



KANSAS CITY PUBLIC SCHOOL RETIREMENT SYSTEM



Comprehensive Annual Financial Report

Fiscal Years Ending December 31, 2017 and 2016

Prepared by the joint efforts of the KCPSRS staff
3100 Broadway, Suite 1211, Kansas City, MO 64111
816.472.5800 • www.kcpsrs.org

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June 11, 2018

Dear Members of the Kansas City Public School Retirement System,

We are pleased to submit the 2017 *Comprehensive Annual Financial Report (CAFR)* of the Kansas City Public School Retirement System (KCPSRS) for the fiscal year ended December 31, 2017. This report is intended to provide financial, investment, actuarial and statistical information in a single publication. KCPSRS management is responsible for the accuracy of the data, as well as the completeness and fairness of the presentation.

In addition to providing information to our members concerning the financial condition of the System, this CAFR also meets the reporting requirements of state law as stipulated in Section 105.661 of the Revised Statutes of Missouri (RSMo). The complete report is posted on our website, www.kcpsrs.org and printed copies are available upon request.

This letter of transmittal complements the financial statements and the *Management's Discussion and Analysis* section that begins on page 14 of this report.

Management Responsibility

Responsibility for the preparation, the completeness and reliability of all information presented in this report, including all disclosures, rests with the management of KCPSRS. The financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP) within 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 the System's financial position and operating results.

Management of the System is responsible for internal accounting controls, which are designed to provide reasonable but not absolute assurance the financial statements are free of any material misstatements and assets are safeguarded. The concept of reasonable assurance recognizes that the cost of internal controls should not exceed the benefit to be derived and the valuation of cost and benefit requires estimates and judgements by management.

Mayer Hoffman McCann, P.C. 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 is described in the *Independent Auditors' Report* on page 12 in the *Financial Section*.

Major Initiatives

As part of its ongoing focus on the financial condition of the pension fund, the KCPSRS Board of Trustees during 2017 acted upon the results of two recent studies – the experience study (for years 2011-2015), completed by Cavanagh MacDonald, the System's actuary, and the asset/liability analytics (12/31/16), completed by Segal Marco

Advisors, the System's general asset consultant. These studies help establish plan assumptions, measure the System's actuarial accrued liabilities (benefits earned by active and retired members) and help determine how to invest system assets to protect and increase the funding levels while providing adequate liquidity for benefit payments. The results of these studies indicated that several factors, longer lifespans among active and retired members, lower than expected future investment returns, and a contribution fixed rate rather than contribution rates tied to actuarial requirements were having a negative financial effect on the pension fund.

The Board adopted revised actuarial assumptions which were first implemented in the January 1, 2017 actuarial valuation. The two most important actuarial assumption changes recognized new mortality tables and adjustments based on the experience of our members and lowered the assumed rate of long-term investment return from 8% to 7.75%. During 2017, the Board approved revisions to the target asset allocation to be effective in January 1, 2018 and commenced investment manager searches for additional private equity, opportunistic real estate, and multi-asset class strategies.

In addition to actuarial assumptions and asset allocation revisions, both the actuary and asset consultant advised the Board to consider revising the contribution rate which is currently set by state statute. Accordingly, System staff met with participating employers over the summer and fall of 2017 to discuss contribution rate changes. A proposal to significantly increase the employer contribution for two years and then to resume funding contributions at an actuarial required contribution rate without increasing the employee rate was vetted. With significant employer support, legislative language was introduced, in the Missouri General Assembly session beginning January 2, 2018, to revise the KCPSRS contribution rates. Senate Bill 892 which included language to change KCPSRS contribution rate was ultimately approved by the House of Representatives and the Senate in May 2018.

The legislative changes increase the contribution rate of the employers by 1.5% effective January 1, 2019 and again on January 1, 2020, and thereafter the legislation establishes guidelines to keep the System's contribution rate at the actuarial required contribution (ARC) rate. The increases of 3% through 2020 are intended to support the System in becoming financially stronger and stop the downward trend. Continued payment of the ARC is one of the most important factors of funding a defined benefit plan.

Investment Information

The System achieved strong absolute and relative returns in fiscal year 2017. For the fiscal year ended December 31, 2017, the total fund returned 16.93% net of investment fees. The total fund return, net investment expenses and fees, exceeded both the long-term actuarial assumed rate of return of 7.75% and the total fund policy benchmark return of 15.98%. KCPSRS is a long-term investor with a diversified portfolio. The Systems' investment portfolio added approximately \$103.8 million in net investment earnings to the growth of the assets during the fiscal year.

A summary of the asset allocation and more information regarding the investment performance and the investments professionals who provide services to KCPSRS can be found in the *Investment Section* of this report.

Funding Status and Valuation Results

Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides an indication of the System's funded status on an on-going basis. KCPSRS adopted this as the appropriate measure of the System's funded status for purposes of RSMO section 169.324.3(1)(a) in determining the potential for cost of living adjustments (COLAs). As of the actuarial valuation January 1, 2018, KCPSRS funded status is 69.2%, reflecting a slight decrease from in funding from the January 1, 2017 funded status of 69.7%. The changes in funded status are primarily due to an actuarial loss of \$9.5 million on assets (smoothing of prior investment loss) and an actuarial

gain of \$10.8 million on liability experience (salary increases smaller than expected). Additional information on actuarial assumptions and funding can be found in the *Actuarial Section* of this report.

Award for Excellence in Financial Reporting

KCPSR was awarded a Certificate of Achievement for Excellence in Financial Reporting for our *Comprehensive Annual Financial Report (CAFR)* for the fiscal year ended December 31, 2016. For the first time in KCPSRS history, KCPSRS submitted a CAFR to the Government Finance Officers Association (GFOA) for review and evaluation.

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. The 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.

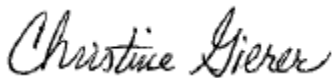
This prestigious award recognizes KCPSRS for financial standards of excellence and is extremely gratifying to staff who work diligently throughout the year to carry out excellence and integrity in their work.

Acknowledgements

We would like to express our thanks and gratitude to the staff and consultants who have worked to produce this report and to provide complete and reliable information for making management decisions, complying with legal provisions and determining responsible stewardship of the assets contributed by members and their employers.

In closing, the Board of Trustees and staff look forward to serving your future needs, if you have any questions regarding this report or any aspect of KCPSRS, contact us at KCPSRS 3100 Broadway, Suite 1211, Kansas City, Missouri 64111 or call 819-472-5800 or visit our website www.kcpsrs.org.

Respectfully submitted,



Christine Gierer, Executive Director



Laura Oswald, Fiscal Accountant



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Kansas City Public School
Retirement System**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2016

Christopher P. Morrill



3100 Broadway, Suite 1211
Kansas City, MO 64111
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www.kcpsrs.org

June 11, 2018

Dear Members,

On behalf of the Board of Trustees (Board), I am pleased to present KCPSRS' *Comprehensive Annual Financial Report* for the fiscal year ending December 31, 2017. While the focus of this report is on information related to the financial and actuarial status of your retirement system, it also highlights other changes and accomplishment that occurred during the year.

KCPSRS' investments generated \$103.8 million, a net return of 16.93 percent (after all investment expenses) for 2017. This year's net investment return exceeded our policy benchmark by 0.95 percent and our assumed rate of return by 9.18 percent. While very pleased with our 2017 investment return, the Board fully recognizes that financial markets are volatile and continuously focuses its investment policies on the long-term.

As part of its fiduciary duty, the Board annually reviews actuarial assumptions and asset allocations. Additionally, at least every five years the Board commissions an experience study to compare actuarial assumptions to the actual experience of the fund and an asset/ liability study to analyze asset allocation mixes to determine which best serves to meet the goals of the retirement system. Throughout late 2016 and much of 2017, the Board consulted with its actuarial firm, Cavanaugh Macdonald Consulting, LLC, and its general asset consulting firm, Segal Marco Advisors, who both provided reports, research and insight to the Board.

In December 2016, based on the results from the experience study, the Board voted to lower KCPSRS' assumed long-term investment rate of return to 7.75 percent from 8.0 percent to better reflect the changing financial market environment. The Board also adopted other assumption changes, including longer life expectancies of our members as revealed in our 2016 experience study that compared assumptions against the actual experience of the System. The longer life expectancies indicate KCPSRS will pay benefits for a longer period and the lower expected investment returns indicate investment earnings will be lower than in the past. From an actuarial perspective, these revised assumptions have an effect of increasing the cost of KCPSRS. Both our actuary and asset consultant recommended the Board consider increasing in the contribution rate paid to the System. The KCPSRS contribution rate as currently stated in Revised Missouri State Statutes is below the rate recommended by actuarial valuations.

In the summer of 2017, the Board directed staff to work with participating employers to discuss possible contribution rate changes. After those meetings and much deliberation, the Board decided to propose legislative language to revise the KCPSRS contribution rate. Language was drafted and introduced in the 2018 General Assembly session which commenced January 2, 2018. The legislative changes were approved by the General Assembly in May 2018 will increase the employer contribution rate in 2019 and 2020 and then set the total

contribution rate at the actuarial required contribution rate each year. These changes are expected to strengthen KCPSRS' financial position and will ultimately enhance the retirement security of all our members.

Public pension plans are experiencing heightened media attention and critics of defined benefit (DB) plans are quick to offer 401(k) or 403(b) defined contribution (DC) plans as an alternative. Unfortunately, those critics fail to recognize DB plans, like KCPSRS, offer teachers, school and public library staff a real path to retirement security by:

- helping overcome obstacles to saving for retirement such as putting off saving and saving too little
- delivering benefits more efficiently than defined contribution accounts
- boosting retirement incomes among lower- and middle-income staff

Research by the National Institute on Retirement Security reflects that DB plans allow schools to recruit and retain effective teachers and, at the same time, help teachers effectively and efficiently build retirement security. In contrast to critics of DB plans, the KCPSRS Board of Trustees stands by our core value of Member Focused – All our work begins with the question, “Is it good for our members?”

I would like to recognize the departure of two trustees. Linda Watkins retired from the school district in 2017. She served as a KCPSRS trustee four years as an elected active member. David Price served on the board during 2017 until he moved outside the district boundaries. On behalf of the Board, I extend my appreciation to these individuals for their service to the KCPSRS membership. With these departures, the Board welcomed new trustees. Lazona Stovall, appointed by the KCPSRS Board of Trustees in 2017 to complete Mr. Price's term, Boni Tolson, elected by the active members for a four year term commencing January 1, 2018.

I wish to thank the entire Board for their contributions this year as well as the staff for their expertise and professionalism in the administration of the System. I also wish to express my appreciation to you, our members, for your public service and commitment to serving our Kansas City children and community. If you ever have any questions regarding KCPSRS, contact us at KCPSRS 3100 Broadway, Suite 1211, Kansas City, Missouri 64111 or call us at 819-472-5800 or visit our website www.kcpsrs.org.

Sincerely,



Horace Coleman, Board of Trustees Chairperson

Our Mission

The Kansas City Public School Retirement System works to fulfill the expectation of a secure retirement for employees of Kansas City's School District, charter schools and Public Library.



Our Core Values

In pursuit of our mission, our work is guided and informed by four core values.



Fiduciary Stewardship

We are legally and ethically responsible to our members to safeguard the assets that provide for their future financial security.



Accountability

Our principle obligation and concern is the security of member assets through efficient operations and prudent investment decisions.



Transparency

We ensure openness in all aspects of governance and operations for our members and community.



Member Focused

We strive to make all decisions in the best interests of our members. All of our work begins with the question, *"Is it good for our members?"*

KCPSRS Board of Trustees

As of December 31, 2017

Horace Coleman, Jr.
Board Chairperson
Appointed by School Board

Mark Bedell, Ed.D.
District Superintendent
Ex-Officio

Joanne M. Collins
Treasurer
Appointed by School Board

Curtis Rogers
Vice-Chairperson
Elected by retired Members

Carl Evans
Appointed by School Board

Debbie Siragusa
Appointed by Library District

Lazona Stovall
Appointed by Trustees to complete a
term of an active member

Bakari Ukuu
Elected by active members

Roger Offield
Elected by active members

Linda E. Watkins
Elected by active members

Beverly Pratt
Elected by retired members

Brian Welch
Appointed by School Board

KCPSRS Staff

Christine Gierer, Executive Director

Lois Henderson, Retiree Services Coordinator

Erica Hill, Retirement Education Specialist

Jim Lewallen, Administrative Manager

Laura J. Oswald, Fiscal Accountant

Shannon McClain, Executive Assistant

Joe Schaefer, IT Manager

Outside Professional Services

ACTUARY

Cavanaugh Macdonald Consulting, LLC

AUDITORS

CBIZ MHM, LLC

Mayer, Hoffman, McCann PC

INVESTMENT MANAGEMENT CONSULTANTS

Segal Marco Advisors

LEGAL COUNSEL

Seyferth, Blumenthal & Harris, LLC

Husch Blackwell, LLP

MASTER TRUSTEE/CUSTODIAN

BNY Mellon

BANKING RELATIONSHIP

Bank of America

INSURANCE

Lockton Companies, Inc.

TECHNOLOGY CONSULTANTS

Sagitec

GFI

LEGISLATIVE CONSULTANTS

The Giddens Group

MEDICAL ADVISORS

Clay Platte Family Medicine Clinic

INVESTMENT ADVISORS

(refer to pages 46 & 47,

Investment Summary and Investment Fees)

AQR Capital Management, LLC

BlackRock

Brandywine Global

Investment Management, LLC

Brookfield Asset Management Inc

The Clifton Group Investment Management
Company

Corbin Capital Partners, L.P.

Denver Investments

Earnest Partners

Fisher Investments

JP Morgan Investment Management

Loomis Sayles & Company, L.P.

Mesirow Financial Investment Management

Pantheon Ventures Inc

Pugh Capital Management

RhumbLine Advisers, L.P.

The Rock Creek Group, L.P.

StepStone Group, LLC

Wells Capital Partners, LLC

Westfield Capital Management Company, L.P.

Westport Capital Partners, LLC

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INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees
Public School Retirement System of the School District of Kansas City, Missouri
Kansas City, Missouri

Report on the Financial Statements

We have audited the accompanying financial statements of the Public School Retirement System of the School District of Kansas City, Missouri (the "Retirement System"), which comprise the statements of fiduciary net position as of December 31, 2017 and 2016, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the 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 accounting principles generally accepted in the United States of America; 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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits under Government Accounting Standards issued by the Comptroller of the United States. 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 auditors' 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 entity'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 entity'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 Retirement System as of December 31, 2017 and 2016, and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.



Member of Kreston International – a global network of independent accounting firms

Other Matters

Required Supplementary Information

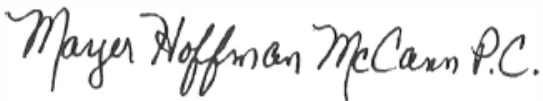
Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in net pension liability and related ratios, employer contributions, and investment returns, as listed in the table of contents, be presented to 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 auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits 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 audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Retirement System's basic financial statements. The other supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and was derived from and relates directly to underlying accounting and other records used to prepare the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial and Statistical sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.



Kansas City, Missouri
June 11, 2018

Management’s Discussion and Analysis

The discussion and analysis of the Kansas City Public School Retirement System financial statements provides an overview of its financial activities during the years ended December 31, 2017 and 2016. Please read it in conjunction with more detailed financial statements, notes and required supplementary information which follows this section.

KCPSRS is the defined benefit plan for all regular, full-time employees of the Kansas City School District, Kansas City Public Library, the Charter Schools located within the boundaries of the Kansas City School District and the Retirement System. The Plan was established by the Missouri General Assembly in 1944 and is administered by the KCPSRS Board of Trustees to provide retirement, disability and survivor benefits to its members.

Overview of Financial Statements and Accompanying Information

- The financial statements presented in this report are the Statements of Fiduciary Net Position as of December 31, 2017 and 2016, and the Statements of Changes in Fiduciary Net Positions for the years ended December 31, 2017 and 2016. These statements reflect resources available for the payment of benefits as of the year-end, and the sources and uses of those funds during the year.
- The notes to the financial statements are an integral part of the financial statements and provide facts and detailed information to assist the reader in understanding the statements. Information in the notes includes a description of the Plan, a summary of significant accounting policies, the method used to value investments, a summary of investments, and actuarial methods and assumptions.
- Schedules related to employer contributions and the funding of the Plan are included in the section entitled Required Supplementary Information.
- Other supplementary schedules consist of detailed information supporting administrative and investment expenses.

Fiduciary Net Position

	December 31,			Percentage Change From 2016 to 2017	Percentage Change From 2015 to 2016
	2017	2016	2015		
Receivables	\$ 11,680,121	\$ 12,069,103	\$ 12,175,210	-3.22%	-0.87%
Investments	672,509,851	618,133,183	622,054,307	8.80%	-0.63%
Cash	2,259,107	2,401,367	2,469,527	-5.92%	-2.76%
Prepaid and other assets	45,403	45,865	36,491	-1.01%	25.69%
Property and equipment, net of accumulated depreciation	38,383	54,238	103,742	-29.23%	-47.72%
Total assets	686,532,865	632,703,756	636,839,277	8.51%	-0.65%
Securities purchased	-	538,494	30,751	-100.00%	1651.14%
Accounts payable	599,450	590,186	583,179	1.57%	1.20%
Accrued expenses	131,416	132,463	115,841	-0.79%	14.35%
Total liabilities	730,866	1,261,143	729,771	-42.05%	72.81%
Net position restricted for pensions	\$ 685,801,999	\$ 631,442,613	\$ 636,109,506	8.61%	-0.73%

Financial Analysis of Fiduciary Net Position

As of December 31, 2017, KCPSRS held \$685.8 million in trust on behalf of about 10,843 active, inactive and retired members. This represented a \$54.4 million increase in net position from the previous fiscal year-end. In fiscal 2016, KCPSRS experienced a \$4.7 million decrease in net position from the previous fiscal year-end.

