Comprehensive Annual Financial Report

for the fiscal year ended June 30, 2018

Education for Today, Retirement for Tomorrow

Missouri Public Schools and PSRS/PEERS

BEULAH RALPH ELEMENTARY SCHOOL





PUBLIC SCHOOL & EDUCATION EMPLOYEE RETIREMENT SYSTEMS OF MISSOURI

Comprehensive Annual Financial Report

for the fiscal year ended June 30, 2018

Education for Today

Our public school districts proudly provide Missouri's students with the best possible education and learning environment. They work hard and smart to meet the challenge of keeping facilities, technologies and course offerings up-to-date and meet the ever changing needs of today's students.

> M. Steve Yoakum Executive Director

Prepared by PSRS/PEERS Staff

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www.psrs-peers.org

Cover photo of Missouri public schools by Renette Reiske.



RETIREMENT SYSTEMS OF MISSOURI

TABLE OF CONTENTS

INTRODUCTORY SECTION

Mission Statement, Goals, Focus Areas	4
Board of Trustees	5
Administrative Organization	6
Professional Services	7
Transmittal Letter	8
Economic Impact	2
Certificate of Achievement for Excellence in Financial Reporting	3
Public Pension Coordinating Council, Public Pension Standards Awards	4

FINANCIAL SECTION

Independent Auditors' Report from Williams Keepers, LLC
Management's Discussion and Analysis17
Basic Financial Statements
Statements of Fiduciary Net Position
Statements of Changes in Fiduciary Net Position25
Notes to the Financial Statements
Required Supplementary Information
Schedules of Changes in the Employers' Net Pension Liability
Schedules of Employers' Net Pension Liability
Schedules of Employer Contributions
Schedules of Investment Returns
Notes to the Schedules of Required Supplementary Information51
Staff Retiree Health Plan - Defined Benefit OPEB Plan53
Schedules of Administrative Expenses
Schedules of Investment Expenses
Schedules of Professional Services

INVESTMENT SECTION

TABLE OF CONTENTS

ACTUARIAL SECTION

Certification of Actuarial Results, PricewaterhouseCoopers LLP	
Schedule of Funding Progress	
Required Contribution Rates and Amortizations of Unfunded Liability	
Reconciliation of Unfunded Actuarial Accrued Liability	
Schedules of Active Member Valuation Data	
Solvency Tests	
Schedules of Retirees and Beneficiaries Added to and Removed from Retirement Rolls	
PSRS Summary Plan Description	
PEERS Summary Plan Description	
PSRS and PEERS Summary of Actuarial Assumptions and Methods	

STATISTICAL SECTION

Statistical Summary	
Summary of Benefit Recipients by Type	
Schedules of Changes in Fiduciary Net Position, Last 10 Fiscal Years	
PSRS Summary of Changes in Membership During 2017-2018	
PEERS Summary of Changes in Membership During 2017-2018	
PSRS 2017-2018 New Service Retirees	
PEERS 2017-2018 New Service Retirees	
PSRS Schedule of Average Benefit Payments to New Service Retirees	
PEERS Schedule of Average Benefit Payments to New Service Retirees	
Comparisons of Actuarial Assets and Total Actuarial Liabilities	
Growth in Membership	
PSRS Schedule of Covered Employees in the Top 10 Employers	
PEERS Schedule of Covered Employees in the Top 10 Employers	

...Retirement for Tomorrow

At the same time, PSRS/PEERS helps those school districts attract and retain the best and brightest educators and staff by providing them the peace of mind of having future lifetime retirement benefits. Our job is to provide Missouri's educators and education employees with the best possible retirement, tomorrow.

Introductory Section

Mission Statement, Goals, Focus Areas	4
Board of Trustees	5
Administrative Organization	6
Professional Services	7
Transmittal Letter	8
Economic Impact	12
Certificate of Achievement for Excellence in Financial Reporting	13
Public Pension Coordinating Council, Public Pension Standards Awards	14

Mission Statement, Goals, Focus Areas

MISSION STATEMENT

The Public School Retirement System of Missouri and the Public Education Employee Retirement System of Missouri (PSRS and PEERS) work in partnership with the member school districts of this state to provide eligible employees and their beneficiaries with a significant source of income based on the employee's length of service and compensation in order to enhance retirement, disability and death benefits received from other sources.

