# **FINANCIAL STATEMENTS**

Years Ended December 31, 2017 and 2016



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## INDEPENDENT AUDITORS' 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.

#### **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 an opinion on the Retirement System's financial statements. The introductory section, titled Management Discussion and Analysis, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The introductory section has not been subjected to the auditing procedures applied in the audits of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Mayer Hoffman McCann P.C.

Kansas City, Missouri June 11, 2018

MANAGEMENT DISCUSSION AND ANALYSIS

### MANAGEMENT DISCUSSION AND ANALYSIS

Years Ended December 31, 2017, 2016, and 2015

Our discussion and analysis of the Public School Retirement System of the School District of Kansas City, Missouri's (the "Retirement System") financial performance provides an overview of the Retirement System's financial activities for the years ended December 31, 2017, 2016, and 2015.

#### Financial statements

**Statement of Fiduciary Net Position** - The statement of fiduciary net position reports the Retirement System's assets, liabilities, and the resultant net position available at the end of the year (Assets - Liabilities = Net Position). All assets and liabilities are recorded by use of the accrual basis of accounting. The assets are generally made up of cash, investments (at fair market value), and contributions receivable from participating employers and plan members. The liabilities include unpaid and/or accrued expenses as of the end of the year. Overall, this statement shows the financial position of the Retirement System at the specified year-end date.

**Statement of Changes in Fiduciary Net Position** - The statement of changes in fiduciary net position reports the transactions of the Retirement System that occurred during the year. All of the current year's revenue and expenses are taken into account when preparing this statement. This statement not only shows that Additions - Deductions = Net Changes in Fiduciary Net Position, but it also supports the change that has occurred to the prior year's net position value as shown on the statement fiduciary net position.

**Notes to the Financial Statements** - The notes to the financial statements are an integral part of the financial statements. The required supplementary information provides historical and supplementary information, which is considered useful in the evaluation of the condition of the Plan, which is administered by the Retirement System.

#### MANAGEMENT DISCUSSION AND ANALYSIS

Years Ended December 31, 2017, 2016, and 2015

#### **Comparative statements**

The following are summary comparative statements of the Retirement System. For the purpose of this report, these comparative statements have been condensed to give its users a quick overview of the Retirement System's net position and changes in them. One can think of the Retirement System's net position as a way to measure the Retirement System's financial health. Over time, increases or decreases in the Retirement System's net position are indicators of whether its financial health is improving or deteriorating.

		December 31,		Percentage Change From	Percentage Change From
	2017	2016	2015	2016 to 2017	2015 to 2016
Receivables	\$ 11,680,121		\$ 12,175,210	-3.22%	-0.87%
Investments	672,509,851	, ,	622,054,307	8.80%	-0.63%
Cash	2,259,107	, ,	2,469,527	-5.92%	-2.76%
Prepaid and other assets Property and equipment, net of	45,403	45,865	36,491	-1.01%	25.69%
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	<u> </u>	\$ 631,442,613	\$ 636,109,506	8.61%	-0.73%

## MANAGEMENT DISCUSSION AND ANALYSIS

Years Ended December 31, 2017, 2016, and 2015

#### <u>Comparative statements</u> (continued)

	Y	ears Ended Decembe	r 31,	Percentage Change From	Percentage Change From
	2017	2016	2016 2015		2015 to 2016
Contributions Net investment income (loss)	\$ 33,890,913 103,767,715		\$ 29,145,161 (10,025,518)	3.30% 134.04%	12.57% 542.25%
Total additions	137,658,628	77,146,289	19,119,643	78.44%	303.49%
Benefits paid Refunds of contributions Depreciation expense Administrative expenses	78,181,575 3,581,147 15,855 1,520,665	3,270,723 92,179	76,235,124 3,399,065 250,979 1,648,449	1.67% 9.49% -82.80% -2.02%	0.87% -3.78% -63.27% -5.85%
Total deductions	83,299,242	81,813,182	81,533,617	1.82%	0.34%
Increase (decrease) in net position	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%
End of year	\$ 685,801,999	\$ 631,442,613	\$ 636,109,506	8.61%	-0.73%

For the year ended December 31, 2017, the change in plan net position for the Retirement System increased just under 9% compared to the year ended December 31, 2016. For the year ended December 31, 2016, the change in plan net position for the Retirement System decreased by just under 1% compared to the year ended December 31, 2015.