Assets - Total assets of KCPSRS were \$ 686.5 million as of December 31, 2017 and \$632.7 million as of December 31, 2016 and included receivables, investments and cash. A large percentage of total assets, 98.0% fiscal 2017 and 97.7% fiscal 2016 is represented by investments held to provide retirement, death, and disability benefits to members and their beneficiaries. Other assets, including cash, receivables from employee and employer contributions, receivables from investment-related transactions, prepaid assets, and property and equipment make up 2.0% fiscal 2017 and 2.3% fiscal 2016 of total assets. Total assets increased \$53.8 million (8.5%) from the previous fiscal year-end due to the increase in investable assets of \$54.4 million (8.8%). In fiscal 2016, total assets decreased \$4.1 million (-.65%) from the previous fiscal year-end due to the decrease in investable assets of \$3.9 million (-.63%).

Liabilities – Total liabilities of KCPSRS were \$.7 million as of December 31, 2017 and \$1.3 million as of December 31, 2016 and included payables for investment manager fees, payables from investment-related transactions, and accrued expenses. Total liabilities decreased \$.5 million from previous fiscal year-end due to the decrease in amounts due brokers for purchase of investments of \$.5 million. In fiscal 2016, total liabilities increase \$.5 million from the previous fiscal year-end due to the increase in amounts due brokers for purchase of investments of \$.5 million.

Net Position – The fiduciary net position restricted for pensions increased 8.6% from prior fiscal year, ending at \$685.8 million as of December 31, 2017. The fiduciary net position restricted for pensions decreased .73% during fiscal 2016, ending at \$631.4 million as of December 31, 2016.

Changes in Fiduciary Net Position

	Years Ended December 31,			Percentage Change From 2016 to 2017	Percentage Change From 2015 to 2016
	2017	2016	2015		
Contributions	\$ 33,890,913	\$ 32,808,515	\$ 29,145,161	3.30%	12.57%
Net investment income (loss)	103,767,715	44,337,774	(10,025,518)	134.04%	542.25%
Total additions	137,658,628	77,146,289	19,119,643	78.44%	303.49%
Benefits paid	78,181,575	76,898,255	76,235,124	1.67%	0.87%
Refunds of contributions	3,581,147	3,270,723	3,399,065	9.49%	-3.78%
Depreciation expense	15,855	92,179	250,979	-82.80%	-63.27%
Administrative expenses	1,520,665	1,552,025	1,648,449	-2.02%	-5.85%
Total deductions	83,299,242	81,813,182	81,533,617	1.82%	0.34%
Net increase (decrease)	54,359,386	(4,666,893)	(62,413,974)	1264.79%	92.52%
Net position restricted for pensions, beginning of year	631,442,613	636,109,506	698,523,480	-0.73%	-8.94%
Net position restricted for pensions, end of year	\$ 685,801,999	\$ 631,442,613	\$ 636,109,506	8.61%	-0.73%

Financial Analysis of Changes in Fiduciary Net Position

Member contributions, employer contributions and investment income are additions to fiduciary net position. For the year 2017 and 2016, both members and employers contributed at 9.0% of covered salary versus for the year 2015, both members and employers contributed at 8.5% of covered salary. Total contributions for fiscal 2017 shows an increase of \$1.1 million (3.3%) due to the growth of payroll compared to fiscal 2016 shows an increase of \$3.7 million (12.57%) due to the contribution rate increase of .5% for both members and employers and the growth of payroll during year 2016 compared to previous year-end.

Net Investment income for fiscal 2017 of \$103.8 million and fiscal 2016 of \$44.3 million are the result of positive investment performance. The portfolio’s investment rate of return for the year 2017 gross of fees was 17.47% with investment income of \$108.2 million and investment expenses of \$4.4 million. The portfolio’s investment rate of return for the year 2016 gross of fees was 7.92% with investment income of \$48.3 million and investment expenses of \$4.0 million. Investment related expenses include investment manager fees, investment advisor and custodial fees.

Total additions to fiduciary net position as of December 31, 2017 increased \$60.5 million from previous fiscal year-end and as of December 31, 2016 increased \$58.0 million from previous fiscal year-end due to the increase in both contributions and net investment income.

Benefits paid to members, refund of member contributions and administrative expenses are the deductions fiduciary net position. Benefits paid out exceeded contributions received by \$44.2 million for fiscal year 2017 and by \$44 million for fiscal year 2016. This excess of benefits paid relative to contributions received is characteristic of a mature pension plan such as KCPSRS. The administrative expenses for year 2017 were approximately .22% and for year 2016 were approximately .25% of assets, respectively.

Total deductions from fiduciary net position as of December 31, 2017 increased \$1.5 million from previous fiscal year-end due to increase in both benefits paid and refunds of contributions during the year. For fiscal year 2016, deductions showed a slight increase of \$.3 million from previous fiscal year-end.

Request for information

This report is intended to provide the Board of Trustees, the Retirement System’s members, and other interested parties a general overview of the Retirement System’s financial matters. If you have questions about this report or need additional information, contact us at:

KCPSRS
3100 Broadway, Suite 1211
Kansas City, MO 64111
816.472.5800
Kcpsrs.org
www.kcpsrs.org

Statements of Fiduciary Net Position

December 31, 2017 and 2016

ASSETS	2017	2016
Receivables:		
Plan member contributions	\$ 685,624	\$ 697,036
Employers' contributions	10,537,802	10,562,880
Due from brokers for securities sold	-	364,670
Accrued interest and dividends	456,695	444,517
	<u>11,680,121</u>	<u>12,069,103</u>
Investments, at fair value:		
Cash and short term investments	20,365,076	13,832,993
Commingled domestic fixed income	54,913,727	52,860,342
High yield fixed income	17,979,851	16,474,561
Global fixed income	31,604,923	28,214,068
Domestic equity	164,878,025	145,024,310
International equity	190,814,088	151,657,182
Pooled real estate funds	55,885,706	70,742,809
Alternative equity funds	89,533,199	91,321,786
Private equity funds	25,437,896	27,812,474
Commodities fund	21,097,360	20,192,658
	<u>672,509,851</u>	<u>618,133,183</u>
Other:		
Cash	2,259,107	2,401,367
Prepaid and other assets	45,403	45,865
Property and equipment, at cost, less accumulated depreciation	38,383	54,238
	<u>2,342,893</u>	<u>2,501,470</u>
TOTAL ASSETS	<u>686,532,865</u>	<u>632,703,756</u>
LIABILITIES		
Due to broker for securities purchased	-	538,494
Accounts payable	599,450	590,186
Accrued payroll expenses	131,416	132,463
	<u>730,866</u>	<u>1,261,143</u>
TOTAL LIABILITIES	<u>730,866</u>	<u>1,261,143</u>
NET POSITION RESTRICTED FOR PENSIONS	<u>\$ 685,801,999</u>	<u>\$ 631,442,613</u>

See Notes to the Financial Statements

Statements of Changes in Fiduciary Net Position

Years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
ADDITIONS		
Contributions:		
Plan members	\$ 16,964,351	\$ 16,528,188
Employers	<u>16,926,562</u>	<u>16,280,327</u>
Total contributions	<u>33,890,913</u>	<u>32,808,515</u>
Investment Income:		
Net realized and unrealized appreciation in fair value of investments	102,069,468	42,374,383
Interest	2,316,875	2,147,094
Dividends	<u>3,767,884</u>	<u>3,797,930</u>
	108,154,227	48,319,407
Less: Investment expenses	<u>4,386,512</u>	<u>3,981,633</u>
Net investment income	<u>103,767,715</u>	<u>44,337,774</u>
TOTAL ADDITIONS	<u>137,658,628</u>	<u>77,146,289</u>
DEDUCTIONS		
Benefits paid	78,181,575	76,898,255
Refunds of contributions	3,581,147	3,270,723
Depreciation expense	15,855	92,179
Administrative expenses	<u>1,520,665</u>	<u>1,552,025</u>
TOTAL DEDUCTIONS	<u>83,299,242</u>	<u>81,813,182</u>
NET INCREASE (DECREASE) IN NET POSITION	54,359,386	(4,666,893)
NET POSITION RESTRICTED FOR PENSION		
Beginning of year	<u>631,442,613</u>	<u>636,109,506</u>
End of year	<u>\$ 685,801,999</u>	<u>\$ 631,442,613</u>

See Notes to the Financial Statements

NOTES TO FINANCIAL STATEMENTS

(1) Description of plan

The following description of the Public School Retirement System of the School District of Kansas City, Missouri (the “Retirement System”) provides only general information. Participants should refer to the Missouri Revised Statutes regarding the Retirement System or the Summary Plan Description for a more complete description of the Retirement System’s provisions, which are available from the Retirement System’s administrator.

General - The Retirement System is a cost-sharing multiple-employer defined benefit pension plan (the “Plan”), which was established by the General Assembly of the State of Missouri and is exempt from the provisions of the Employee Retirement Income Security Act of 1974. The Board of Trustees of the Retirement System (“Board of Trustees”) administers and operates the Plan in accordance with the statutes of the State of Missouri. At December 31, 2017, participating employers consisted of the School District of Kansas City, Missouri; the Kansas City, Missouri Public Library District; the Retirement System; and the following charter schools: Académie Lafayette, Academy for Integrated Arts, Allen Village Charter School, Benjamin Banneker Charter Academy, Brookside Charter School, Citizens of the World Kansas City, Crossroads Charter Schools, DeLaSalle Charter School, Ewing Marion Kauffman School, Frontier Schools, Genesis School, Inc., Gordon Parks Elementary, Guadalupe Center Schools, Hogan Preparatory Academy, Hope Leadership Academy, Kansas City International Academy, Kansas City Neighborhood Academy, KIPP Endeavor Academy, Lee A. Tolbert Community Academy, Pathway Academy, Scuola Vita Nuova, and University Academy.

Eligibility - All regular, full-time employees of the participating employers become members of the Plan as a condition of employment if they are in a position requiring at least 25 hours of work per week and nine calendar months per year. Employees who retire after June 30, 1999 and were hired after 1961, but before January 1, 2014 are members of Plan B. Employees hired after January 1, 2014 are members of Plan C. At January 1, 2017 and 2016, respectively, the Plan’s membership consisted of:

	<u>2017</u>	<u>2016</u>
Active plan members	3,701	3,574
Retirees and beneficiaries receiving benefits	4,032	4,049
Terminated plan members, vested entitled to but not yet receiving benefits	490	461
Terminated plan members, nonvested entitled to a refund of contributions plus accrued interest	<u>2,298</u>	<u>2,279</u>
Total plan membership	<u>10,521</u>	<u>10,363</u>

Contributions – For the years beginning January 1, 2017 and 2016, members of Plan B and C contributed at 9% of annual compensation.

For the years beginning January 1, 2017 and 2016, employers contributed at 9% of annual compensation.

Service - Creditable service is membership service. This is service for which required contributions have been made. Members of Plan B are effectively limited to 30 years of creditable service, regardless of the number of years actually worked, unless the member earned more than 30 years prior to August 28, 1993. Members of Plan C are effectively limited to 34.25 years of creditable service, regardless of the number of years actually worked.

Compensation

Annual compensation - Compensation in excess of the limitations set forth in Section 401(a)(17) of the Internal Revenue Code will be disregarded for purposes of determining contributions and benefits for members of Plan B and C. A member's annual compensation is the member's regular compensation.

Average final compensation - For members of Plan B and C, the average final compensation is the highest average compensation paid during any four consecutive years of creditable service.

Normal retirement

Eligibility - A member of Plan B may retire (a) after the completion of five years of creditable service, provided such member has attained at least the age of 60 or (b) after the member has accumulated a minimum of 75 credits (effective August 28, 1998), where each year of creditable service plus a member's age equals 75 credits. A member of Plan C may retire (a) after the completion of five years of creditable service, provided such member has attained at least the age of 62 or (b) after the member has accumulated a minimum of 80 credits, where each year of creditable service plus a member's age equals 80 credits.

Benefit - For a member of Plan B, the normal monthly retirement benefit equals the product of one-twelfth of 2.00% (1.75% for members who retired prior to June 30, 1999) of the member's average final compensation and years of creditable service, subject to a maximum of 60% of their average final compensation. The normal monthly retirement benefit for a member of Plan B whose years of creditable service exceeded 34.25 years on August 28, 1993, shall equal the product of 1.75% and the member's years of creditable service on August 28, 1993. For a member of Plan C, the normal monthly retirement benefit equals the product of one-twelfth of 1.75% of the member's average final compensation and years of creditable service, subject to a maximum of 60% of their average final compensation.

Minimum benefit - Effective January 1, 1996, any member with at least ten years of service, but less than twenty years, is entitled to a minimum monthly retirement benefit equal to the sum of \$150 and \$15 for each full year of creditable service in excess of ten years or the actuarial equivalent if an option is elected. Any member with at least twenty years of creditable service at retirement is entitled to a minimum monthly retirement benefit of \$300 or the actuarial equivalent of \$300 if an option is elected. Beneficiaries of deceased members who retired with at least ten years of creditable service and elected one of the optional plans for payment of benefits may receive the actuarial equivalent of the minimum monthly retirement benefit available for the option chosen.

Early retirement

Eligibility - A member with at least five years of creditable service and a minimum age of fifty-five is eligible for early retirement.

Benefit - A member eligible for early retirement will receive a reduced benefit, calculated as for normal retirement, which recognizes service and compensation to the actual retirement date. The reduction in benefit will provide a benefit which is actuarially equivalent to the normal retirement benefit that would be payable at the member's normal retirement date.

Disability retirement

Eligibility - A member with at least five years of creditable service who is certified to be totally incapacitated for performance of duty by the Medical Board (as designated by the Board of Trustees) is eligible for disability retirement.

Benefit - A disabled member will receive a benefit, calculated as for normal retirement, based on credible service and average final compensation at the actual disability retirement date. The minimum disability retirement benefit shall be the lesser of:

1. 25% of the person's average compensation; or

2. The member's service retirement benefit calculated on the member's average final compensation and the maximum number of years of creditable service the member would have earned had the member remained an employee until age 60.

Termination benefits - vested

Eligibility - A member who has at least five years of creditable service earns a vested interest in their accrued benefit, provided the member leaves their contributions in the Plan.

Benefit - The vested benefit is calculated as a normal retirement benefit based on a member's creditable service and average final compensation on the termination date. The benefit is payable, at minimum, on the member's normal retirement date.

Termination benefits - non-vested

If the member's termination is for reasons other than death or retirement, and if the member has not met the vesting or retirement requirements, only the member's contributions with interest will be refunded.

Death benefit

Prior to retirement - For a member who passes away while actively employed, the member's accumulated contributions with interest will be paid to the member's beneficiary. Certain beneficiaries of a member of Plan B or C have the option to receive a monthly retirement benefit or a refund of the member's contributions with interest. All beneficiaries are guaranteed to receive at least the member's accumulated contributions at retirement, if a member passes away before electing an option.

Post retirement - The optional form of benefit payment selected under either Plan B or Plan C will determine what, if any, benefits are payable upon death after retirement.

Option 1 - The retiree's designated survivor will receive, for life, the same level of monthly retirement benefit. In the event that the retiree's designated survivor predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount it would have been, had the retiree not elected Option 1.

Option 2 - The retiree's designated survivor will receive, for life, a monthly retirement benefit equal to one-half the retiree's benefit. In the event the retiree's designated survivor predeceases the retiree, the retiree's monthly benefit will be adjusted to the amount it would have been, had the retiree not elected Option 2.

Option 3 - No benefits are payable to the retiree's estate or any beneficiary. Retirement benefits payable under this option will be actuarially increased from the normal formula.

If the death of any retiree who has not elected an option occurs before they have received total benefits at least as large as their accumulated contributions and interest, the difference shall be paid to the deceased's beneficiary, if living, or to their estate.

Benefit increase adjustments - The Board of Trustees shall determine annually whether or not the Retirement System can provide an increase in benefits for those retirees who, as of January 1 preceding the date of such increase, have been retired at least one year (three years prior to January 1, 2002). Any increase also applies to optional retirement allowances paid to a retiree's beneficiary. Before any increases are made, the following requirements must be satisfied:

1. The Retirement System funded ratio as of January 1st of the preceding year of the proposed increase must be at least 100% after adjusting for the effect of the proposed increase. The funded ratio is the ratio of assets to the pension benefit obligation.

2. The actuarially required contribution rate, after adjusting for the effect of the proposed increase, may not exceed the statutory contribution rate.
3. The actuary must certify that the proposed increase will not impair the actuarial soundness of the Retirement System.

In accordance with the Benefit Increase Adjustments Policy, if an increase is permissible, the amount of the increase will be equal to the lesser of 3% or the percentage increase in the CPI for the preceding year, subject to a cumulative increase of 100% subsequent to December 31, 2000.

