2016
Fort Osage Fire Protection District	27	L-6	no	3	no	yes	04-1983
Goldman Fire Protection District	7	L-3	no	5	no	no	01-2012
Gravois Fire Protection District	12	L-3	yes	5	yes	no	11-2017
Hematite Fire Protection District	4	L-1	no	3	no	no	04-2017
Hillsboro Fire Protection District	10	L-3	yes	5	no	no	02-2011
Johnson County Fire Protection District	1	L-7	yes	5	no	no	05-2006
Johnson Co Fire Protection District No. 2	1	LT-8 (Age 65)	yes	3	no	no	01-2015
Kearney Fire & Rescue Protection District	29	L-7	yes	3	no	no	01-1997
Lake Ozark Fire Protection District	37	L-1	no	5	no	no	10-2016
Lawson Fire & Rescue Protection District	11	L-3	no	5	yes	no	05-2008
Little Dixie Fire Protection District	1	L-1	yes	3	no	no	01-2003
Logan-Rogersville Fire Protection District	25	L-1	no	3	yes	no	06-2016
Lotawana Fire Protection District	4	L-1	yes	3	no	no	01-2009
Mid-County Fire Protection District	14	L-6	no	5	yes	no	05-2010
Nixa Fire Protection District	34	L-12	no	3	no	no	01-2005
Odessa Fire & Rescue Protection District	3	L-6	no	5	no	no	01-2010
Osage Beach Fire Protection District	31	L-6	no	5	no	no	07-2006
Ozark Fire Protection District	27	L-7	no	5	no	no	02-2009
Pleasant Hill Fire Protection District	14	L-3	no	3	no	no	11-2008
Prairie Township Fire District	13	L-3	no	3	no	no	01-2009
Raytown Fire Protection District	37	LT-8 (Age 62)	yes	5	no	no	09-1992
Redings Mill Fire Protection District	16	L-3	no	5	yes	no	01-2007
Rocky Mount Fire Protection District	2	L-7	no	5	yes	no	08-2007
Savannah Fire Protection District	1	L-1	yes	5	yes	no	06-2006
Smithville Fire Protection District	11	L-7	no	5	no	no	04-2004
Sni Valley Fire Protection District	23	L-11	no	3	no	no	07-1986
South Metro Fire Protection District	48	L-11	no	3	no	no	11-1981
Southern Platte Fire Protection District	37	L-6	no	5	yes	no	08-2010
Southern Stone County Fire Protection District	11	L-7	no	5	yes	no	01-2013
St. James Fire Protection District	1	L-12	no	3	yes	no	05-2007
Strafford Fire Protection District	17	L-1	no	5	yes	no	10-2009
Sunrise Beach Fire Protection District	17	L-1	no	5	yes	no	01-2017
Union Fire Protection District	16	L-6	no	3	no	no	11-2006
Warrenton Fire Protection District	11	L-1	no	5	yes	no	12-2017

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

Fire District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Waynesville Rural Fire Protection District	10	L-7	no	3	no	no	07-2008
West Overland EMS & Fire Protection District	19	L-6	no	5	yes	no	04-2016
West Peculiar Fire Protection District	8	LT-4 (Age 65)	no	5	no	no	09-2006
Western Taney County Fire Protection District	9	L-3	no	5	yes	no	07-1993
Willard Fire Protection District	13	L-7	no	5	yes	no	09-2013