AUDITED FINANCIAL STATEMENTS

# STATEMENTS OF FIDUCIARY NET POSITION

December 31, 2017 and 2016

	2017	2016
ASSETS		
Receivables:	ф со <b>л</b> сол	¢ 607.026
Plan member contributions	\$ 685,624 10 527 802	\$ 697,036
Employers' contributions Due from brokers for securities sold	10,537,802	10,562,880 364,670
Accrued interest and dividends	- 456,695	444,517
Accided interest and dividends	11,680,121	12,069,103
	11,000,121	12,000,100
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
	672,509,851	618,133,183
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
	2,342,893	2,501,470
TOTAL ASSETS	686,532,865	632,703,756
LIABILITIES		538,494
Due to brokers for securities purchased Accounts payable	- 599,450	530,494 590,186
Accounts payable Accrued payroll expenses	131,416	132,463
Accided payroll expenses	131,410	102,400
TOTAL LIABILITIES	730,866	1,261,143
NET POSITION RESTRICTED FOR PENSIONS	\$ 685,801,999	\$ 631,442,613

# STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended December 31, 2017 and 2016

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

See Notes to Financial Statements

#### NOTES TO FINANCIAL STATEMENTS

## (1) <u>Description of plan</u>

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: Academie 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:

	2017	2016
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	2,298	2,279
Total plan membership	10,521	10,363

**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.

#### NOTES TO FINANCIAL STATEMENTS

#### (1) <u>Description of plan</u> (continued)

#### 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.

#### NOTES TO FINANCIAL STATEMENTS

#### (1) <u>Description of plan</u> (continued)

#### **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, or the minimum disability benefit whichever is greater. The minimum disability retirement benefit shall be the lesser of:

- 1. 25% of the member's average final 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.

#### NOTES TO FINANCIAL STATEMENTS

#### (1) <u>Description of plan</u> (continued)

#### Death benefit (continued)

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 1<sup>st</sup> 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 policies 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) <u>Summary of significant accounting policies</u>

**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.

### NOTES TO FINANCIAL STATEMENTS

#### (2) <u>Summary of significant accounting policies</u> (continued)

**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 time-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.

#### NOTES TO FINANCIAL STATEMENTS

### (2) <u>Summary of significant accounting policies</u> (continued)

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 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		
Rhumbline S&P 500 Pooled Index Fund	\$	79,649,292	\$	67,259,581		
Georgetown Fund Managed by Rock Creek		*		33,491,017		
Rhumbline 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%.

#### NOTES TO FINANCIAL STATEMENTS

#### (2) <u>Summary of significant accounting policies</u> (continued)

**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 90% of holdings in issues rated BBB 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	<sup>•</sup> 31, 2017	Decembe	er 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%		
	\$ 54,913,727	100.0%	\$ 52,860,342	100.0%		

**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:

	December 31,			Investment Maturities (in years)								
		2017		Less						Greater		
Security Description		Fair Value		Than 1		1 - 5	6 - 10			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 BondsUnited States		29,579,129		-		9,884,110		10,211,371		9,483,648		
	\$	54,913,727	\$	777,374	\$	15,342,368	\$	12,915,528	\$	25,878,457		
	De	ecember 31,			In	vestment Ma	turi	ties (in years	)			
		2016		Less						Greater		
Security Description		Fair Value		Than 1		1 - 5		6 - 10		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 BondsUnited States		25,482,878		-		4,583,664		9,370,188		11,529,026		
	\$	52,860,342	\$	-	\$	8,166,542	\$	13,954,083	\$	30,739,717		

### NOTES TO FINANCIAL STATEMENTS

#### (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.

#### NOTES TO FINANCIAL STATEMENTS

## (3) Fair value measurements (continued)

	Fair Value Measurements as of December 31, 2							017
Investment Type	Quoted Prices in S Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		<ul> <li>Significant</li> <li>Unobservable</li> <li>Inputs</li> <li>(Level 3)</li> </ul>		То	tal 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 <sup>(a)</sup>								446,763,172
Investments measured at amortized cost <sup>(a)</sup>								20,365,076
Total investments measured at fair value							\$	672,509,851

	Fair Value Measurements as of December 31, 2016								
	Ouote Prices in Active Markets for Identical		Significant Other Observable Inputs		Significant Unobservable Inputs				
Investment Type	As	sets <u>(Level 1)</u>		<u>(Level 2)</u>		<u>(Level 3)</u>		tal 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 the NAV <sup>(a)</sup>								422,453,124	
Investments measured at amortized cost <sup>(a)</sup>								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.

#### NOTES TO FINANCIAL STATEMENTS

#### (3) Fair value measurements (continued)

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.

					Redemption	
	C	December 31,			Frequency	
		2017	U	nfunded	(If Currently	Redemption
	Fair Value		Com	nmitments	Eligible)	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)		21,097,360		-	Monthly	5 days
Global tactical asset allocation commingled funds (1)		42,911,304		-	Monthly	15 days
Real estate commingled fund (3)		22,889,287		-	Quarterly	45 - 60 Days
Real estate (3)		32,996,418		1,767,144	Not Eligible	N/A

Investments measured at the NAV \$ 467,128,248

	December 31, 2016 Fair Value		-	nfunded nmitments	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 commingled funds (1)		36,967,974		-	Monthly	15 days		
Real estate commingled 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, which 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.