The Board of Trustees reserves the right, at its sole discretion, not to award any Benefit Increase Adjustment or other supplements for any year, even if the statutory requirements for an increase are satisfied, or to provide increases in greater or lesser amounts than prescribed by this policy. For the years ended December 31, 2017 and 2016 there was no Benefit Increase Adjustment or an extra check issued to eligible retirees.

Administration of the Retirement System - The Board of Trustees (the “Board”) is responsible for the general administration and proper operation of the Retirement System. The Board consists of twelve members: four members appointed by the Board of Education, one member appointed by the Board of Trustees of the Library District, four members elected by and from the members of the Retirement System, two members elected by and from the retirees of the Retirement System, and the Superintendent of Schools of the School District of Kansas City, Missouri. The Board hires an Executive Director to manage the day-to-day operations and implement strategic plans as set by the Board.

Administrative expenses - All expenses of the Retirement System are paid by the Plan. Fees related to the administration of Plan are included in administrative expenses. Investment related expenses are included in net appreciation of fair value of investments.

(2) Summary of significant accounting policies

Basis of accounting - The financial statements of the Retirement System are prepared on the accrual method of accounting. Plan member and employer contributions are recognized in the period in which the contributions are due. Based on an agreement with the State of Missouri, the School District of Kansas City, Missouri and the Kansas City, Missouri Public Library District pay the employer portions of their retirement payment one year in arrears. These amounts are included in the financial statements as contributions receivable. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

New accounting pronouncement - Governmental Accounting Standards Board (“GASB”) No. 82, *Pension Issues*, was issued in March 2016 and amended GASB Statements No. 67 and No. 73. GASB No. 82 addresses certain issues with the presentation of payroll-related measures in required supplementary information, the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and the classification of payments made by employers to satisfy employee (member) contribution requirements. Upon review, it was determined that the Retirement System is currently presenting information in accordance with the requirements of GASB Statement No. 82.

Use of estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and changes therein, and disclosures of contingent assets and liabilities. Accordingly, actual results may differ from those estimates.

Property and equipment - Property and equipment are carried at cost. Purchases are depreciated over their estimated useful lives by use of the straight-line method. The useful lives for the purpose of computing depreciation are:

Equipment	7 years
Software	5 years

Investment valuation and income recognition - The net unrealized appreciation in the fair value of investments for the period reflects the net increase in the fair value of the investments, on an aggregate basis, between the beginning and the end of the reporting period. The net realized gain or loss on sale of investments is the difference between the proceeds received and the cost of the investment sold. The net realized gains and losses have been combined with the net unrealized appreciation and depreciation for purposes of this report.

Purchases and sales of securities are recorded on a trade-date basis. Investment income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Rate of return - For the years ended December 31, 2017 and 2016, the annual money-weighted return on the Retirement System's investments, net of investment expense was 16.93% and 8.07%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

The Retirement System's policy in regard to the allocation of invested assets is established and may be amended by the Board of Trustees. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan. The following is the Retirement System Board's adopted asset allocation policy for 2017 and 2018 plan years. In 2017, an asset liability study was completed at the request of the board. This study identified new optimal portfolio mixes with new asset classes for the Board's consideration. The Board chose a new asset allocation mix that is expected to increase their long-term return slightly while lowering the overall risk of the portfolio. Implementation of the new asset allocation policy commenced January 1, 2018.

Asset Class	2017 Target Allocation	2018 Target Allocation
US Equity	22.50 %	22.50 %
International Developed Equity	15.00 %	12.00 %
International Emerging Equity	10.00 %	10.00 %
Core Fixed Income	10.00 %	10.00 %
High Yield	2.50 %	2.50 %
International Fixed Income	5.00 %	5.00 %
Real Estate	10.00 %	12.00 %
Commodities	5.00 %	3.00 %
Hedge Funds of Funds	7.50 %	5.00 %
Global Tactical Asset Allocation	7.50 %	0.00 %
Private Equity	5.00 %	0.00 %
Multi-Asset Class	0.00 %	10.50 %
Alternatives	0.00 %	7.50 %
Total	100.00 %	100.00 %

Concentration risk - As of December 31, 2017 and 2016, the Retirement System has the following concentrations defined as investments (other than those issued or guaranteed by the U.S. government in any one organization) that represent 5% or more of the Retirement System's net position.

	December 31	
	2017	2016
Rhumblin S&P 500 Pooled Index Fund	\$ 79,649,292	\$ 67,259,581
Georgetown Fund Managed by Rock Creek	*	33,491,017
Rhumblin S&P Mid-Cap 400 Index Fund	43,413,903	40,203,896
AQR Global Risk Premium Fund	42,911,304	36,967,974
Earnest Partners Emerging Market Fund	44,671,822	32,867,196
Wells Capital Emerging Market Fund	37,489,154	*

*Not applicable, investment amount is below 5%.

Custodial credit risk - Custodial credit risk is when, in the event a financial institution or counterparty fails, the Retirement System would not be able to recover the value of deposits, investments or collateral securities that are in the possession of an outside party. All investments are held in the Retirement System's name and are not subject to creditors of the custodial financial institution.

Currency risk - Currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. All investments held by the Retirement System at December 31, 2017 and 2016 were in United States currency.

Credit risk - Credit risk is the risk that an issuer or other counterparty to a debt investment will not fulfill its obligations. The Retirement System's investment policies require that any investment manager have at least 80% of holdings in issues rated A or higher by both Standard & Poor's Corporation and Moody's Investors Service or their equivalents. Each portfolio is required to maintain a reasonable risk level relative to its benchmark. The Retirement System's assets as of December 31, 2017 and 2016 subject to credit risk are shown with current credit ratings below:

	December 31, 2017		December 31, 2016	
	Fair Value	%	Fair Value	%
U.S. Government	\$ 23,774,133	43.3%	\$ 25,720,798	48.7%
Other Government Agency	1,560,465	2.8%	1,656,666	3.1%
AAA	8,795,113	16.0%	8,316,820	15.7%
AA	799,060	1.5%	1,208,711	2.3%
A	4,702,789	8.6%	5,427,073	10.3%
BAA	15,282,167	27.8%	10,530,274	19.9%
	<u>\$ 54,913,727</u>	<u>100.0%</u>	<u>\$ 52,860,342</u>	<u>100.0%</u>

Interest rate risk - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Retirement System's assets as of December 31, 2017 and 2016 subject to interest rate risk are shown below grouped by effective duration ranges:

Security Description	December 31, 2017	Investment Maturities (in years)			
	Fair Value	Less Than 1	1 - 5	6 - 10	Greater Than 10
U.S. Government	\$ 23,774,133	\$ 719,487	\$ 4,668,849	\$ 2,704,157	\$ 15,681,639
Other Government and Agency	1,560,465	57,887	789,409	-	713,170
Corporate Bonds – United States	29,579,129	-	9,884,110	10,211,371	9,483,648
	<u>\$ 54,913,727</u>	<u>\$ 777,374</u>	<u>\$ 15,342,368</u>	<u>\$ 12,915,528</u>	<u>\$ 25,878,457</u>

Security Description	December 31,	Investment Maturities (in years)			
	2016 Fair Value	Less Than 1	1 - 5	6 - 10	Greater Than 10
U.S. Government	\$ 25,720,798	-	\$ 3,454,703	\$ 4,257,456	\$ 18,008,639
Other Government and Agency	1,656,666	-	128,175	326,439	1,202,052
Corporate Bonds – United States	25,482,878	-	4,583,664	9,370,188	11,529,026
	<u>\$ 52,860,342</u>	<u>\$ -</u>	<u>\$ 8,166,542</u>	<u>\$ 13,954,083</u>	<u>\$ 30,739,717</u>

(3) Fair value measurements

The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

- Level 1 Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.

- Level 2 Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in inactive markets; inputs other than quoted market prices that are observable for the asset or liability; and inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

- Level 3 Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability’s fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Following is a description of the valuation methodologies used for assets measured at fair value.

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.

Debt and equity securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Debt securities classified in Level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features, and ratings. Matrix pricing is used to value securities based on the securities’ relationship to benchmark quoted prices. Level 2 debt securities have nonproprietary information that is readily available to market participants, from multiple independent sources, which are known to be actively involved in the market.

Financial Section – Notes to Financial Statements

Fair Value Measurements as of December 31, 2017				
Investment Type	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Common stocks	\$ 148,432,022	\$ -	\$ -	\$ 148,432,022
Real estate investment trusts	2,035,854	-	-	2,035,854
Total equity investments	150,467,876	-	-	150,467,876
U.S. Treasuries	9,275,992	-	-	9,275,992
Agencies	-	13,876,921	-	13,876,921
Collateralized mortgage-backed securities	-	4,522,409	-	4,522,409
Corporate bonds	-	20,761,212	-	20,761,212
Corporate asset-backed securities	-	5,272,715	-	5,272,715
Non-agency collateralized mortgage obligations	-	433,422	-	433,422
State and local obligations	-	771,056	-	771,056
Total fixed income investments	9,275,992	45,637,735	-	54,913,727
Total investments by fair value level	\$ 159,743,868	\$ 45,637,735	\$ -	\$ 205,381,603
Investments measured at NAV^(a)				446,763,172
Investments measured at amortized cost^(a)				20,365,076
Total investments measured at fair value				\$ 672,509,851

Fair Value Measurements as of December 31, 2016				
Investment Type	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
Common stocks	\$ 126,302,355	\$ -	\$ -	\$ 126,302,355
Real estate investment trusts	2,684,369	-	-	2,684,369
Total equity investments	128,986,724	-	-	128,986,724
Fixed-income investments	-	-	-	-
U.S. Treasuries	8,665,034	-	-	8,665,034
Agencies	-	15,959,551	-	15,959,551
Collateralized mortgage-backed securities	-	1,096,213	-	1,096,213
Corporate bonds	-	17,007,275	-	17,007,275
Corporate asset-backed securities	-	4,568,012	-	4,568,012
Corporate collateralized mortgage obligations	-	3,533,019	-	3,533,019
Corporate collateralized obligations	-	374,572	-	374,572
State and local obligations	-	1,656,666	-	1,656,666
Total fixed income investments	8,665,034	44,195,308	-	52,860,342
Total investments by fair value level	\$ 137,651,758	\$ 44,195,308	\$ -	\$ 181,847,066
Investments measured at NAV^(a)				422,453,124
Investments measured at amortized cost^(a)				13,832,993
Total investments measured at fair value				\$ 618,133,183

(a) Certain investments that were measured at net asset value (“NAV”) per share (or its equivalent) have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statements of net assets available for benefits.

The valuation method for investments measured at the net asset value per share, or equivalent, as of December 31, 2017 and 2016 are presented in the tables below.

	December 31, 2017 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investment Type				
Cash equivalents (4)	\$ 20,365,076	-	N/A	N/A
Equity commingled funds				
Developed markets (1)	123,063,195	-	Twice a Month	2 days
Emerging markets (1)	82,161,043	-	Daily/Weekly	2 days
Fixed-income comingled funds				
High yield fixed income (1)	17,979,851	-	Daily	2 days
International fixed income (1)	31,604,923	-	Daily	2 days
Hedge fund of funds commingled funds (1)	46,621,895	-	Quarterly	90 - 100 days
Private equity funds (2)	25,437,896	2,919,000	Not Eligible	N/A
Global real estate investment trusts (1)	-	-	Monthly	15 days
Commodities (1)	21,097,380	-	Monthly	5 days
Global tactical asset allocation comingled funds (1)	42,911,304	-	Monthly	15 days
Real estate comingled fund (3)	22,389,287	-	Quarterly	45 - 60 days
Real estate (3)	32,896,418	1,767,144	Not Eligible	N/A
Investments measured at the NAV	\$ 467,128,248			

	December 31, 2016 Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Investment Type				
Cash equivalents (4)	\$ 13,832,993	-	N/A	N/A
Equity commingled funds				
Developed markets (1)	107,463,477	-	Twice a Month	2 days
Emerging markets (1)	60,231,292	-	Daily/Weekly	2 days
Fixed-income comingled funds				
High yield fixed income (1)	16,474,561	-	Daily	2 days
International fixed income (1)	28,214,068	-	Daily	2 days
Hedge fund of funds commingled funds (1)	54,353,812	-	Quarterly	90 - 100 days
Private equity funds (2)	27,812,474	3,463,000	Not Eligible	N/A
Global real estate investment trusts (1)	7,030,949	-	Monthly	15 days
Commodities (1)	20,192,658	-	Monthly	5 days
Global tactical asset allocation comingled funds (1)	36,967,974	-	Monthly	15 days
Real estate comingled fund (3)	29,187,752	-	Quarterly	45 - 60 days
Real estate (3)	34,524,107	1,300,000	Not Eligible	N/A
Investments measured at the NAV	\$ 436,286,117			

- (1) Consists of two domestic equity funds, two international emerging market equity funds, two fixed income funds and two hedge fund of funds, one global tactical asset allocation fund, one commodities fund, and one global real estate securities trust fund, that are considered commingled in nature. Each are valued at the net asset value of the units held at the end of the period based upon the fair value of the underlying investments.
- (2) KCPSRS' private equity portfolio consists of 165 active partnerships within the funds-of-funds investments, which invests primarily in buyout funds, with exposure to venture capital, special situations, growth equity and supplemented by secondary and co-investment opportunities. The fair values of the funds-to-funds have been determined using net assets valued one quarter in arrears plus current quarter cash flows. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of the next 1 to 7 years.

- (3) For real estate and real estate commingled funds, investments generally valued using one or a combination of the following accepted valuation approaches: market, cost or income. For three of the real estate funds, generally annual appraisals are performed by an independent third-party each year, minimum every three years. For two of the real estate funds, the inputs and assumptions utilized to estimate future cash flows are based upon the manager’s evaluation of the economy, capital markets, market trends, operating results, and other factors, including judgments regarding occupancy rates, rental rates, inflation rates, and capitalization rates utilized to estimate the projected cash flows at disposition and discount rates. All portfolios have audited financials completed at fiscal year-end.
- (4) The EB Temporary Investment Fund of The Bank of New York Mellon (the “Fund”) values its investments on the basis of amortized cost which approximates market value for the Fund as a whole. The amortized cost method involves valuing a security at cost on the date of purchase and thereafter at a constant dollar amortization to maturity of the difference between the principal amount due at maturity and the initial cost of the security. The use of amortized cost is subject to compliance with the Fund’s amortized cost procedures as specified under The Bank of New York Mellon Employee Benefit Collective Investment Fund Plan.

(4) Property and equipment

Property and equipment consisted of the following at December 31, 2017 and 2016:

	December 31,	
	2017	2016
Cost		
Equipment	\$ 42,675	\$ 42,675
Software	2,223,908	2,223,908
Total cost	2,266,583	2,266,583
Less: accumulated depreciation	(2,228,200)	(2,212,345)
Net property and equipment	<u>\$ 38,383</u>	<u>\$ 54,238</u>

Depreciation expense for the years ended December 31, 2017 and 2016 was \$15,855 and \$92,179, respectively.

(5) Funding policy

The Missouri Revised Statutes Sections 169.350.4 and 169.291.16 specify that for 2014 and each subsequent year, the employee contribution rate and the employer contribution rate shall be the same percentage of compensation, each not less than 7.5% of compensation not more than 9% compensation. Within this permitted range, the rate may be changed (increased or decreased) in increments of 0.5% each year. The objective is that the combined employee and employer contribution will be the amount actuarially required to cover the normal cost and amortize the unfunded accrued actuarial liability over a period that does not exceed 30 years from the date of valuation. The rate for each calendar year shall be certified by the Board of Trustees to the employers at least six months prior to the date such rate is to be effective.

(6) **Net pension liability**

The components of the net pension liability of participating entities at December 31, 2017 and 2016, were as follows:

	<u>2017</u>	<u>2016</u>
Total pension liability	\$ 989,536,742	\$ 900,947,927
Less: plan fiduciary net position	685,801,999	631,442,613
Net pension liability	<u>\$ 303,734,743</u>	<u>\$ 269,505,314</u>
 Plan fiduciary net position as a percentage of total pension liability	 69.31%	 70.09%

Actuarial information - The Retirement System engages an independent actuarial firm to perform an annual actuarial valuation. The information displayed below presents the funded status as of the most recent actuarial valuation.

Actuarial Valuation Date	Actuarial Value of Assets A	Actuarial Accrued Liability B	Unfunded Actuarial Accrued Liability (UAAL) B-A	Funded Ratio A/B	Covered Payroll C	UAAL as a Percentage of Covered Payroll (B-A)/C
1/1/2016	\$ 694,641,248	\$ 895,230,295	\$ 200,589,047	77.59%	\$ 179,013,516	112.05%
1/1/2017	\$ 684,412,437	\$ 981,517,827	\$ 297,105,390	69.73%	\$ 194,132,739	153.04%

The actuarial assumptions used for the most recent valuations are as follows:

Valuation Date	January 1, 2017 and 2016
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay, Closed Period (2017); Level Dollar, Open Period (2016)
Remaining Amortization Period	30 years
Asset Valuation Method	5-year Smoothed Market Value
Actuarial Assumptions:	
Investment Rate of Return	7.75% (2017) and 8.00% (2016), including inflation
Projected Salary Increases	5.00%, including inflation
Inflation	2.75% (2017) 3.00% (2016)
Mortality:	
	2017 – Pre-retirement mortality rates were based on RP-2014 Health Non-Annuitant Blue Collar Table with a one-year setback for females, projected 15 years from the valuation date using Scale MP-2016. Post-retirement mortality rates were based on RP-2014 Healthy Annuitant Blue Collar Table with a one-year setback for females projected 7 years from the valuation date using Scale MP-2016. Disability mortality rates were based on RP-2014 Disabled Table for Males and Females.
	2016 - Pre-retirement mortality rates were based on RP-2000 Healthy Non-Annuitant projected 15 years

from the valuation date using Scale AA. Post-retirement mortality rates were based on RP-2000 Healthy Annuitant Table Annuitant projected 7 years from the valuation date using Scale AA. Disability mortality rates were based on RP-2000 Disabled Table for Males and Females.