GOAL

To provide retirement security to Missouri's educators and education employees after a full career of service.

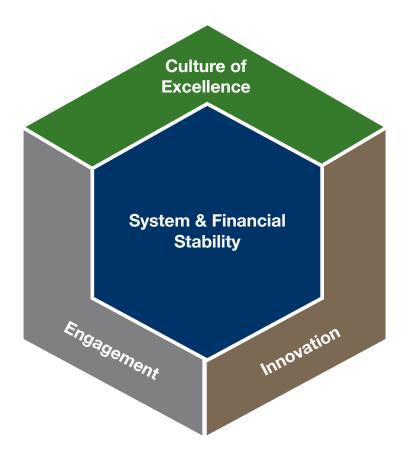
GOAL

To help school districts attract and retain the best and brightest educators and employees for Missouri's school children.

GOAL

To manage the Systems in a prudent and cost-efficient manner while continuing to provide exceptional service to our members.





Board of Trustees

As of June 30, 2018

The PSRS/PEERS Board of Trustees is charged by law with the administration of PSRS/PEERS. Trustees are committed to providing services to the members and beneficiaries professionally, promptly, courteously and efficiently. The Board meets regularly six times a year, with special meetings called as necessary.

It is the fiduciary responsibility of those charged with the administration of PSRS and PEERS to:

- Effectively collect contributions,
- Prudently invest the assets to obtain optimum returns,
- Equitably provide benefits,



Dr. Aaron Zalis Chair Elected PSRS Trustee



Jason Hoffman Vice Chair Elected PEERS Trustee



Charles Bryant Appointed Trustee



Yvonne Heath Elected PSRS Trustee



Scott Hunt Appointed Trustee

• Impartially and in accordance with applicable law administer the benefit programs, and

• Set contribution rates that are adequate to fund promised benefits.

The seven-member Board consists of three elected PSRS members; one elected PEERS member; and three governor-appointed trustees, one of whom must be a PSRS or PEERS retiree. Trustees serve four-year terms and serve without compensation.



Beth Knes Appointed Trustee



Jason Steliga Elected PSRS Trustee

Administrative Organization

As of June 30, 2018



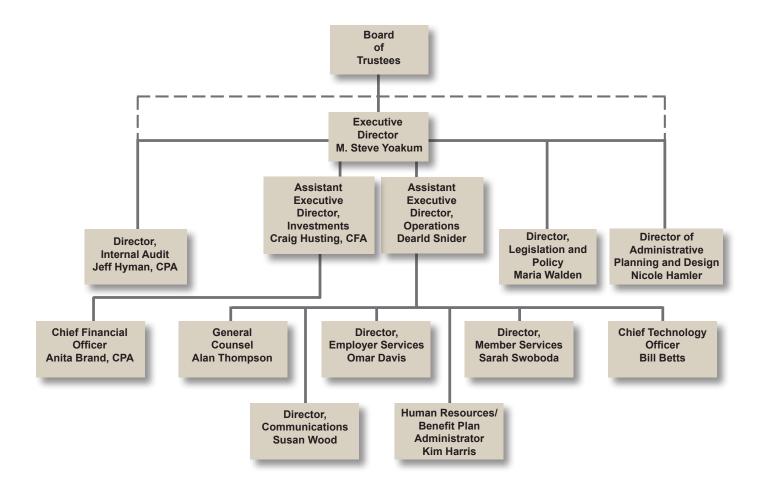
M. Steve Yoakum Executive Director



Craig Husting, CFA Assistant Executive Director, Investments



Dearld Snider Assistant Executive Director, Operations



Professional Services

As of June 30, 2018

Actuaries

PricewaterhouseCoopers, LLP

Cindy Fraterrigo, FSA, EA, MAAA Brandon Robertson, ASA, EA, MAAA Chicago, Illinois New York, NY