## NOTES TO FINANCIAL STATEMENTS

#### (3) Fair value measurements (continued)

- (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) <u>Property and equipment</u>

	Decem	nber 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	\$ 38,383	\$	54,238		

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

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

#### (5) <u>Funding policy</u>

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.

## NOTES TO FINANCIAL STATEMENTS

# (6) <u>Net pension liability</u>

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

	2017			2016
Total pension liability Less: plan fiduciary net position Net pension liability	\$ \$	989,536,742 685,801,999 303,734,743	\$ \$	900,947,927 631,442,613 269,505,314
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	 unded Actuarial crued 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%

#### NOTES TO FINANCIAL STATEMENTS

#### (6) <u>Net pension liability</u> (continued)

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

Valuation Date Actuarial Cost Method Amortization Method	January 1, 2017 and 2016 Entry Age Normal Level Percent of Pay, Closed Period (2017); Level Dollar, Open Period (2016)
Remaining Amortization Period	30 years
Asset Valuation Method Actuarial Assumptions:	5-year Smoothed Market Value
Investment Rate of Return	7.75% (2017) and 8.00% (2016), including inflation
Projected Salary Increases Inflation	5.00%, including inflation 2.75% (2017) and 3.00% (2016)
Mortality:	2017 - Pre-retirement mortality rates were based on RP-2014 Healthy 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 ended December 31, 2015 (dated October 3, 2016).

### NOTES TO FINANCIAL STATEMENTS

## (6) <u>Net pension liability</u> (continued)

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:

	10-Year Long-term Expected Real Rate
Asset Class	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.

	1	% Decrease	Curr	ent Assumption	1% Increase			
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		

## NOTES TO FINANCIAL STATEMENTS

#### (7) <u>Operating lease</u>

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:

2018	¢	66 700
	\$	66,702
2019		68,255
2020		70,009
2021		71,823
2022		72,125
Thereafter		219,699
Total	\$	568,613

## (8) <u>Tax status</u>

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

## (9) <u>Risks and uncertainties</u>

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) <u>Subsequent events</u>

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.

### NOTES TO FINANCIAL STATEMENTS

#### (10) <u>Subsequent events</u> (continued)

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 on 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.

**REQUIRED SUPPLEMENTARY INFORMATION** 

## **REQUIRED SUPPLEMENTARY INFORMATION**

#### SCHEDULES OF CHANGES IN NET PENSION LIABILITY (\$ IN THOUSANDS)

	2017		2016		2015	2014	
Total Pension Liability							
Service cost Interest Benefit term changes Differences between expected and actual experience Assumption Changes Benefit payments, including member refunds	\$	18,683 68,868 - 4,918 77,882 (81,763)	\$ 17,413 68,599 (64) (2,897) 1,268 (80,169)	\$	16,690 67,219 - 12,010 1,224 (79,634)	\$	15,418 66,956 - - - (78,536)
Net change in total pension liability		88,588	 4,150		17,509		3,838
Total pension liability - beginning		900,948	896,798		879,289		875,451
Total pension liability - ending	\$	989,536	\$ 900,948	\$	896,798	\$	879,289
Plan Fiduciary Net Position							
Contributions: Employer Employee Net investment income (loss) Benefit payments, including member refunds Administrative expenses Other Net change in plan fiduciary net position Plan fiduciary net position - beginning	\$	16,927 16,964 103,768 (81,763) (1,521) (16) 54,359 631,443	\$ 16,280 16,528 44,338 (80,169) (1,552) (92) (4,667) 636,110	\$	14,499 14,646 (10,025) (79,634) (1,648) (251) (62,413) 698,523	\$	13,288 13,358 25,937 (78,536) (1,548) (529) (28,030) 726,553
		i	 <u> </u>				
Plan fiduciary net position - ending Net pension liability - ending	\$	685,802 303,734	\$ 631,443 269,505	\$	636,110 260,688	\$	698,523 180,766
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.

### **REQUIRED SUPPLEMENTARY INFORMATION**

## SCHEDULES OF NET PENSION LIABILITY (\$ IN THOUSANDS)

Year Ended	Total Pension Liability (TPL) (a)		Plan Fiduciary Net Position (b)		Net Pension bility (NPL) (a-b)	Plan Fiduciary Net Position as a % of TPL (b/a)	Ε	Covered mployee Payroll (c)	Employers' NPL as a % of Covered Payroll ((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	\$ 180,766	79.44%	\$	166,102	108.83%		

#### **REQUIRED SUPPLEMENTARY INFORMATION**

# 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	 16,280	 14,492	 13,288		12,094	 11,370	 11,973	 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.

## **REQUIRED SUPPLEMENTARY INFORMATION**

#### SCHEDULES OF INVESTMENT RETURNS

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Annual time-weighted rate of return, net of investment expense	16.93%	8.07%	-1.45%	3.64%	12.43%	12.93%	0.64%	13.35%	15.93%	-23.70%

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#### 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 1, 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 differences 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 members 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%