The actuarial assumptions used in the January 1, 2017 valuation were adopted by the Board from the results of an actuarial experience study covering the five-year period ending December 31, 2015 (dated October 3, 2016).

The long-term expected rate of return on pension plan investments is reviewed as part of the regular experience study prepared by the Retirement System. Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the Retirement System’s investment consultant. These ranges are combined to produce the 10-year long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Retirement System’s target asset allocation as of December 31, 2017 (see the discussion of the pension plan’s investment policy) are summarized in the following table:

Asset Class	10-Year Long-term Expected Real Rate of Return
US Equity	6.8 %
International Developed Equity	7.5 %
International Emerging Equity	9.9 %
Core Fixed income	1.8 %
High Yield	5.0 %
International Fixed Income	1.3 %
Real Estate	4.6 %
Commodities	4.3 %
Hedge Funds of Funds	3.8 %
Global Tactical Asset Allocation	4.2 %
Private Equity	11.5 %

Discount Rate - The discount rate used to measure the total pension liability as of December 31, 2017 and 2016 was 7.75% and 8%, respectively. The projection of cash flows used to determine the discount rate assumed that contributions from the Plan members will be made at the current contribution rate and that contributions from employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the Plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate - The following represents the net pension liability of participating entities as of December 31, 2017 and 2016, calculated using the discount rate assumption, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current assumption.

	<u>1% Decrease</u>	<u>Current Assumption</u>	<u>1% Increase</u>
December 31, 2016	7.00%	8.00%	9.00%
	\$ 351,329,071	\$ 269,505,314	\$ 199,173,702
December 31, 2017	6.75%	7.75%	8.75%
	\$ 401,049,071	\$ 303,734,744	\$ 221,067,453

(7) Operating lease

The Retirement System entered into an office lease agreement commencing on April of 2016 and expiring on February 2026. Minimum rent payments under non-cancellable operating leases which extend for periods greater than one year are as follows:

<u>Years Ending December 31,</u>			
2018		\$	66,702
2019			68,255
2020			70,009
2021			71,823
2022			72,125
Thereafter			219,699
Total		<u>\$</u>	<u>568,613</u>

(8) Tax status

The Retirement System is exempt from federal income tax under Section 501 of the Internal Revenue Code.

(9) Risks and uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of plan net assets.

Plan contributions are made and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimation and assumption process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Changes in the discount rate and investment returns can have a significant effect on the funded status of the Plan. Management continues to monitor these changes and the potential impact on the future pension plan funding requirements and related expenses.

(10) **Subsequent events**

The Retirement System has evaluated subsequent events through June 11, 2018, which is the date the financial statements were available to be issued and noted the following items for disclosure:

Beginning in 2018 both the School District of Kansas City, Missouri and the Kansas City, Missouri Public Library District began paying their employer contributions each month rather than one year in arrears.

The 2018 Missouri General Assembly passed a bill that increases the employer contribution rate to 10.50 % of pay, effective January 1, 2019, and then 12% of pay, effective January 1, 2020. Beginning July 1, 2021, the employer contribution rate will be the greater of (1) the actuarial required contribution rate less the member contribution rate, or (2) 12.00 % of pay, until the System is fully funded. Once the System is fully funded, the employer contribution rate may increase or decrease, in subsequent years, depending on valuation results and the employee contribution rate may decrease from 9% depending of valuation results. However, such changes are subject to statutory limitations. As of the date of this report, the bill has not been signed by the Governor, however the expectation is that the bill will be signed and become law in 2018. These changes to the contribution rate are expected to improve the funding status of the System in the future.

Implementation of a new asset allocation policy commenced January 1, 2018. See Note 2 for the target allocation by asset class that was implemented January 1, 2018.

Schedules of Changes in Net Pension Liability

(\$ in thousands)

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability				
Service Cost	\$ 18,683	\$ 17,413	\$ 16,690	\$ 15,418
Interest	68,868	68,599	67,219	66,956
Benefit term changes	-	(64)	-	-
Differences between expected and actual experience	4,918	(2,897)	12,010	-
Assumption Changes	77,882	1,268	1,224	-
Benefit Payments, including member refunds	<u>(81,763)</u>	<u>(80,169)</u>	<u>(79,634)</u>	<u>(78,536)</u>
Net change in total pension liability	88,588	4,150	17,509	3,838
Total pension liability - beginning	<u>900,948</u>	<u>896,798</u>	<u>879,289</u>	<u>875,451</u>
Total pension liability - ending	<u>\$ 989,536</u>	<u>\$ 900,948</u>	<u>\$ 896,798</u>	<u>\$ 879,289</u>
Plan Fiduciary Net Position				
Contributions				
Employer	\$ 16,927	\$ 15,280	\$ 14,499	\$ 13,288
Employee	16,984	16,528	14,646	13,358
Net investment income (loss)	103,768	44,338	(10,025)	25,937
Benefit Payments, including member refunds	(81,763)	(80,169)	(79,634)	(78,536)
Administrative expenses	(1,521)	(1,552)	(1,648)	(1,548)
Other	<u>(16)</u>	<u>(92)</u>	<u>(251)</u>	<u>(529)</u>
Net change in plan fiduciary net position	54,359	(4,667)	(62,413)	(28,030)
Plan fiduciary net position - beginning	<u>631,443</u>	<u>636,110</u>	<u>698,523</u>	<u>726,553</u>
Plan fiduciary net position - ending	<u>685,802</u>	<u>631,443</u>	<u>636,110</u>	<u>698,523</u>
Plan pension liability - ending	<u>\$ 303,734</u>	<u>\$ 269,505</u>	<u>\$ 260,688</u>	<u>\$ 180,766</u>
Plan fiduciary net position as a percentage of the total pension liability	69.31%	70.09%	70.93%	79.44%
Covered payroll	\$ 188,073	\$ 180,893	\$ 170,580	\$ 166,102
Employers' Net Pension Liability as a percentage of covered payroll	161.50%	148.99%	152.82%	108.83%

Note to Schedule:

This schedule is intended to show 10-year trend. Additional years will be reported as they become available.

Schedules of Net Pension Liability
(\$ in thousands)

Year Ended	Total Pension Liability (TPL)	Plan Fiduciary Net Position	Net Pension Liability (NPL)	Plan Fiduciary Net Position as a % of TPL	Covered Employee Payroll	Employers' NPL as a % of Covered Payroll
	(a)	(b)	(a-b)	(b/a)	(c)	((b-a)/c)
12/31/2017	\$ 989,536	\$ 685,802	\$ 303,734	69.31%	\$ 188,073	161.50%
12/31/2016	\$ 900,948	\$ 631,443	\$ 269,505	70.09%	\$ 180,893	148.99%
12/31/2015	\$ 896,798	\$ 636,110	\$ 260,688	70.93%	\$ 170,580	152.82%
12/31/2014	\$ 879,289	\$ 698,523	\$ 180,786	79.44%	\$ 166,102	108.83%

Schedules of Employers' Contributions
(\$ in thousands)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Actuarially determined employer contribution	\$ 18,074	\$ 20,224	\$ 18,856	\$ 19,401	\$ 20,995	\$ 16,373	\$ 11,398	\$ 7,084	\$ 3,818	\$ 3,934
Actual employer contributions	16,927	19,280	14,492	13,288	12,094	11,370	11,943	13,282	27,657	15,613
Annual contribution deficiency (excess)	\$ 1,147	\$ 3,944	\$ 4,364	\$ 6,113	\$ 8,901	\$ 5,003	\$ (575)	\$ (6,198)	\$ (23,839)	\$ 11,679
Covered-employee payroll*	\$ 188,073	\$ 180,893	\$ 170,492	\$ 166,102	\$ 161,253	\$ 151,603	\$ 159,637	\$ 177,093	\$ 206,384	\$ 208,173
Actual contributions as a percentage of covered-employee payroll*	9.00%	9.00%	8.50%	8.00%	7.50%	7.50%	7.50%	7.50%	13.40%	7.50%

*Covered-employee payroll based upon the pensionable payroll reported to the Plan and excludes additional compensation amounts that may need to be reported by the employer.

Schedules of Investment Returns

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Annual money-weighted rate of return, net of investment expense	16.93%	8.07%	-1.45%	3.64%	12.43%	12.96%	0.64%	13.35%	15.93%	-23.70%

**Notes to Required Supplementary Information
For the Year Ended December 31, 2017**

Changes of benefit terms. The following changes to the plan provisions were reflected in the valuation performed as of January 1, 2017 are listed below:

Under legislation passed in 2013, the Board may adjust the member and employer contribution rate each year by no more than 0.50% each. The contribution rate can fluctuate between 7.5% and 9.0%. The Board increased the contribution rate for both members and employers to 8.0% of pay, effective January 1, 2014, 8.5% of pay, effective January 1, 2015 and 9% effective January 2016.

In addition, legislation in 2013 created a new set of plan provisions for members hired after December 31, 2013, referred to as Plan C. The key difference between Plan B and Plan C are a lower benefit multiplier (1.75% instead of 2.00%) and different requirements for unreduced benefits (age 62 or Rule of 80 rather than age 60 or Rule of 75). These changes are effective for those hired on or after January 1, 2014.

Changes of assumptions. There were several changes to the Retirement System’s actuarial assumptions as a result of a comprehensive Experience Study performed for the Retirement System and present to the Board at their October 3, 2016 meeting.

Method and assumptions used in calculations of actuarially determined contributions. The system is funded with fixed contribution rates for member and employers. The actuarially determined contributions in the Schedule of Employer Contributions are calculated as of the beginning of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the employer Actuarially Determined Contribution reported in the most recent actuarial valuation (January 1, 2017):

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay, Closed Period
Remaining Amortization Period	30 Years
Asset Valuation Method	5-year Smoothed Market Value
Investment Rate of Return	7.75%, including inflation
Projected Salary Increases	5.00%, including inflation
Inflation	2.75%

Schedule of Expenses

For the Period Ending December 31, 2017 and 2016

Investment Expenses	2017	2016
Bank custodial fees and expenses	\$ 93,735	\$ 94,038
Financial consultation	235,000	205,000
Financial management expenses	<u>4,057,777</u>	<u>3,682,596</u>
Total	<u>4,386,512</u>	<u>3,981,633</u>
Administrative Expenses		
Salaries and payroll taxes	584,357	566,502
Fringe Benefits	119,947	112,280
Legal fees	50,935	41,709
Audit fees	45,718	42,211
Actuarial fees	57,800	67,900
Legislative consultation	45,000	45,000
Other professional services	4,666	9,654
Board meetings	991	2,211
Board election	6,689	10,522
Travel and education expense	53,305	61,995
Membership dues	4,135	5,190
Printing and office expense	40,985	50,277
Postage and equipment	12,642	17,423
Payroll processing	3,066	8,817
Bank fees	16,531	15,121
Computer software support	325,500	325,500
Computer expense	36,588	34,058
Insurance	46,964	45,876
Lease space rental	64,846	55,651
Relocation expense	0	23,167
Building operations	<u>0</u>	<u>10,962</u>
Total	<u>\$1,520,665</u>	<u>\$1,552,025</u>

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May 23, 2018

Board of Trustees
The Public School Retirement System of the
School District of Kansas City, Missouri
3100 Broadway, Suite 1211
Kansas City, MO 64111

Dear Trustees:

World equity markets were positive again in 2017 with emerging markets equity having an amazing year with returns in excess of 30%. The volatility in the markets in 2017 was one of lowest levels of volatility in recent history. The Russell 3000 gained 21.13% for the 2017 period outpaced by the MSCI EAFE index which produced a 25.03% return for the year, this was in large contrast to 2016 when the international markets returned a mere 1%.

The year 2017 was an eventful one both domestically and on the international stage. Notable macro events, such as U.S. tax reform, strengthening global economic growth, positive manufacturing data, increased corporate earnings, and rising oil prices positively affected market sentiment. Many major currencies, including the euro and the pound, strengthened against the U.S. dollar, which boosted returns in USD terms. However, the Japanese yen and the Canadian dollar weakened slightly. Asia was the best performing region in the developed world.


The emerging markets did extremely well in 2017. Robust profits from technology companies, strengthening prices for key commodities such as oil and copper, as well as positive political developments supported gains in emerging markets. South Africa posted a strong gain as pro-reform candidate Cyril Ramaphosa was elected leader of the African National Congress, increasing the prospect of political reform after elections in 2019. Greece rallied as the country reached an agreement with international creditors over reforms, clearing the way for the further distribution of bailout funds. U.S. and international fixed income markets returned modest positive returns and were positive in the fourth quarter of 2017 when the Fed raised rates again in December. Commodities were up slightly 1.7% for the 2017 period, with strong gains in the fourth quarter in Industrial Metals and Energy. Hedge fund of funds also produced gains in 2017 returning 7.74% for the year period. Both private equity and real estate markets had strong returns in 2017.

KCPSRS is valued at \$673 million as of December 31, 2017. These assets are allocated between various asset classes based off the System's investment policy. This asset allocation was developed to provide a diversified, optimal portfolio to achieve the Fund's long-term investment objectives and risk objectives.

The Fund is invested in U.S. equities, international equities, fixed income, international fixed income, real estate, commodities, hedge fund of funds, MACS (multi-asset class strategies), and private equity. As of

the end of December, the Fund's trailing 1-year net return is 16.93%, which outpaced its policy index return of 15.98%. The trailing 3-year return ending 12/31/17 outpaced the policy benchmark returning 7.59% vs. the 7.50%

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for the Index. The trailing 5-year return ending 12/31/17 slightly lagged the policy benchmark returning 7.73% vs. the 7.93% for the Index.

KCPSRS continues to change and evolve. In 2017, Segal Marco completed an Asset Liability Study that was requested by the KCPSRS Board of Trustees in 2016. This study helped the Fund continue to evolve by identifying new optimal portfolio mixes with possible new asset classes for the Board's consideration. The study also ran various scenarios regarding the risk levels of these portfolios. The Board chose a new asset allocation mix that is expected to increase their long-term return slightly while lowering the overall risk of the portfolio. This new mix requires a few changes in the Fund and introduction to a few new asset classes. Implementation to the new asset allocation will take some time and the new targets and benchmarks will be implemented and reflected in fiscal year 2018, commencing January 1, 2018. The international equity exposure, hedge fund and commodity exposures will be reduced. The exposures to MACS, real estate, and private equity will increase with the implementation of the new asset mix. The fixed income portfolio was further diversified with the Board's approval for the addition of emerging market debt.

In May of 2017, Segal Marco provided education training to the Board on asset allocation, active vs. passive investing, the MACS asset class, emerging market debt investing and private equity. After this education presentation, the Board changed their investment policy to match the new asset allocation mix chosen as a result of the ALM Study. We started work on manager searches for real estate, MACS, and private equity. The Investment Committee interviewed managers for MACS and real estate in December of 2017 and scheduled private equity interviews for January 2018. The Board voted to hire Wellington as a new MACS manager and Ares as a new real estate manager. The Board also voted to allocate additional dollars to some existing real estate managers in their follow-on investments. The Board terminated their global REIT position as it was minimal and no longer needed after the ALM Study. Over the years, asset classes have been added and investment managers have been changed to continue to optimize the Fund's investment line-up and asset allocation. This forward-looking approach has allowed the Fund to evolve over time with the markets and achieve strong performance.

In 2018, we will continue to work with the System on the implementation of the new asset mix and the on-boarding of new managers and rebalancing. In the next year, Segal Marco will continue to work with the System to achieve both their long-term and short-term objectives through asset allocation, educational sessions, policy development, manager monitoring, and new manager selection.

Segal Marco Advisors enjoys our relationship with KCPSRS and looks forward to continuing to support your good work and serve as an extensive of your staff.

Sincerely yours,



Rosemary E. Guillette
Senior Consultant

Investment Policy Summary

Pursuant to investment fiduciary duties provided in Revised Missouri Statutes section 105.688, the KCPSRS Board of Trustees (Board) established the system's investment program, with overall objectives, asset allocation, and operating guidelines. The purpose of the System is to provide retirement and certain other benefits to participants and their beneficiaries. With respect to this purpose, the board develops a long-term plan to preserve the long-term corpus of the Fund and to maximize the rate of return within prudent risk parameters to meet, when combined with employee and employer contributions, will meet or exceed the benefit and administration funding requirements of the plan over time. The investment horizon of the Fund is long-term.