Auditors

Williams Keepers, LLC

Heidi A. Chick, CPA Nick Mestres, CPA Columbia, Missouri

Technology Consultants

Dell EMC Travis Foxell Round Rock, TX

Gartner Inc. Jamie Combs Stamford, CT

KiZAN Technologies LLC Ken Fox Louisville, KY

Network Technology Partners Bill Streck Ellisville, MO

OPTIV

Jeff Davis Chicago, IL

Secureworks, Inc. Bret Collard Atlanta, GA

ShareSquared, Inc. John Honeycutt Montrose, CA

SHI International Rick Wolters Somerset, NJ

Towner Communications Systems Steve Sisson Jefferson City, MO

Insurance Consultants

Charlesworth & Associates Bob Charlesworth Overland Park, Kansas

The Insurance Group Jason Swindle Columbia, Missouri

Other Consultants

Cortex Tom Iannucci Toronto, Ontario

Legal Counsel

Groom Law Group David Levine Washington, D.C.

Pillsbury, Winthrop, Shaw, Pittman, LLP Semma Arzapalo Los Angeles, California

Thompson Coburn, LLP Allen Allred St. Louis, Missouri

Legislative Consultant

Statehouse Strategies, LLC James "Jim" Moody Jefferson City, Missouri

Medical Advisor

Andrew Matera, M.D. Columbia, Missouri

Investment Management, Custodial and Consulting fees can be found in the Schedule of Investment Expenses on page 102. Schedules of broker commissions can be found on page 100. Additional information on Investment Managers can also be found in the Investment Section of this report.

Transmittal Letter



November 30, 2018

To the Board of Trustees and Members of the Retirement Systems:

We are pleased to present the *Comprehensive Annual Financial Report* (CAFR) of the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS) for the fiscal year ended June 30, 2018. The PSRS/PEERS' Board of Trustees and staff understand the passion our educators and schools have for providing the best for their students and families. PSRS/PEERS shares this passion when it comes to providing financial security for our members. We work to ensure all members have access to the best possible financial future by providing lifetime retirement benefits and financial security in retirement. Together, our efforts have a positive impact on many lives. While our members provide education for today, PSRS/PEERS provides retirement for tomorrow. The financial strength and stability of the Systems combined with a strong governance structure continue to provide financial security to all members.

In addition to providing information to our Board of Trustees and members concerning the financial condition of the Systems, this report also meets our reporting requirements under Sections 169.020.16 and 169.450.11 of the Revised Statues of Missouri (RSMo). Printed copies are available to the public upon request and the complete report is also posted on our website, **www.psrs-peers.org**.

This letter provides a brief overview of the contents of the CAFR. We encourage you to read the Management's Discussion and Analysis on pages 17 to 22 for a more detailed analysis of our financial position for the fiscal year.

Report Contents and Structure

Responsibility for the preparation, accuracy and completeness of this report, including all disclosures, rests with the management staff of PSRS/PEERS (the Systems). The Systems' financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP) within the guidelines established by the Governmental Accounting Standards Board (GASB). To the best of our knowledge, the enclosed data is accurate in all material respects and fairly presents our financial position and operating results.

The management of the Systems is responsible for internal accounting controls, which are designed to provide reasonable but not absolute assurance that the financial statements are free of any material misstatements and assets are safeguarded. The cost of internal controls should not exceed the benefits to be derived. The Systems employ two internal auditors who perform operational reviews to ensure that the internal controls are functioning effectively. We believe the internal controls in place are adequate to meet the purpose for which they were intended.

Our independent external auditors, selected by the Board of Trustees, have conducted an audit of the basic financial statements in accordance with U.S. generally accepted auditing standards. This audit and the financial statements and related footnotes are presented on pages 15 to 56 of this report.

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 Member Services FAX (573) 634-7934
 Employer Services FAX (573) 634-7911

Overview of the Retirement Systems

The Public School Retirement System of Missouri (PSRS), a cost-sharing multiple employer retirement system, was established in 1946 by the Missouri legislature to provide certificated public school employees and their families with a significant and stable source of retirement income, disability and survivor benefits. The majority of PSRS members do not contribute to Social Security.