Emergency Services District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Adair County Ambulance District	31	L-7	no	5	yes	no	02-2009
Audrain Ambulance District	15	L-6	yes	5	no	no	03-2010
Audrain County Emergency Services	13	L-7	yes	5	no	no	01-2011
Barry County E-911 Emergency Services	19	L-7	yes	5	yes	no	01-2013
Barry-Lawrence County Ambulance District	13	L-3	no	5	yes	no	01-2014
Barton County Ambulance District	11	L-3	yes	5	no	no	10-1998
Big River Ambulance District	14	L-3	no	5	no	no	01-2011
Caldwell County Ambulance District	5	L-1	no	5	yes	no	01-2014
Callaway County Ambulance District	36	L-9	yes	3	no	no	01-1996
Cameron Ambulance District	10	L-3	yes	5	yes	no	01-2010
Carroll County Ambulance District	10	L-1	no	5	yes	no	05-2017
Cass County Emergency Services	1	L-6	no	3	no	no	05-2013
Chariton County Ambulance District	10	L-1	no	5	yes	no	01-2013
Chariton County Enhanced 911	7	L-1	no	3	yes	no	05-2004
Christian County Ambulance District	1	LT-4 (Age 65)	no	5	yes	no	07-2013
Christian County Emergency Services	26	L-6	no	3	no	no	04-2011
Clearwater Ambulance District	7	L-3	no	3	yes	no	11-2017
Daviess County Community Ambulance District	3	LT-10 (Age 65)	no	3	yes	no	07-2000
Dekalb/Clinton County Ambulance District	5	L-1	no	5	yes	no	03-2017
East Central Dispatch Center	20	L-6	no	3	yes	no	07-2013
Gasconade County 911 Board	9	L-1	no	5	no	no	07-2003
Grand River Regional Ambulance District	17	L-1	no	5	yes	no	11-2014
Henry County Emergency 911 Center	11	L-1	no	5	yes	no	10-2015
Hermann Area Ambulance District	10	L-3	no	5	no	no	10-2009
Howell County 911 Emergency Services	11	L-6	yes	5	no	no	03-2009
Iron County E911 Communications	1	L-3	no	3	yes	no	06-2012
Jefferson County 911 Dispatch District	38	L-7	yes	3	no	no	01-2009
Joachim-Plattin Ambulance District	40	L-6	no	3	no	no	01-2013
Johnson County Central Dispatch E-911	26	L-6	no	5	no	no	01-2016
Johnson County Ambulance District	32	L-7	yes	5	yes	no	01-2004
Lewis County Emergency E-911	0	L-1	no	5	no	no	03-2003
Lincoln County Ambulance District	38	LT-8 (Age 65)	no	3	no	no	02-1990
Linn County Ambulance District	14	L-1	no	5	yes	no	01-2010
Madison County Ambulance District	13	L-3	no	5	yes	no	01-2014
Marion County E-911 Communications	16	LT-5 (Age 65)	no	5	no	no	01-1997
Mcdonald County 911	17	L-1	no	5	yes	no	03-2018

# Participating Political Subdivisions (continued)

Emergency Services District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Monroe County Ambulance District	5	L-1	no	5	no	no	08-2012
Montgomery County Ambulance District	16	L-6	yes	5	yes	no	04-1994
Nodaway County Ambulance District	21	L-3	no	5	yes	no	05-2016
North Scott County Ambulance District	12	L-1	no	5	yes	no	11-2012
Northland Regional Ambulance District	24	LT-8 (Age 65)	no	5	yes	no	07-2012
Pulaski County 911 Communications	13	L-7	yes	3	no	no	03-2008
Ralls County 911 District	8	L-3	no	5	no	no	06-2001
Randolph County Ambulance District	20	L-3	no	5	no	no	01-2008
Ray County 911 Emergency Services Board	8	L-12	no	3	no	no	09-1998
Ray County Ambulance District	17	L-7	no	3	yes	no	04-1997
South Scott County Ambulance District	18	LT-14 (Age 65)	yes	5	yes	no	07-2000
St. Francois County Ambulance District	56	LT-8 (Age 65)	yes	5	yes	no	01-2009
Ste. Genevieve County Ambulance District	16	L-12	no	5	yes	no	01-2012
Stoddard County Ambulance	26	L-6	yes	3	yes	no	07-2001
Stone County Emergency Services	13	L-7	no	3	yes	no	04-2002
Sullivan County E-911	6	L-3	no	5	yes	no	04-2009
Taney County Ambulance District	63	L-6	yes	3	yes	no	01-1987
Texas County Emergency Services	6	L-12	yes	3	no	no	08-2015
Tri-County Ambulance Services	5	L-3	no	5	no	no	02-1996
Valle Ambulance District	21	L-7	no	5	no	no	11-2015
Webster County E-911 Services	13	LT-8 (Age 65)	no	5	no	no	04-2006
West Central Dispatch Center	11	L-7	no	5	yes	no	02-2017