To achieve a balanced program, every five years, the Board conducts a review of its investment strategy and plan liability structure to evaluate the potential consequences of alternative investment strategies on the long-term financial wellbeing of the system. The investment policy shall consider the current and expected financial condition of the system, the expected long-term capital market outlook, and the system's risk tolerance. The policy shall consider the potential impact on pension costs of alternative asset allocation policies, the existing and projected liability structure of the pension plan, and other issues affecting governance of the system. An asset allocation review will be conducted annually with an updated investment policy developed at least every two years.

Investment Objectives

The total fund objective is to generate a rate of return equaling or exceeding, over rolling 3- and 5-year periods the following performance objectives:

- A required rate of return, net of expenses, equaling the real rate objective of 5.0% (actuarial assumed rate 7.75% less actuarial assumed inflation 2.75%) plus current inflation, as measured by the Consumer Price Index, to ensure that real asset growth maintains pace with real pay growth and cost of living adjustments, primary determinants of benefits and, therefore, pension costs.
- The system's actuarial interest rate assumption of 7.75% to avoid an actuarial loss which would increase future years' contributions.
- A policy index that measures the value added through active management calculated by weighting the appropriate capital market indices per the established asset allocation.

Roles and Responsibilities

Board of Trustees

The Board bears the ultimate fiduciary responsibility for the investment of the system assets. Members of the board must adhere to state law and prudent standards of diligence with respect to their duties as investment fiduciaries. In so doing, the members of the Board and its advisors, as investment fiduciaries, shall discharge their duties in the sole interest of the plan participants and their beneficiaries and shall act with the same care, skill, prudence, and diligence that a prudent person acting in a similar capacity and familiar with these matters would use in the conduct of a similar enterprise with similar aims. To accomplish this, the Board utilizes staff, as well as investment and actuarial consultants to provide expert assistance.

Investment Asset Consultant

The investment consultant is hired by and serves at the pleasure of the Board. The investment consultant shall assist the board in the development, implementation, and monitoring of investment policy on behalf of the System. Specifically, the investment consultant shall be responsible for the following functions:

- Development and periodic revision, as needed at least annually, of investment guidelines and objectives. This undertaking shall be conducted in conjunction with the Board, internal staff and other professional advisors as appropriate.
- Review and identification of qualified investment manager candidates based on the consultant's asset allocation studies and professional judgment.
- Investment performance monitoring.

- Efficiency reviews, including, but not limited to, assessment of the System’s custodian relationship(s) and related functions, such as securities lending, commission recapture programs and other related matters.
- Special studies and projects as may periodically be determined by the board to be appropriate for the governance of the investment activities of the System.
- Education of Board members and staff in areas of investment strategy as needed to assist them in governance of the System’s portfolio.

Executive Director

The executive director is appointed by and serves at the pleasure of the Board. Under the authority delegated by the Board, the executive director is responsible for the administration and management of the System consistent with policies set by the Board. Specific to the investment program, the executive director is responsible for implementing the Board’s investment policies and management of the relationship with outside advisors and investment managers.

Investment Managers

In the implementation of the investment program, the Board hires and utilizes investment managers who have demonstrated expertise with specific asset classes and investment styles. Each manager shall operate under a set of guidelines specific to the strategic role its portfolio is to fulfill in the overall investment structure. The investment managers are monitored and judged per benchmarks which reflect the objectives and characteristics of the strategic role their portfolio is to fulfill.

Asset Allocation

The primary means by which capital preservation is to be achieved is through diversification of the Fund's investments across various asset classes. Determining the system’s asset allocation is regarded as one of the most important decisions of the investment program. The Board with advice from the external investment consultant, develops an asset allocation with appropriate benchmarks that is designed to achieve the long-term required return objectives of the system, given risk constraints and liquidity needs. In October 2017, after review of the asset liability analysis the Board adopted new asset allocation targets and policy benchmarks. However, in recognition of the time needed to implement the revisions, the effective date of the new allocation policy was set as first quarter of 2018. During 2017 the asset allocation policy and permissible ranges for each asset class, were as follows:

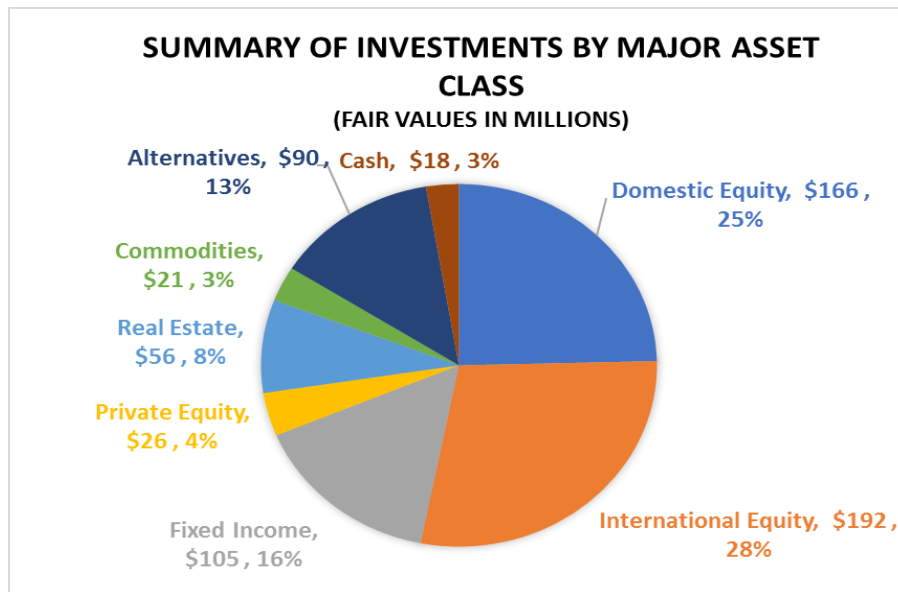
Asset Class	Policy Benchmark	Target Allocation %	Allocation Range %
Domestic	Russell 3000	22.5	
Large Cap Core			8.0 - 13.0
Mid Cap Core			4.0 - 8.0
Small Cap Growth & Value			4.0 - 8.0
International Developed	MSCI (EAFE)	15.0	10.0 - 20.0
Emerging Mkts	MSCI EM	10.0	5.0 - 15.0
Equity Total		47.5	
Domestic Fixed Income-Core	Barclays Cap Agg	10.0	5.0 - 15.0
High Yield	Barclays Cap HY	2.5	1.5 - 3.5
International Fixed Income	Citigroup World Gvt	5.0	3.5 – 7.5
Fixed Income Total		17.5	
Private Equity	S&P 500 + 5%	5.0	3.5 – 7.5
GTTA	91 Day T-Bill + 5%	7.5	5.0 – 10.0
Hedge Fund of Funds	91 Day T-Bill + 5%	7.5	5.0 – 10.0
Commodities	50% DJ UBS Com/ 50% S&P 500 GSCI	5.0	3.5 – 7.5
Real Estate	NCREIF RE	10.0	5.0 – 15.0
Alternatives Total		35.0	

Total Fund Review

As of December 31, 2017, the KCPSRS investment portfolio had a fair market value of \$673.4 million. KCPSRS' investments generated a time-weighted return of 16.9%, net of fees, for the fiscal year ended December 31, 2017.

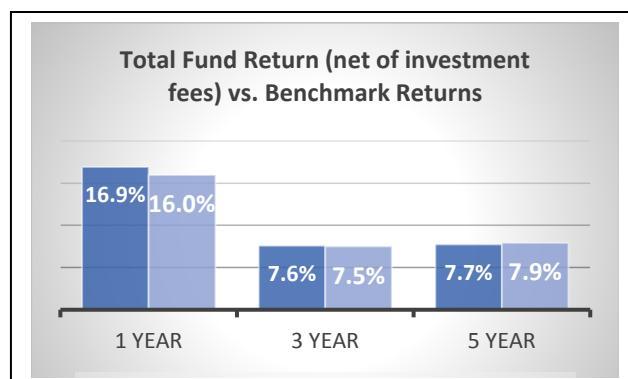
Diversification

Asset allocation is a process designed to construct an optimal long-term asset mix that achieves specific investment objectives. The Investment Policy reflects the System's asset allocation policy as designed to meet the investment objectives. The chart below illustrates the actual allocation to each asset class, as of December 31, 2017.



Investment Performance vs. Benchmarks

The total fund return, net of investment fees, outperformed the 1-year policy benchmark by 0.95%, earning more than our benchmark would have prescribed. Returns for the total fund versus the policy benchmark, composed of market indexes with weightings reflective of KCPSRS' asset allocation targets are displayed in the bar chart to the right.



Asset Class Investment Performance (net) Versus Policy Benchmarks

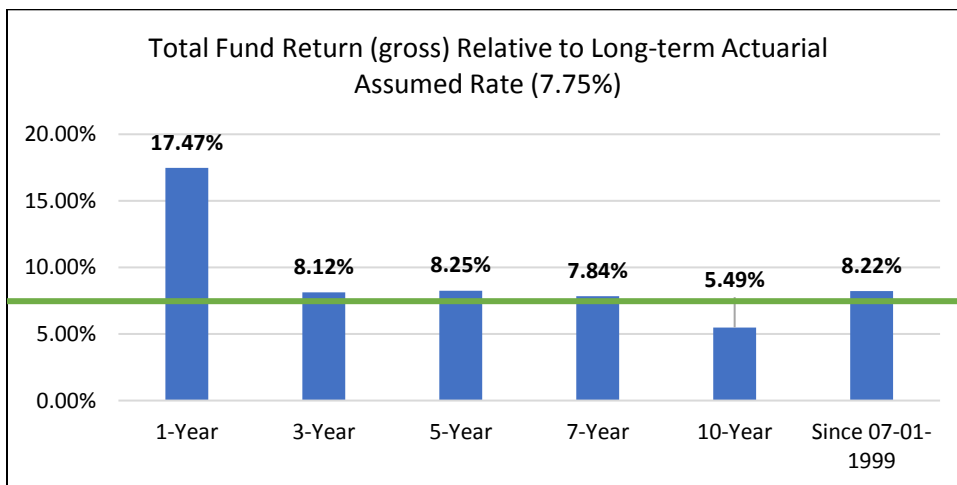
Asset Class	Annualized Returns* (%)		
	Fiscal Year	3-Year	5-Year
Total Fund	16.93	7.59	7.73
Policy Benchmark**	15.98	7.50	7.93
Domestic Equity	17.03	10.27	14.52
Russell 3000 Index	21.13	11.12	15.58
Intl. Develop. Equity	25.03	7.05	7.50
MSCI EAFE (net)	37.28	9.10	4.35
Fixed Income	6.89	2.54	1.80
Blended F.I. Policy***	5.23	2.72	2.08
Private Equity	13.86	8.75	13.50
S&P 500 + 5%	26.83	16.41	20.79
Global Tactical Asset Allocation	16.08	5.16	4.12
90-Day T-Bill + 5%	5.90	5.40	5.26
Hedge Fund of Funds	9.09	3.99	6.15
90-Day T-Bill + 5%	5.90	5.40	5.26
Commodities	4.48	-5.03	-8.92
50% DJ UBS Com/ 50% S&P 500 GSCI	3.76	-6.19	-10.23
Core Real Estate	8.22	10.76	11.17
NCREIF RE	6.96	9.38	10.19
Value Add/Oppportunistic Real Estate	27.52	24.71	N/A
NCREIF RE	6.96	9.38	10.19

*All the returns are time-weighted returns except for private equity and value add/opportunistic real estate which are IRR return calculations.

**The total fund policy benchmark as of December 31, 2017, consisted of 22.5% Russell 3000, 15% MSCI EAFE(N), 10% MSCI EM(N), 10% Blmbg. Barc. US Agg., 2.5% Blmbg. Barc. US High Yield-2% Issuer Cap, 5%Citigroup World Government Bond, 10% NCREIF Property Index, 5% Commodity Policy, 15% 90-Day T-Bill+5% and 5% S&P 500+5%.

***As of December 31, 2017, the blended fixed income policy consisted of 57.14% Blmbg. Barc. US Agg., 28.57% Citigroup World Govt. Bond and 14.29% Blmbg. Barc. US High Yield-2% Issuer Cap.

Investment Performance vs. Actuarial Assumed Rate of Return



Largest Assets Held

As of December 31, 2017

Public Equity Portfolio:

Top Ten Holdings

The top ten holdings within the public equity portfolio (domestic and international combined) listed below does not include the fair value of units held in commingled fund investments. A complete listing of the holdings, including commingled fund holdings, is available upon request.

Ten Largest Equity Holdings	Fair Value
ASML Holding NV	\$ 5,532,343
Dassault System Sa	3,680,713
Softbank Group Corp	3,614,750
LVMH Moet Hennessy Louis Vuitt	3,186,910
Fanuc Corp	3,183,719
Novo Nordisk A/S	3,148,282
SAP SE	3,140,462
Bayer AG	2,844,233
ING Groep NV	2,776,384
Deutsche Post AG	2,757,716

Fixed-Income Portfolio:

Top Ten Holdings

The top ten holdings within the consolidated fixed-income portfolio (core-plus and credit opportunities combined) listed below does not include the fair value of units held in commingled fund investments. A complete listing of the holdings, including commingled fund holdings, is available upon request.

Ten Largest Bond Holdings	Fair Value
US Treasury Notes 2.125% Due 2021	\$ 2,141,348
FHLMC POOL #G0-8525 3.00% Due 2043	1,325,539
FHLMC POOL #Q2-2877 4.00% Due 2043	1,019,103
US Treasury Bond 3.125% Due 2043	1,015,251
FNMA POOL #0AO5472 3.50% Due 2042	943,446
US Treasury Note 3.625% Due 2020	844,193
US Treasury Bond 2.25% Due 2046	834,415
FNMA GTD REMIC P/T 12-M2 A2 2.717% Due 2022	739,519
FHLMC POOL #G0-7559 4.00% Due 2043	734,009
Synchrony Credit Card MAST 7 A 1.76% Due 2022	665,049

Investment Summary

For the year ending December 31, 2017

Investment Manager	Date Hired	Investment Class	Portfolio Fair Value as of 12/31/17	% of Total
Rhumblin Advisors	December 2007	Large Cap Core Equities	\$ 79,649,292	11.8%
Rhumblin Advisors	June 2003	Mid Cap Core Equities	43,413,903	6.5%
Denver Investments	April 2008	Small Cap Value Equities	21,827,193	3.2%
Westfield Capital Management	July 2016	Small Cap Growth Equities	21,336,804	3.2%
Fisher Investments	August 2002	International Developed Equities	109,281,199	16.2%
Earnest Partners, LLC	June 2002	International Emerging Market Equities	44,671,822	6.6%
Wells Capital Management	August 2012	International Emerging Market Equities	37,489,220	5.6%
Pugh Capital Management	March 2014	Core Fixed Income	55,599,795	8.3%
Loomis Sayles	October 2011	High Yield Bonds	17,979,851	2.7%
Brandywine Global	June 2015	International Fixed Income	31,604,923	4.7%
BlackRock	January 1994	Core Real Estate	11,185,240	1.7%
JP Morgan Asset Management	February 2007	Real Estate	11,704,047	1.7%
Brookfield Property Group	May 2012	Real Estate	24,386,781	3.6%
Mesirow Financial	January 2014	Real Estate	5,065,770	0.8%
Westport Capital Partners, LLC	May 2013	Real Estate	3,543,868	0.5%
Parametric Clifton	May 2012	Commodities	21,097,360	3.1%
Rock Creek	August 2008	Long/Short Equity	24,154,044	3.6%
Corbin Investor Services	December 2011	Hedge Fund of Funds	22,467,851	3.3%
AQR Capital Management	December 2012	GTTA	42,911,304	6.4%
StepStone Group	May 2006	Private Equity	12,957,911	1.9%
Pantheon VI	July 2004	Private Equity	5,594,901	0.8%
Pantheon IX	March 2011	Private Equity	6,885,084	1.0%
Cash			18,158,381	2.7%
		Total	\$ 672,966,545	100%

Investment Fees

For the year ending December 31, 2017

Investment Managers	Investment Fee
Rhumblin Advisors	\$ 53,952
Denver Investments	162,407
Westfield Capital Management	196,727
Fisher Investments	687,219
Earnest Partners, LLC	394,349
Wells Capital Management	316,336
Pugh Capital Management	137,106
Loomis Sayles	87,021
Brandywine Global	139,189
BlackRock	74,548
JP Morgan Asset Management	228,408
Brookfield Property Group	270,155
Voya Clarion	39,856
Mesirow Financial	68,227
Westport Capital Partners, LLC	75,000
Parametric Clifton	59,109
Rock Creek	432,927
Corbin Investor Services	307,351
AQR Capital Management	159,147
StepStone Group	47,278
Pantheon VI	80,555
Pantheon IX	60,000
Total	\$ 4,076,869

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Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

June 11, 2018

The Board of Trustees
Public School Retirement System of the
School District of Kansas City, Missouri
3100 Broadway, Suite 1211
Kansas City, MO 64111

Dear Members of the Board:

The basic financial objective of the Public School Retirement System of the School District of Kansas City, Missouri is to establish and receive contributions which:

- when expressed in terms of percentages of active member payroll will remain approximately level from generation to generation, and
- when combined with present assets and future investment return will be sufficient to meet the financial obligations of the Public School Retirement System of the School District of Kansas City, Missouri to present and future retirees and beneficiaries.