The Non-Teacher School Employee Retirement System of Missouri (NTRS), also a cost-sharing multiple employer retirement system, was established in 1965 by the Missouri legislature to build a plan similar to PSRS, but for non-certificated public school personnel. The name of the non-teacher system was changed to the Public Education Employee Retirement System of Missouri (PEERS) in August 2005 to more positively represent the members of the System. Members of PEERS contribute to Social Security.

PSRS and PEERS are governed jointly by a seven-member Board of Trustees, composed of three elected PSRS members, one elected PEERS member and three members appointed by the governor.

Unlike most public pension systems, the members of PSRS and PEERS share equally in funding the contributions to the Retirement Systems. The contribution rates in total approximate the contribution rates of similar public plans. However, this funding mechanism has kept the employer contributions lower and the employee contributions higher than many similar public plans.

The combined Systems serve approximately 272,000 total members in 534 districts and other employers. In excess of \$2.8 billion is paid annually to over 91,000 service retirees and beneficiary recipients. At June 30, 2018, PSRS/PEERS had a market value of net assets of approximately \$44.0 billion, making it larger than all other public retirement systems in the state of Missouri combined.

Strategic Planning - Mission, Goals and Focus Areas

During the current fiscal year, the Board of Trustees and staff prepared a three-year strategic plan. The strategic plan insures that the Board of Trustees and staff continue to proactively prepare for the future of the Systems. The process used to create the plan included a review of the Systems' current mission, goals and principles, while always being mindful of and congruent with the statutes that govern the Systems. The mission and goals of the Systems have remained the same since the creation of the Systems and therefore the mission statement and goals included on page 4 are unchanged. The Systems are financially stable and are managed based on sound governing principles. The goal of the strategic planning process was to continue to identify areas of opportunity, as well as threats, and then develop strategic objectives to address those areas while maintaining alignment with the Systems' mission and goals. The strategic plan categorizes the Systems' strategic objectives in four focus areas: 1. System and Financial Stability, 2. Culture of Excellence, 3. Engagement and 4. Innovation. Every member of the Systems' staff and Board of Trustees has an important role within each focus area. The finalized strategic plan is a detailed summation of the Systems' long-standing governance structure and philosophy.

Funding Status and Valuation Results

The Board of Trustees evaluates a large amount of information each year including, but not limited to, the annual actuarial valuations prepared by the Systems' external actuaries, PricewaterhouseCoopers, LLP. During the current year, staff and the Board of Trustees reviewed the sensitivities to changes in cost-of-living adjustment (COLA) assumptions and investment returns. The review included multiple scenarios to lower the assumed rate of return on investments. A lower assumed rate of return decreases the risk profile of the plans, which was an important consideration when determining future contribution rates and the ability to maintain a consistent COLA policy. It's important to note that decreased risk provides for greater stability of future contribution rates and COLAs.

Transmittal Letter, continued

The Board of Trustees amended the Systems' Actuarial Funding Policies at their October 29, 2018 meeting. The Actuarial Funding Policy amendments included a change to the assumed rate of return on investments. The Board of Trustees reduced the assumed rate of return from 7.6% to 7.5% effective with the June 30, 2018 actuarial valuations. All Funding Policy amendments are based on two critical elements that are at the forefront of all System decisions: the Board of Trustees' fiduciary responsibility and their funding goals.

Fiduciary responsibility includes the duties of loyalty and impartiality. The duty of loyalty requires the operation of the Systems for the exclusive benefit of the members and retirees of those Systems, and must supersede the interests of all other parties. The duty of impartiality requires that the Board not favor any one type of plan participant over another (e.g. active, inactive, retired members). The Board has a fiduciary duty to: 1. Effectively collect contributions, 2. Prudently invest the assets to obtain optimum returns, 3. Equitably provide benefits, 4. Impartially and in accordance with applicable law, administer the benefit program, and 5. Set contribution rates that are adequate to fund promised benefits.