Library District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Adair County Public Library	4	L-3	no	3	yes	no	01-1992
Brookfield Carnegie Library District	1	L-1	no	3	no	no	06-1989
Camden County Library	16	L-7	no	3	no	no	01-1978
Carthage Public Library	6	L-1	no	5	yes	no	08-2001
Cass County Public Library	32	L-6	no	5	no	no	05-1988
Cedar County Library	2	L-3	no	3	yes	no	05-1971
Christian County Library	7	L-6	no	5	no	no	06-1969
Douglas County Public Library	2	L-1	no	5	yes	no	05-2013
Ferguson Municipal Library	5	L-1	no	5	yes	no	07-1969
Gentry County Library	0	L-3	no	5	no	no	06-2018
Henry County Library	5	L-3	no	3	yes	no	01-2006
Hickory County Library	1	L-1	no	3	yes	no	05-1971
Jefferson County Public Library	32	L-3	no	3	yes	no	01-1992
Lebanon-Laclede County Library	9	L-9	no	5	no	no	01-1970
Little Dixie Regional Libraries	13	L-7	no	5	no	no	06-1996
Livingston County Library	10	L-1	no	5	no	no	02-2006
Maplewood Library	6	L-6	no	3	yes	no	04-1970
Maryville Public Library	3	L-7	yes	5	no	no	01-1973
Mexico-Audrain County Library	8	L-3	no	5	no	no	08-1984
* Mid-Continent Public Library	369	L-6	yes	3	no	yes	04-1968

†See Summary of Plan Provisions for benefit program description.

\*Charter Member

Library District Name:	Employee Members	Benefit Program†	Rule of 80	Final Average Salary Period	Employee Contrib.	Non-Contrib. Refund	Membership Date
Mississippi County Public Library	4	L-6	yes	3	yes	no	02-1969
Missouri River Regional Library	35	L-7	no	3	yes	no	01-2003
Neosho/Newton County Library	5	L-3	yes	5	no	no	01-2005
Nevada Public Library	3	L-6	no	3	no	no	04-1969
New Madrid County Library	4	L-7	no	3	yes	no	04-1968
Ozark Regional Library	5	L-6	no	3	no	no	01-2016
Polk County Library	10	L-1	no	3	no	no	05-1971
Poplar Bluff Public Library	9	L-7	no	5	yes	no	01-2013
Pulaski County Library	10	L-3	no	5	no	no	01-1970
Ray County Library	3	LT-10 (Age 65)	no	5	no	no	07-1970
Riverside Regional Library	11	L-12	no	3	no	no	08-1968
Rock Hill Public Library	2	L-3	no	3	yes	no	01-1989
Rolla Free Public Library	2	L-6	no	3	yes	no	05-1989
Rolling Hills Consolidated Library	20	L-1	no	5	no	no	07-2003
Salem Public Library	3	L-7	no	3	yes	no	07-1993
Scenic Regional Library	24	L-6	no	5	yes	no	01-1971
Sedalia Public Library	6	L-6	no	3	no	no	07-1987
Springfield-Greene Co Library	108	L-7	no	3	no	yes	07-1969
St Charles City-County Library	92	L-7	no	3	no	yes	08-1973
St Joseph Public Library	30	L-1	no	5	no	no	09-2013
Stone County Library	5	L-1	no	5	yes	no	02-1970
Texas County Library	1	L-6	no	3	yes	no	08-1982
Trails Regional Library	35	L-7	no	3	no	no	10-1970
Washington County Library	5	L-1	no	5	no	no	01-2017
Webster County Library District	6	L-3	yes	3	no	no	01-2007
Webster Groves Municipal Library	11	L-7	no	5	yes	no	10-2013
Wright County Library	1	L-1	no	5	no	no	05-1982







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