The financial objective is addressed by actuarial funding valuations that are prepared annually as of January 1. The valuation process develops contribution rates that are sufficient to fund the plan’s current cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund the unfunded actuarial accrued liability, as a level percent of active member payroll. The unfunded actuarial accrued liability as of January 1, 2017 is amortized over a closed 30-year period and subsequent changes to the UAAL are amortized over closed 20-year periods. The most recent valuation was completed based upon population data, asset data, and plan provisions as of January 1, 2018.

3802 Raynor Parkway, Suite 202, Bellevue, NE 68123

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www/CavMacConsulting.com

The plan administrative staff provides the actuary with data for the annual actuarial valuation. The actuary relies on the data after reviewing it for internal and year to year consistency. The actuary summarizes and tabulates population data in order to analyze longer term trends. The plan’s external auditor also audits the actuarial membership data annually.

For funding valuation purposes, an asset smoothing method is used to develop the actuarial value of assets. The difference between the actual return on the market value of assets and the expected return, based on the investment return assumption, is recognized equally over five years.

Actuarial valuations for funding the System are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board, after considering the advice of the actuary and other professionals. In our opinion, the assumptions and the methods comply with the requirements of applicable Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the actuarial contribution rates as needed. The January 1, 2018 actuarial valuation reflects the actuarial assumptions and methods included in the experience study covering the five year period from January 1, 2011 to December 31, 2015, as adopted by the Board based on advice of the actuary.

The unfunded actuarial accrued liability (UAAL) increased from the last valuation by \$5.0 million. There was an actuarial loss of \$9.5 million on assets and an actuarial gain of \$10.8 million on experience on liabilities. The largest source of gain on the liability experience was salary increases that were smaller than expected, based on the actuarial assumptions.

Legislation passed in 2013 modified the set of plan provisions applicable for members hired after December 31, 2013, referred to as Plan C. The key differences between Plan B and Plan C are a lower benefit multiplier (1.75% instead of 2.00%) and more stringent requirements for unreduced benefits (age 62 or Rule of 80 rather than age 60 or Rule of 75). As of January 1, 2018, there are 1,908 active Plan C members in the System out of a total of 3,760, about 50%.

The System is 69% funded as of January 1, 2018 based on the actuarial value of assets. The impact of the new benefit structure on the System’s funding will evolve gradually over time as current members (covered by Plan B) leave covered employment and are replaced with new members who are covered by Plan C.

Cavanaugh Macdonald also prepared actuarial computations as of December 31, 2017 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board (GASB) Statement No. 67, the results are presented in a separate report dated May 7, 2018. The assumptions used in the funding valuation report were also used in the GASB 67 report, including the use of a 7.75% discount rate for the GASB 67 calculation of the Total Pension Liability. In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the funding valuation report. The actuarial assumptions and methods used in both the funding and the GASB 67 valuation meet the parameters set by the Actuarial Standards of Practice (ASOPs), as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United States of America as promulgated by the Governmental Accounting Standards Board.

The actuary prepared, or assisted in preparing, the following supporting information for the Comprehensive Annual Financial Report:

Financial Section

- Total Pension Liability
- Net Pension Liability
- Sensitivity Analysis
- Schedule of Changes in the Net Pension Liability
- Schedule of Employer Contributions

Actuarial Section

- Summary of Assumptions and Methods
 - Actuarial Cost Method and Asset Valuation Method
 - Investment Return, Salary Increase, and Payroll Growth
 - Probabilities of Age & Service Retirement
 - Probabilities of Separation from Active Employment Before Age & Service Retirement
 - Probabilities of Death, Before and After Retirement
- Short-Term Solvency Test
- Membership Data
- Analysis of Financial Experience
- Schedule of Funding Progress
- Computed and Actual Employer Contributions

Respectfully submitted,

CAVANAUGH MACDONALD CONSULTING, LLC



Patrice A. Beckham, FSA, FCA, EA, MAAA
Principal and Consulting Actuary

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL COST METHOD

The actuarial cost method is a procedure for allocating the actuarial present value of pension benefits and expenses to time periods. The method used for the valuation is known as the Entry Age Normal actuarial cost method, and have the following characteristics:

- (i) The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year-by-year projected covered compensation.

The Entry Age Normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's assumed pensionable compensation rates between the entry age of the member and the assumed exit ages.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called actuarial accrued liability. Deducting actuarial assets from the actuarial accrued liability determines the unfunded actuarial accrued liability or (surplus). Effective with the January 1, 2017 valuation, the existing UAAL is amortized over a closed 30-year period and subsequent pieces of UAAL, determined each year in the valuation process, will be amortized over a closed 20-year period. The amortization payments on each of the UAAL bases will be determined on a level percentage of payroll basis.

CALCULATION OF THE ACTUARIAL VALUE OF ASSETS

The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The Market Value of assets on the valuation date is reduced by the sum of the following:

- I. 89% of the return to be spread during the first year preceding the valuation date,
- II. 60% of the return to be spread during the second year preceding the valuation date,
- III. 40% of the return to be spread during the third year preceding the valuation date,
- IV. 20% of the return to be spread during the fourth year preceding the valuation date.

ACTUARIAL ASSUMPTIONS

System contribution requirements and actuarial present values are calculated by applying assumptions to the benefit provisions and membership information of the System, using the actuarial cost method.

The principal areas of risk which require assumptions about future activities of the System are:

- (i) Long-term rates of investment return to be generated by the assets of the System
- (ii) Patterns of pay increases to members

- (iii) Rates of mortality among members, retirees and beneficiaries
- (iv) Rates of withdrawal of active members
- (v) Rates of disability among active members
- (vi) The age patterns of actual retirements

In making a valuation, the monetary effect of each assumption is calculated for as long as a presently covered person survives – a period of time which can be as long as a century.

Actual experience of the System will not coincide exactly with assumed experience. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experiences. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time, one or more of the assumptions are modified to reflect experience trends (but not random or temporary year-to-year fluctuations).

Long-term Rate of Return: (net of administrative expenses): 7.75% per year, compounded annually (2.75% long-term price inflation and a 5.00% real rate of return).

Price Inflation: 2.75%

General Wage Growth (Wage Inflation): 3.50%

Payroll Growth Assumption: 3.00% per year

Interest Crediting Rate on Member Accounts: 3.25% per year.

Salary Increase Rates: 5.00% per year.

Mortality Table: This assumption is used to measure the probabilities of members dying and the probabilities of each pension payment being made after retirement.

Healthy Retirees

And Beneficiaries: RP-2014 Healthy Annuitant Blue Collar Table with a one-year setback for females, projected 7 years from valuation date using Scale MP-2016

Disabled Retirees: RP-2014 Disabled Table for Males and Females

Active Members: RP-2014 Healthy Non-Annuitant Blue Collar Table with a one-year setback for females, projected 15 years from valuation date using Scale MP-2016

Rates of Retirement: These rates are used to measure the probability of eligible members retiring under the regular retirement provisions.

Retirements occur at rates based on the actual experience of the retirement system. The age-related rates used are shown in the tables below. The first year of normal retirement eligibility is the earlier of age 60 and 5 years of creditable service or 75 credits for Plan B members, and the earlier of age 62 and 5 years of creditable service or 80 credits for Plan C members.

Retirement Rates When Eligible for Unreduced Benefits		
Age	First Eligible Rate	Ultimate Rate
45 – 54	10%	12%
55 – 61	20	12
62	30	25
63	20	15
64	30	15
65 – 69	30	25
70 – 74	50	40
75	100	100

Retirement Rates When Eligible for Reduced Benefits	
Age	Rate
55 – 59	8%

Terminated vested members are assumed to begin receiving their benefits upon reaching age 60 if they participated in Plan B, and age 62 if they participated in Plan C.

Rates of Separation from Active Membership: This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire. Rates vary by service. Sample rates are as follows:

Years	Rate
<1	27%
1	25
5	17
10	8
15+	3

Forfeiture of Vested Benefits: Members terminating in vested status are given the option of taking a refund of their accumulated member contributions (and thereby forfeiting the employer-provided benefit) or deferring their vested benefit. Active members who terminate in the future with a vested benefit are assumed to take a deferred vested annuity, unless a refund of contributions and interest is greater than the actuarial present value of their vested deferred benefit.

Rates of Disability: This assumption measures the probabilities of a member becoming disabled.

Sample Ages	% of Active Members Becoming Disabled During Next Year
25	0.025%
30	0.050
35	0.050
40	0.050
45	0.075
50	0.125
55	0.200
60	0.250

Disability probabilities vary by age, however, not all ages are shown above.

Active Member Group Size: Assumed to remain constant.

Future Benefit Increases or Additional Benefits: When funding is adequate, the Board may authorize cost of living adjustments (COLAs), as noted in the summary of plan provisions. In the past, the Board has also sometimes granted an additional monthly payment to retirees (13th check.) This valuation assumes that no future COLAs and no future 13th checks will be awarded.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption: All participants are assumed to be married for purposes of death benefits. In each case, the male was assumed to be 4 years older than the female.

Decrement Timing: Decrements of all types are assumed to occur mid-year.

Other: The turnover decrement does not operate during retirement eligibility.

Missing Gender: Records that are missing a gender are assumed to be female if the record belongs to a member, and male if the record belongs to a beneficiary.

CHANGES FROM THE PRIOR VALUATION

There have been no changes to the actuarial assumptions or methods since the prior valuation.

Membership Profile as of January 1						
	2018	2017	2016	2015	2014	2013
Active Members	3,760	3,701	3,574	3,493	3,501	3,396
Average Age	42.8	43.5	44.0	44.4	44.5	44.9
Average Years of Service	7.5	8.1	8.1	8.3	8.5	9.0
Inactive Vested	522	490	461	476	560	526
Average Age	49.8	50.5	50.5	50.2	51.6	51.1
Average Estimated Monthly Benefit	\$678	\$671	\$689			
Retirees, Disabled and Survivors	4,112	4,032	4,049	4,011	3,885	3,859
Average Age	72.3	72.2	72.0	71.7	71.7	71.5
Average Monthly Benefit	\$1,607	\$1,589	\$1,580	\$1,574	\$1,569	\$1,562

Active Member Valuation Data				
Valuation January 1	Active Members	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2009	4,648	\$ 205,326,108	\$ 44,175	6.16%
2010	4,336	194,474,437	44,851	1.53%
2011	3,490	162,417,257	46,538	3.76%
2012	3,284	155,893,016	47,470	2.00%
2013	3,396	157,303,005	46,320	(2.42%)
2014	3,501	157,014,537	44,848	(3.18%)
2015	3,493	170,845,124	48,911	9.06%
2016	3,574	179,013,516	50,088	2.41%
2017	3,701	194,132,739	52,454	4.72%
2018	3,760	196,277,971	52,202	(0.48%)

Retirants and Beneficiaries Added to and Removed from Rolls								
Year Ended December 31	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Benefits	Average Annual Benefits
	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits		
2012	138	\$ 1,939,048	108	\$ 1,485,934	3,859	\$ 72,356,163		18,750
2013	148	2,480,646	95	1,690,031	3,885	73,146,778	1.09%	18,828
2014	257	4,763,445	131	2,173,699	4,011	75,736,524	3.54%	18,882
2015	159	2,949,800	122	1,900,088	4,049	76,786,236	1.39%	18,964
2016	151	2,791,834	167	2,697,334	4,032	76,880,736	0.12%	19,068
2017	215	4,456,931	135	2,040,515	4,112	79,297,152	3.14%	19,284

Short-Term Solvency Test

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active participant accumulated contributions (liability 1) and the liabilities for future benefits to retirees, beneficiaries, and inactive participants (liability 2) will be fully covered by assets if all assumptions are met. In addition, the liabilities for service already rendered by active participants (liability 3) are normally partially covered by the remainder of the present assets. Generally, if the system has been using level percent of payroll financing, the funded portion of liability 3 will increase over time. The schedule below illustrates the history of the liabilities of the system and is indicative of the system following the discipline of level percent of compensation funding.

Valuation January 1	Active Participants'	Retirees,	Active	Valuation Assets	Percent Covered By		
	Accumulated Contributions	Beneficiaries and Inactive Participants	Participants (Employer Financed)		(1)	(2)	(3)
	(1)	(2)	(3)				
2009	\$ 140,096,771	\$ 503,450,518	\$ 161,075,791	\$ 832,609,879	100%	100%	117%
2010	139,860,248	524,692,426	154,981,717	814,536,473	100%	100%	97%
2011	110,538,745	611,806,997	121,886,748	786,297,998	100%	100%	52%
2012	99,513,420	654,828,752	119,944,326	742,279,611	100%	98%	0%
2013	100,767,726	653,949,421	113,946,236	697,028,072	100%	91%	0%
2014	98,272,633	660,003,861	117,174,620	710,828,744	100%	93%	0%
2015	98,966,336	674,794,654	117,782,046	712,390,611	100%	91%	0%
2016	101,173,695	677,295,366	116,761,234	694,641,248	100%	88%	0%
2017	105,887,868	717,052,296	158,574,663	684,412,437	100%	81%	0%
2018	103,069,314	739,004,732	138,362,580	678,288,805	100%	78%	0%

Analysis of Financial Experience

(Millions)

Unfunded Actuarial Accrued Liability, January 1, 2017	\$ 297.1
- Expected increase from amortization method	4.0
- Actual versus actuarial contributions	1.2
- Investment experience	9.5
- Liability experience	(10.8)
- Other experience	1.1
Unfunded Actuarial Accrued Liability, January 1, 2018	\$ 302.1

Funding Progress

Analysis of the dollar amounts of actuarial value of assets, actuarial accrued liability, or unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the System's funded status on an on-going concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the System's funding. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the System's funding.

Valuation Date	of Assets (AVA) (a)	Liabilities (AAL) (b)	(UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	of Covered Payroll [(b - a) / c]
1/1/2009	\$ 832,609,879	\$ 804,623,080	\$ (27,986,799)	103.5%	\$ 205,326,108	(13.6%)
1/1/2010	814,536,473	819,534,391	4,997,918	99.4%	194,474,437	2.6%
1/1/2011	786,297,998	844,232,490	57,934,492	93.1%	162,417,257	35.7%
1/1/2012	742,279,611	874,286,498	132,006,887	84.9%	155,893,016	84.7%
1/1/2013	697,028,072	868,663,383	171,635,311	80.2%	157,303,005	109.1%
1/1/2014	710,828,744	875,451,114	164,622,370	81.2%	157,014,537	104.8%
1/1/2015	712,390,611	891,543,036	179,152,425	79.9%	170,845,124	104.9%
1/1/2016	694,641,248	895,230,295	200,589,047	77.6%	179,013,516	112.1%
1/1/2017	684,412,437	981,514,827	297,102,390	69.7%	194,132,739	153.0%
1/1/2018	678,288,805	980,436,626	302,147,821	69.2%	196,277,971	153.9%

Historical Contribution Rates

Actuarial Valuation Date	Actuarial Contribution Rate	Actual Contribution Rate	Contribution Shortfall/(Margin)
1/1/2009	9.35%	15.00%	(5.65%)
1/1/2010	11.50%	15.00%	(3.50%)
1/1/2011	14.64%	15.00%	(0.36%)
1/1/2012	18.30%	15.00%	3.30%
1/1/2013	20.52%	15.00%	5.52%
1/1/2014	19.68%	16.00%	3.68%
1/1/2015	19.56%	17.00%	2.56%
1/1/2016	20.18%	18.00%	2.18%
1/1/2017	18.61%	18.00%	0.61%
1/1/2018	18.82%	18.00%	0.82%

Summary Plan Description

Effective Date

January 1, 1944, most recently amended in 2018.

Plan Type

Plan B applies to anyone who retires on or after June 30, 1999 and was hired prior to January 1, 2014. Plan C applies to members hired on or after January 1, 2014. All members with Plan A benefits have terminated or retired.

Eligibility for coverage

All regular, full-time employees of the School District of Kansas City, Missouri, the Kansas City Public Library District, the Retirement System and the Charter Schools located within the boundaries of the Kansas City District become members as a condition of employment. Regular employment means working at least five hours per day, five days per week, nine months per year. Temporary and part-time employees are excluded.

Service

Creditable service is member service, which is service for which required contributions have been made. There is no cap on creditable service. Prior to 1990, creditable service could not exceed 35 years. The Plan B maximum retirement benefit is 60% of Average final compensation, which will be reached upon attainment of 30 years of service. The Plan C maximum retirement benefit is 60% of Average final compensation, which will be reached upon attainment of 34.25 years of service.

Annual compensation

A participant's annual compensation level will be the regular compensation shown on the employer's salary and wage schedules, excluding extra pay, overtime pay, or any pay not on the schedule.

Average final compensation

The average final compensation is the highest average annual compensation paid during any four consecutive years of service.

Normal retirement

Eligibility

Plan B: Members may retire after (a) the completion of five years of creditable service and the attainment of age 60, or (b) having a total of at least 75 credits, with each year of creditable service and year of age, both prorated for fractional years, equal to one credit.

Plan C: Members may retire after (a) the completion of five years of creditable service and the attainment of age 62, or (b) having a total of at least 80 credits, with each year of creditable service and year of age, both prorated for fractional years, equal to one credit.

Benefit

Plan B: The normal retirement benefit payable monthly equals one twelfth of 2.00% (1.75% for participants who retired prior to June 30, 1999) of the member's average final compensation multiplied by years of creditable service, subject to a maximum of 60% of average final compensation. Any participant whose years of creditable service exceed 34.25 years on August 28, 1993 shall have a maximum greater than 60%, which shall be equal to 1.75% times the participant's years of creditable service on August 28, 1993.