The Board of Trustees' funding goals are: 1. Provide for the security and financial stability of the Systems, including maintaining at least an 80% pre-funded ratio, continuing to amortize the unfunded liability until PSRS/PEERS is 100% pre-funded, and allowing for a reasonable assumed rate of return given capital market estimates, 2. Maintain the contribution rates of both Systems at or below current levels, and 3. Provide a consistent COLA for PSRS/PEERS benefit recipients to maintain their purchasing power, noting COLAs should be dependable and affordable without harming the financial stability of the Systems. The Board of Trustees funding goals are in direct alignment with the Systems' mission, goals and recently adopted strategic plan.

The Systems' funding objective continues to be to achieve a funded ratio of 100% over a closed 30-year period. For this purpose, funded ratio is defined as the actuarial value of assets divided by the actuarial accrued liability determined under the entry age normal cost method and the actuarial assumptions adopted by the Board of Trustees. As of June 30, 2018, PSRS was 84.0% pre-funded, while PEERS was 86.1% pre-funded. PSRS' pre-funding remained the same as June 30, 2017 at 84.0%, while PEERS showed a slight increase in funding from the June 30, 2017 pre-funded percentage of 85.8%. The funded status of both plans remained relatively unchanged due to the investment return assumption being lowered effective June 30, 2018. The assumption change was partially offset by favorable investment experience. Additional information on actuarial assumptions and funding can be found in the actuarial section of this report. Based upon the June 30, 2018 valuations and overall financial projections, the Board of Trustees set the fiscal year 2020 contribution rates at the fiscal year 2019 level for both members and employers.

Investment Activities

The Systems continued to achieve strong absolute and relative returns in fiscal year 2018. The Systems' investment portfolio added approximately \$3.6 billion in investment earnings to the growth of assets during fiscal year 2018. The Systems earned an investment return of 8.9% for fiscal year 2018 (8.7% net of all investment expenses and fees). The total plan return, net of all investment expenses and fees, exceeded both the long-term investment goal (actuarial required rate of return) of 7.6% and the total plan policy benchmark return of 7.4%. PSRS and PEERS are long-term investors with a diversified portfolio that continues to produce strong long-term returns where the annualized investment return is 8.5% (8.4% net of all investment expenses and fees) over the last 30 years.

Additional detailed information regarding the Systems' investments, including policies and strategies, can be found in the Investment Section of this report beginning on page 57.

Legislative Changes During Fiscal Year 2017

Governor Michael L. Parson signed legislation (CCS SCS SB Senate Bill 892) impacting the Systems that became effective August 28, 2018. This bill modified the statutory provision regarding working after retirement for individuals who work at a PSRS-covered employer in a non-certificated position. Additional information on this legislation and working after retirement provisions is available on our website, **www.psrs-peers.org**.

Awards

Public Pension Coordinating Council (PPCC), Public Pension Standards Award

PSRS and PEERS each received the Public Pension Standards Awards in 2018 in recognition of meeting professional standards for plan administration and plan funding as set forth in the Public Pension Standards of the PPCC. These awards are presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PSRS and PEERS for the *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2017. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR whose contents meet or exceed program standards. This report must satisfy both U.S. generally accepted accounting principles, applicable legal requirements and GFOA standards. A Certificate of Achievement is valid for only one year. We believe our current report continues to meet the Certificate of Achievement program requirements and are submitting it to GFOA for consideration again this year.

Professional Services

Certain professional services are provided to the Systems by retained consultants. The required opinion letters from two of those consultants, PricewaterhouseCoopers, LLP, actuaries, and Williams Keepers LLC, independent certified public accountants, are contained elsewhere in this report.

The Systems conducted a general consultant search during the current year resulting in the selection of Verus Advisory, Inc. Willis Towers Watson was the previous general consultant from 2011 to December 2017.

Acknowledgements

We would like to express our thanks and gratitude to the Board of Trustees, staff, and consultants who have worked diligently to produce this report and to ensure the successful operation of the Systems.