Plan C: The normal retirement benefit payable monthly equals one twelfth of 1.75% of the participant’s average final compensation multiplied by years of creditable service, subject to a maximum of 60% of average final compensation.

Minimum benefit

Effective January 1, 1990, any member with at least 10 years of creditable service, but less than 20 years is entitled to a minimum benefit of \$150 per month, plus 15 for each year of creditable service in excess of 10 years, or the actuarial equivalent if an option was elected. Any member with at least 20 years of creditable service at retirement is entitled to a minimum benefit of \$300 per month, or the actuarial equivalent of \$300 if an option was elected. Beneficiaries of deceased members who retired with at least 10 years of creditable service and elected one of the optional plans for payment of benefits may receive the actuarial equivalent of the minimum benefit available for the option chosen.

Early retirement

Eligibility

Members may retire at any time after the completion of five years of creditable service and the attainment of age 55.

Benefit

Plan B: A member eligible for early retirement will receive a reduced benefit, with the reduction based on the number of months preceding eligibility for a normal retirement benefit. The reduction factors are as follows:

Age	Reduction Factor
59	0.91042
58	0.82985
57	0.75727
56	0.69175
55	0.63251

Plan C: A member eligible for early retirement will receive a reduced benefit, with the reduction based on the number of months preceding eligibility for a normal retirement benefit. The reduction factors are as follows:

Age	Reduction Factor
61	0.90799
60	0.82558
59	0.75162
58	0.68511
57	0.62518
56	0.57109
55	0.52219

Disability retirement

Eligibility

A member with at least five years of creditable service who is certified to be totally incapacitated for performance of duty by the Medical Board is eligible for a disability retirement.

Benefit

A disabled vested member will receive a benefit, calculated as for normal retirement, based on creditable service and average final compensation at actual retirement date, or the minimum disability benefit whichever is greater. The minimum disability retirement benefit will be the lesser of (a) 25% of the member's average final compensation, or (b) the member's service retirement benefit calculated on the participant's average final compensation and the maximum number of years of creditable service the member would have earned had the member remained an employee until age 60. Disability benefits are payable immediately.

Vested termination benefits

Eligibility

A member who has at least five years of creditable service earns a vested interest in his or her accrued benefit, provided the member leaves his or her contributions in the System.

Benefit

The vested benefit is calculated as a normal retirement benefit based on service and average final compensation at date of termination and is payable at minimum normal retirement date.

Non-vested benefits

Benefit

If the member's termination is for reasons other than death or retirement and if the participant has not met the vesting or retirement requirements, the participant's contributions with interest will be refunded.

Death Benefit

Prior to retirement

For a member who dies before retirement and was either an active employer or any inactive vested member who met the other requirements (age or points) for either normal or early retirement, the member's designated beneficiary is entitled to receive either (a) the member's accumulated contributions and interest, or if the designated beneficiary is the member's spouse, dependent child or dependent parent, (b) a monthly retirement benefit calculated under Option 1 as if the deceased member had at least ten years of creditable service at time of death. If the beneficiary is a child, the optional monthly benefit is payable until the beneficiary reaches age nineteen.

For an inactive vested member who dies before retirement and has not met the other (age or points) requirements for retirement, the member's accumulated contributions and interest will be payable to the member's designated beneficiary.

All members are guaranteed to have their designated beneficiaries receive at least their accumulated contributions and interest, upon the member's death.

Postretirement

The benefit payment selected by the retiree will determine what, if any, benefits are payable upon death after retirement.

Normal form of benefit payments

The normal form of benefit payment is the normal retirement benefit amount paid monthly for the life of the member. If the member should die before receiving payments totaling the amount of their contributions to the plan, the designated beneficiary shall receive a lump sum payment of the remaining amount.

Optional forms of benefit payments

Members may elect from the following optional forms of benefit payment:

Option 1

Option 1 provides a reduced retirement benefit that will continue on to a designated beneficiary. Upon a retiree's death, the retiree's designated survivor will receive for life, the same level of monthly retirement benefit. In the event the retiree's designated survivor predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount that would have been paid in the normal form of payment.

Option 2

Option 2 provides a reduced retirement benefit that will continue on to a designated beneficiary. Upon a retiree's death, the retiree's designated survivor will receive for life, a monthly benefit equal to one-half of the retiree's monthly retirement benefit. In the event the retiree's designated survivor predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount that would have been paid in the normal form of payment.

Option 3

Option 3 provides that upon a retiree's death, no benefits are payable to the retiree's estate or any beneficiary. Retirement benefits payable under this option will be actuarially increased from the normal form.

Each of the above options produces benefits which are actuarially equivalent to the normal form of benefit which is a monthly annuity payable for the lifetime of the retiree.

Cost-of-living allowances

The Board of Trustees shall determine annually whether or not the system can provide an increase in benefits for those retirees who, as of the January 1 preceding the date of such increase, have been retired at least one year. Any such increase also applies to optional retirement allowances paid to a retiree's survivor. The Board makes its determination as follows:

1. The actuary recommends to the Board what portion of the investment return is available for increases and the amount available to be paid on the first day of the 14th month following the end of the valuation year. The actuary's recommendation is subject to the following safeguards:
 - a. The System's funded ratio as of the January 1st of the preceding year of the proposed increase must be at least 100% after adjusting for the effect of proposed increase. The funded ratio is the ratio of assets to the pension benefit obligation.
 - b. The actuarially required contribution rate, after adjusting for the effect of the proposed increase, may not exceed the statutory contribution rate.
 - c. The actuary must certify that the proposed increase will not impair the actuarial soundness of the System.

2. The Board reviews the actuary's recommendation and shall, in their discretion, determine if an increase may be granted. In accordance with Board policy, if an increase is permissible, the amount of the increase will be equal to the lesser of 3% or the percentage increase in the CPI for the preceding year, subject to a cumulative increase of 100% subsequent to December 31, 2000.
3. This provision does not guarantee an annual increase to any retired member.

Administration of the retirement system

The Board of Trustees is responsible for the general administration and proper operation of the retirement system. The Board consists of 12 members – four members appointed by the Board of Education, one member appointed by the Board of Trustees of the library district, four members elected by and from the actives and terminated vested members of the retirement system, two members elected by and from the retirees of the retirement system, and the Superintendent of Schools of the School District of Kansas City, Missouri. Administrative expenses are paid out of the general reserve fund.

Employee contributions*

Contributions for Employees are as follows:

- Effective July 1, 2021, if the System is at least 100% funded, the members contribute the lesser of (a) 9.00% or (b) one-half of the actuarial required contribution rate. If the System is less than 100% funded, the members contribute 9.00%
- Effective January 1, 2016, members contribute 9.00%
- Effective January 1, 2015, members contributed 8.50%
- Effective January 1, 2014, members contributed 8.00%
- Effective January 1, 1999, members contributed 7.50%
- Prior to January 1, 1999, members contributed 5.90%
- Prior to 1990, members contributed 5.00% of earnable annual compensation plus 2.00% of earnable compensation in excess of \$6,500, the contribution earning base.

* Based on legislation passed by the 2018 Missouri General Assembly, which had not been signed by the Governor prior to the issuance of the January 1, 2018 valuation report.

Employer contributions*

Effective July 1, 2021, if the System is less than 100% funded on the first day of the preceding calendar year, then employers will contribute the greater of (a) the actuarial required contribution rate minus 9.00% and (b) 12.00% of covered payroll. However, if the System is at least 100% funded on the first day of the prior calendar year, then employers will contribute the greater of (a) the actuarial required contribution rate minus 9.00% and (b) one-half of the actuarial required contribution rate. Except when the employer contribution rate is lowered to one-half of the actuarial required contribution rate, the employer contribution rate cannot decrease by more than 0.50% compared to the preceding year, and under no circumstance can the employer contribution rate increase by more than 1.00% compared to the preceding year.

Prior to July 1, 2021, the employers of members contribute at the fixed rate of covered compensation as follows;

- Effective January 1, 2020, 12.00%
- Effective January 1, 2019, 10.50%
- Effective January 1, 2016, 9.00%
- Effective January 1, 2015, 8.50%
- Effective January 1, 2014, 8.00%

- Effective January 1, 1999, 7.50%
- Effective July 1, 1996, 5.99%
- Effective July 1, 1995, 3.99%
- Effective July 1, 1993, 1.99%
- Prior to July 1, 1993, employer contributions were actuarially determined.

* Based on legislation passed by the 2018 Missouri General Assembly, which had not been signed by the Governor prior to the issuance of the January 1, 2018 valuation report.

Changes from the Prior Valuation

The 2018 Missouri General Assembly passed a bill, which had not been signed by the Governor prior to the issuance of the January 1, 2018 valuation report. Even though the bill had not yet been signed by the Governor, we expect the bill will be signed and become law in 2018. The bill changed contribution policy beginning January 1, 2019 with respect to employers covered by the System. In accordance with the new legislation, the employer contribution rate will increase to 10.50% of pay effective January 1, 2019. And 12.00% of pay effective January 1, 2020. Beginning July 1, 2021, the employer contribution rate will be the greater of (1) the actuarial required contribution rate, as determined in the valuation prepared for the prior calendar year, less the member contribution rate, or (2) 12.00% of pay, until the System is fully funded. Once the System is fully funded, the employer contribution rate may increase or decrease in subsequent years, depending on the valuation results and the employee contribution rate may decrease from 9.00% depending on valuation results. However, such changes are subject to statutory limitation. These changes to employer contributions are expected to improve the funding status of the System in the future.

Statistical Section

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Statistical Summary

Objectives

The objective of the Statistical section is to provide the detail and historical context needed for a thorough assessment and understanding of KCPSRS' financial condition. Data in this section are presented in multiple-year format to show previous and emerging trends.

Contents

The schedules on pages 67-68 show financial trend information that assists users in understanding and assessing how KCPSRS financial position has changed over time. The financial trend schedules presented are:

- Changes in Fiduciary Net Position
- Deductions from Fiduciary Net Position for Benefits and Refunds
- Change in Contributions by Employers

Demographic and operating information begins on page 69. This information is intended to assist users in understanding the environment in which KCPSRS operates and to provide information that facilitates comparisons of financial statement information over time. The demographic and operating information presented are:

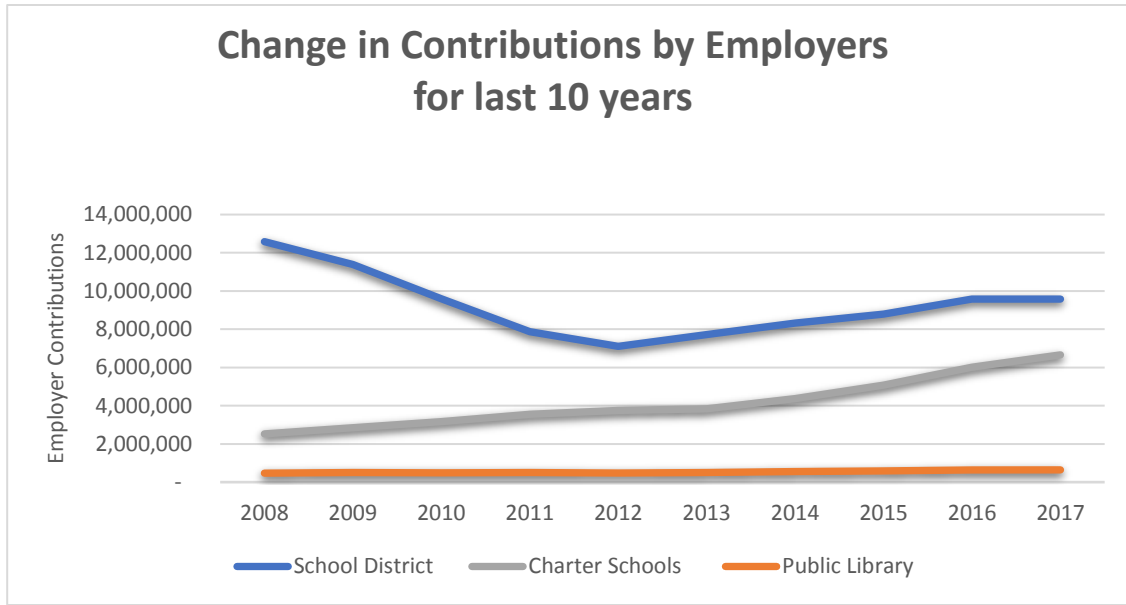
- Valuation Assets vs Pension Liabilities
- Actuarial Accrued Liabilities
- Valuation Assets as percent of Pension Liabilities
- Membership in the Retirement Plan
- Active Members by Employer and Plan
- Change in Active Members by Employer
- Participating Employers
- Retired Members by Type of Benefit
- Average Monthly Benefits Amounts by Service Years
- Distribution of Benefit Recipients

Changes in Fiduciary Net Position – Last 10 Years

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Additions:										
Member Contributions	\$ 15,888,234.00	\$ 14,995,429.00	\$ 13,813,561.00	\$ 12,082,175.00	\$ 11,577,924.00	\$ 12,310,320	\$ 13,358,180	\$ 14,645,901	\$ 16,280,327	\$ 16,964,351
City Contributions	15,612,996.00	27,656,639.00	13,281,191.00	11,972,752.00	11,370,252.00	12,093,945	13,288,142	14,499,260	16,528,188	16,926,562
Net Investment Income	(195,311,930.00)	91,191,550.00	82,266,344.00	5,502,704.00	76,761,126.00	78,598,783	25,936,419	(10,025,518)	44,337,774	103,767,714
Total Additions to										
Plan Net Positions	(163,810,700.00)	133,843,618.00	109,361,096.00	29,557,631.00	99,709,302.00	103,003,048	52,582,741	19,119,643	77,146,289	137,658,627
Deductions:										
Benefits	59,334,054.00	59,226,394.00	64,613,420.00	70,411,893.00	72,426,711.00	73,844,481	75,298,737	76,235,124	76,898,255	78,181,575
Refunds	4,536,201.00	4,016,669.00	6,709,964.00	5,721,334.00	4,386,983.00	3,567,693	3,236,645	3,399,065	3,270,723	3,581,147
Depreciation Expense	83,446.00	82,356.00	363,455.00	443,060.00	522,930.00	524,163	528,860	250,979	92,179	15,855
Administrative	1,311,275.00	1,230,470.00	1,324,789.00	1,283,444.00	1,336,764.00	1,479,931	1,548,320	1,648,449	1,552,025	1,520,665
Total Deductions from										
Plan Net Position	65,264,976.00	64,555,889.00	73,011,628.00	77,859,731.00	78,673,388.00	79,416,268	80,612,562	81,533,617	81,813,182	83,299,242
Change in Net Position	\$ (229,075,676.00)	\$ 69,287,729.00	\$ 36,349,468.00	\$ (48,302,100.00)	\$ 21,035,914.00	\$ 23,586,780	\$ (28,029,821)	\$ (62,413,974)	\$ (4,666,893)	\$ 54,359,385

Deductions from Plan Net Position for Benefit and Refunds

Fiscal Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Benefits	\$ 55,334,054	\$ 59,231,920	\$ 64,638,721	\$ 70,411,892	\$ 72,426,711	\$ 73,844,481	\$ 75,298,738	\$ 76,235,124	\$ 76,898,255	\$ 78,181,575
Total Refunds	\$ 4,536,201	\$ 4,016,669	\$ 6,712,465	\$ 5,721,334	\$ 4,386,983	\$ 3,567,693	\$ 3,236,645	\$ 3,399,065	\$ 3,270,723	\$ 3,581,147

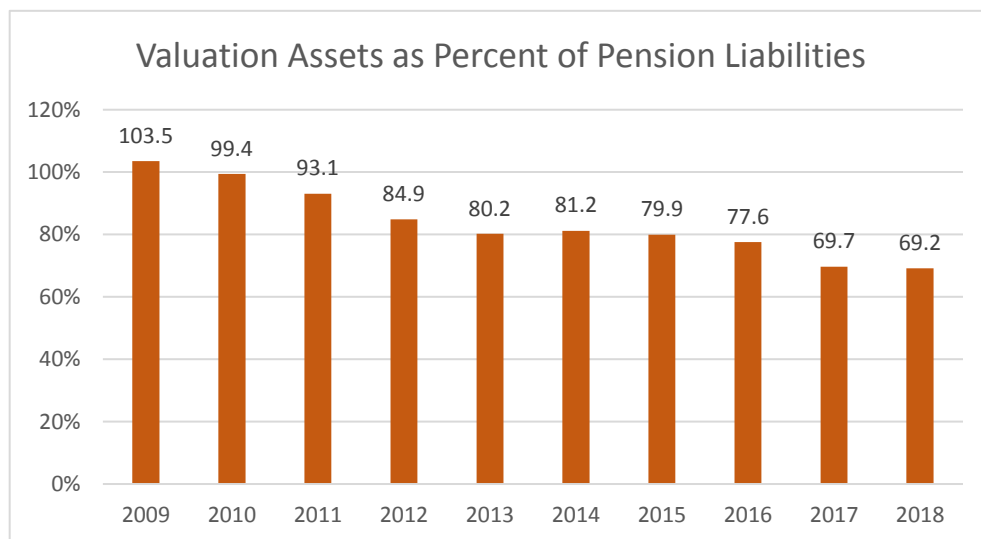
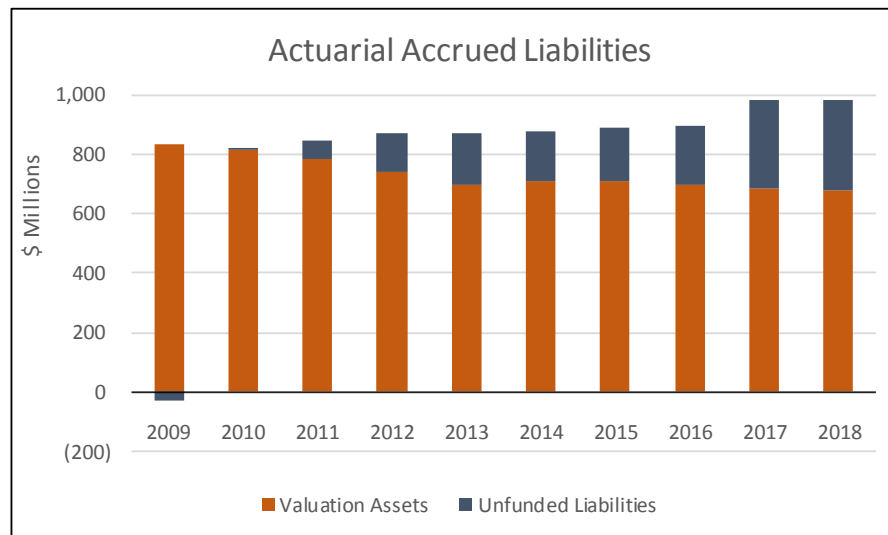


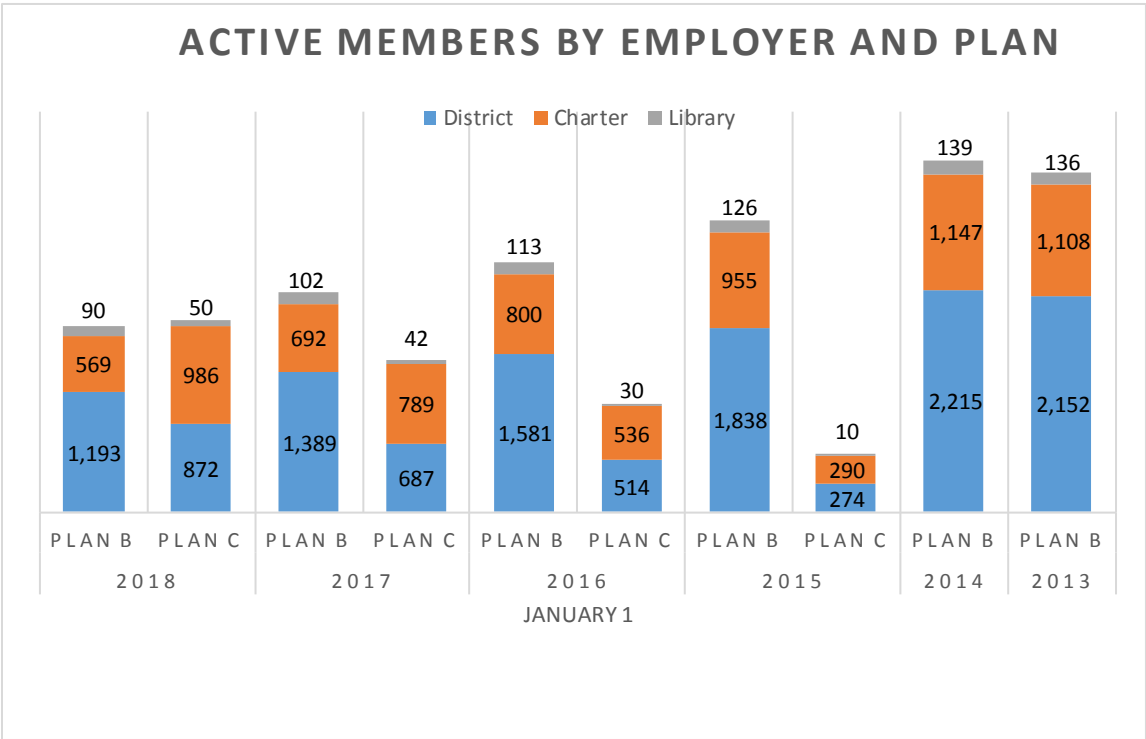
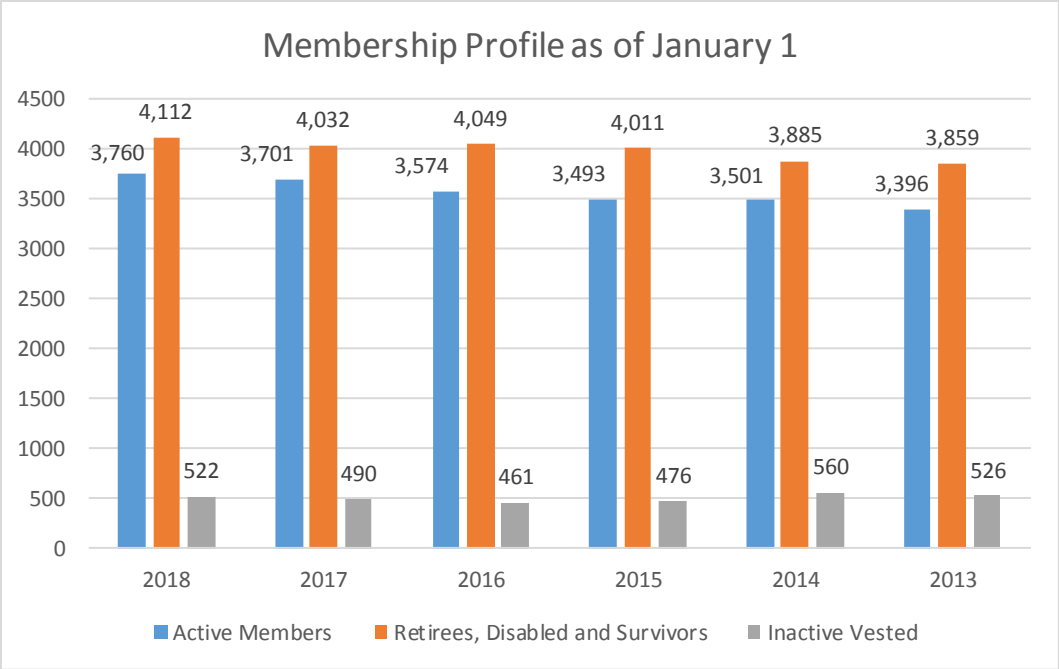
Changes in Contributions by Employers for last 10 years										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
School District	\$ 12,583,497	\$ 11,382,658	\$ 9,593,610	\$ 7,878,152	\$ 7,719,216	\$ 7,719,216	\$ 8,324,500	\$ 8,786,297	\$ 9,586,293	\$ 9,578,553
Charter Schools	\$ 2,524,319	\$ 2,846,669	\$ 3,170,694	\$ 3,554,946	\$ 3,381,254	\$ 3,831,254	\$ 4,375,968	\$ 4,375,968	\$ 6,012,583	\$ 6,659,632
Public Library	\$ 477,037	\$ 508,896	\$ 486,466	\$ 507,553	\$ 508,693	\$ 508,693	\$ 550,376	\$ 587,212	\$ 636,430	\$ 641,867

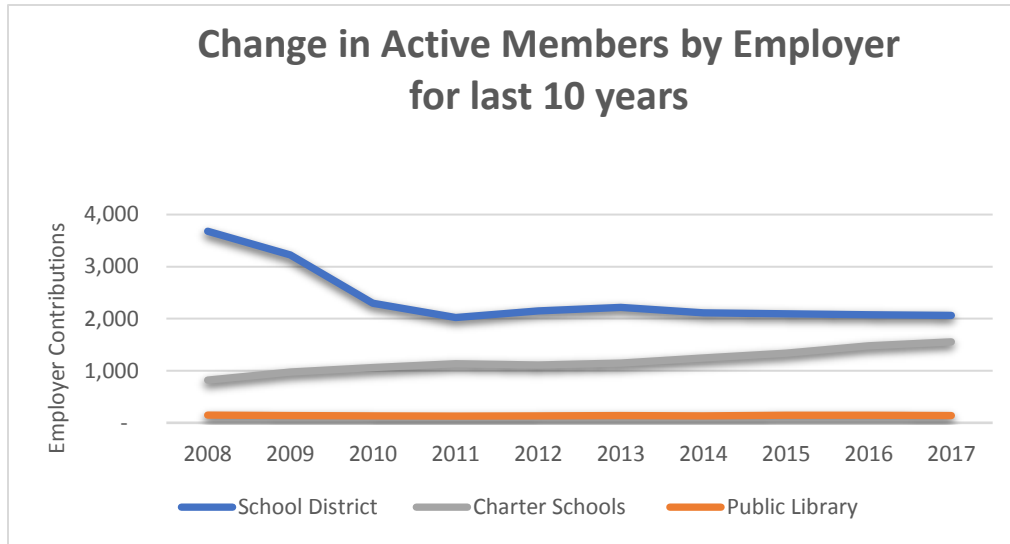
Valuation Assets vs Pension Liabilities

Valuation January 1	Dollars in Millions			Funded Ratios
	Valuation Assets	Unfunded Liabilities	Accrued Liabilities	
2009	832.61	(27.99)	804.62	103.5%
2010	814.54	5.00	819.53	99.4%
2011	786.30	57.93	844.23	93.1%
2012	742.28	132.01	874.29	84.9%
2013	697.03	171.64	868.66	80.2%
2014	710.83	164.62	875.45	81.2%
2015	712.39	179.15	891.54	79.9%
2016	694.64	200.59	895.23	77.6%
2017	684.41	297.10	981.51	69.7%
2018	678.29	302.15	980.44	69.2%

Note: Numbers may not add due to rounding.







Changes in Active Members by Employer for last 10 years										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
School District	3,680	3,222	2,296	2,022	2,152	2,215	2,112	2,095	2,076	2,065
Charter Schools	820	973	1,061	1,133	1,108	1,147	1,245	1,336	1,481	1,555
Public Library	148	141	133	129	136	139	136	143	144	140

Participating Employers
2017 Employer Contribution Total

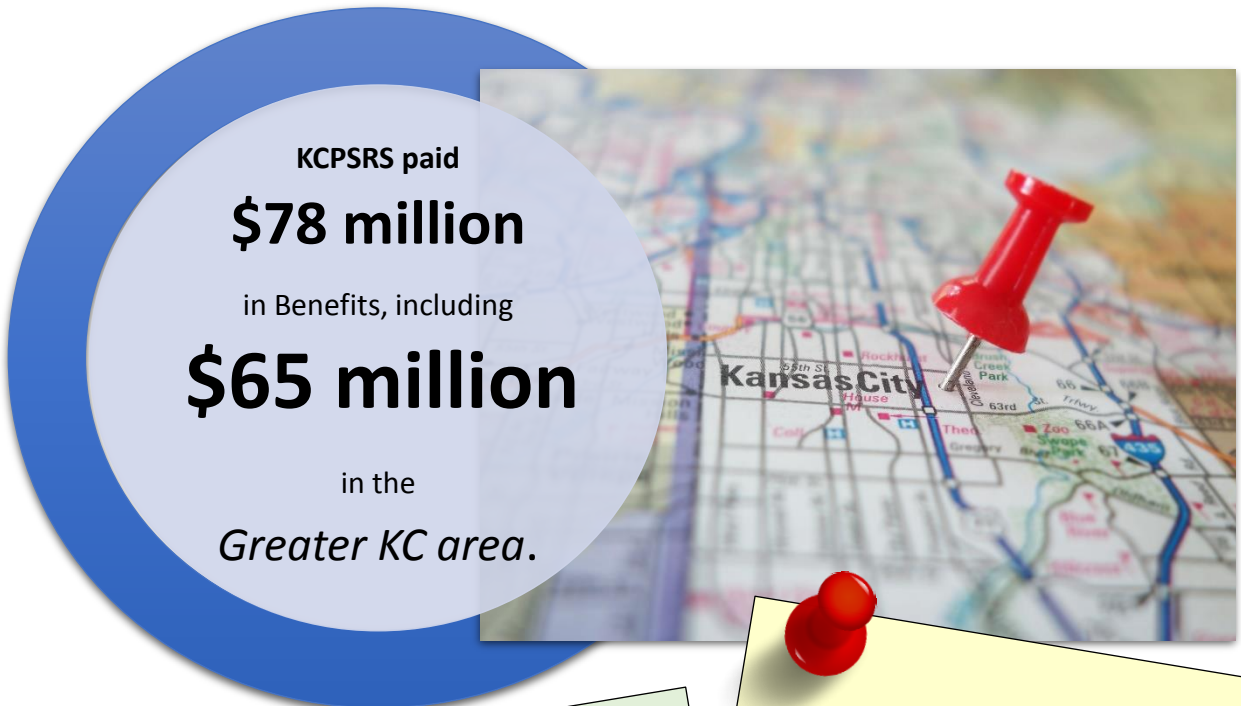
	Total Contribution	% of Total
Kansas City Public Schools	\$ 9,625,063	56.9%
Kansas City Public Library	641,867	3.8%
Charter Schools		
Frontier Schools	804,683	4.8%
University Academy	603,708	3.6%
Hogan Preparatory Academy	571,206	3.4%
Guadalupe Centers Schools	511,175	3.0%
Ewing Marion Kauffman School	455,225	2.7%
Académie Lafayette	446,548	2.6%
KC International Academy	368,732	2.2%
Crossroads Charter Schools	366,500	2.2%
Brookside Charter School	347,923	2.1%
Allen Village Charter	294,948	1.7%
KIPP Endeavor Academy	286,878	1.7%
Lee A. Tolbert Community Academy	248,976	1.5%
Benjamin Banneker Charter Academy	188,672	1.1%
Genesis Schools, Inc.	180,880	1.1%
Pathway Academy	165,370	1.0%
DeLaSalle Charter School	160,301	0.9%
Scuola Vita Nuova	144,732	0.9%
Gordon Parks Elementary	143,945	0.9%
Kansas City Neighborhood Academy	115,847	0.7%
Citizens of the World Kansas City	99,487	0.6%
Academy for Integrated Arts	86,399	0.5%
Hope Leadership Academy	67,496	0.4%
Total Charter Schools	6,659,632	39.3%
Total Contributions	\$ 16,926,562	100.0%

Retired Members by Type of Benefit						
Amount of Monthly Benefits	Total Monthly Benefits	Total Number of Recipients	Type of Benefit			
			Retired	Surviving Spouses	Surviving Children	Disability
\$1 to 500	\$ 205,225	620	561	43	2	14
501 to 1,000	\$ 627,118	845	751	59	1	34
1,001 to 1,500	\$ 801,917	648	564	56	3	25
1,501 to 2,000	\$ 917,011	523	487	29	1	6
2,001 to 2,500	\$ 1,358,260	603	584	13	1	5
2,501 to 3,000	\$ 1,349,615	495	486	9	-	-
3,001 to 3,500	\$ 726,713	225	225	-	-	-
3,501 to 4,000	\$ 286,359	77	76	1	-	-
4,001 to 4,500	\$ 222,540	53	52	1	-	-
4,501 to 5,000	\$ 70,316	15	15	-	-	-
Over 5,000	\$ 43,021	8	8	-	-	-

Average Monthly Benefit Amounts

Members Retiring During	Years of Credited Service							All Members
	<5	5-10	10-15	15-20	20-25	25-30	30+	
Fiscal Year Ending 01/01/2014								
Average monthly benefit	\$1,669	\$566	\$827	\$1,428	\$2,091	\$2,218	\$2,662	\$1,399
Number of retirees	5	32	28	19	22	22	6	134
Fiscal Year Ending 01/01/2015								
Average monthly benefit	\$343	\$563	\$879	\$1,656	\$2,120	\$2,591	\$2,985	\$1,516
Number of retirees	3	37	44	25	36	25	10	180
Fiscal Year Ending 01/01/2016								
Average monthly benefit	\$436	\$625	\$977	\$1,403	\$2,174	\$2,678	\$3,414	\$1,579
Number of retirees	9	23	39	17	21	27	9	145
Fiscal Year Ending 01/01/2017								
Average monthly benefit	\$478	\$493	\$1,019	\$1,415	\$2,036	\$2,568	\$2,740	\$1,570
Number of retirees	4	26	24	17	22	24	12	129
Fiscal Year Ending 01/01/2018								
Average monthly benefit	\$549	\$611	\$935	\$1,490	\$2,435	\$2,786	\$3,087	\$1,792
Number of retirees	11	32	31	30	33	35	24	196

KCPSRS plays an Important Role in Supporting and Sustaining the Greater Kansas City Area.



The **average**
KCPSRS Retiree
receives **\$1,607 a month**

A **KCPSRS Retiree's**
average age is
72.3 years

82%
of **KCPSRS Retirees**
reside in
Greater Kansas City,
including
Missouri and Kansas

Other **KCPSRS Retirees** reside in
41 other states
and in Washington, DC,
France, Philippines,
Egypt, Nicaragua,
Puerto Rico,
and the Virgin Islands