Respectfully submitted,

M. Stury

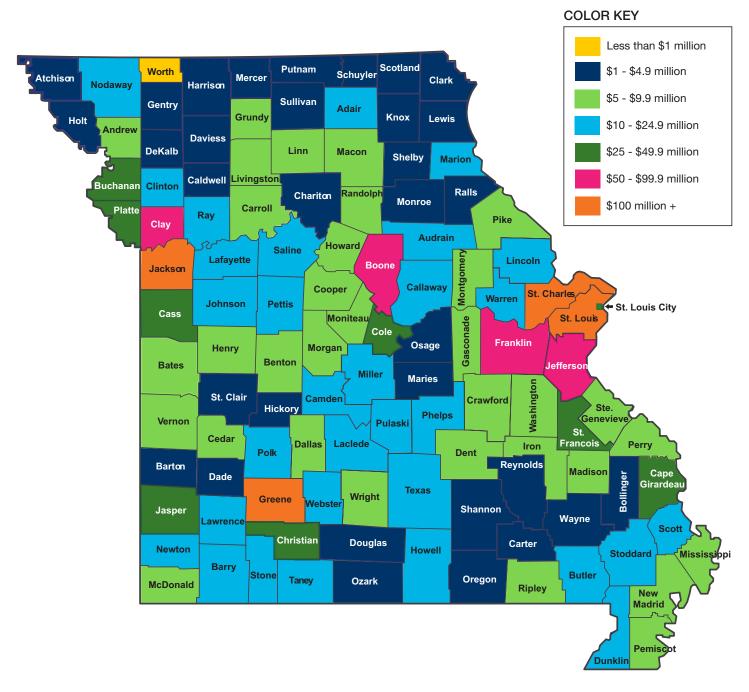
M. Steve Yoakum Executive Director

Anita Brand, CPA Chief Financial Officer

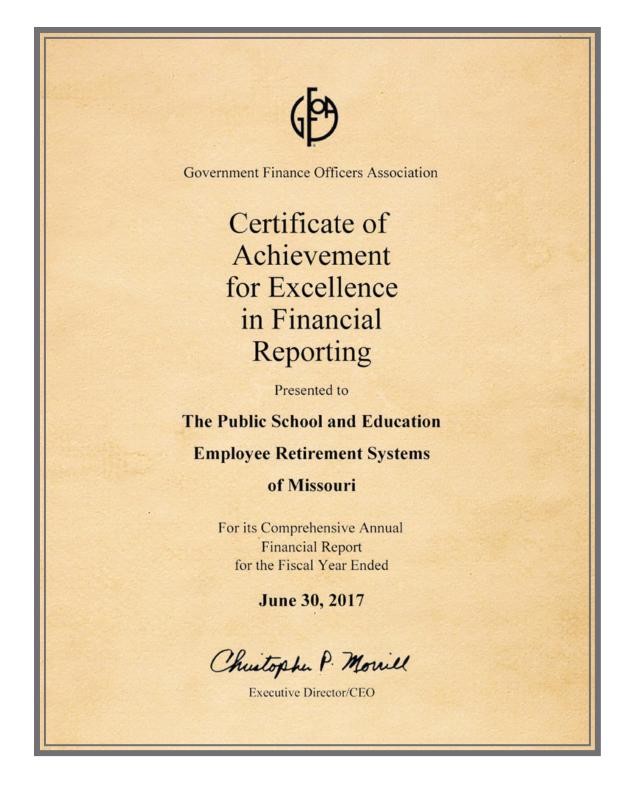
Economic Impact

The benefits distributed by PSRS/PEERS make a sizable contribution to Missouri's economy and help Missouri public schools attract and retain quality teachers and education employees.

As of June 30, 2018, of the over 91,000 individuals receiving benefits from PSRS/PEERS, approximately 89% of them live in Missouri. Total benefits paid for the one-year period ending June 30, 2018 were over \$2.8 billion. Of this amount, more than \$2.5 billion was distributed among Missouri's 114 counties, positively impacting the state's economy.



Certificate of Achievement for Excellence in Financial Reporting



Public Pension Coordinating Council Public Pension Standards Awards

