

**POLICE RETIREMENT SYSTEM
OF KANSAS CITY, MISSOURI**

A COMPONENT UNIT OF THE CITY OF
KANSAS CITY, MISSOURI

FINANCIAL STATEMENTS
WITH SUPPLEMENTARY INFORMATION

YEAR ENDED APRIL 30, 2018

AND

INDEPENDENT AUDITOR'S REPORT



Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Year Ended April 30, 2018

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INDEPENDENT AUDITOR'S REPORT

Retirement Board
Police Retirement System of Kansas City, Missouri
Kansas City, Missouri

Report on the Financial Statements

We have audited the accompanying financial statements of the Police Retirement System of Kansas City, Missouri (Plan), a component unit of the City of Kansas City, Missouri (City) which comprised the statement of fiduciary net position as of April 30, 2018, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with 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.

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Police Retirement System of Kansas City, Missouri as of April 30, 2018, and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Prior Years Comparative Information

The financial statements as of and for the year ended 2016 and prior were audited by other auditors whose previous reports expressed an unmodified opinion on those statements.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and pension information listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's financial statements. The supplementary information listed in the table of contents are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, such information is fairly stated, in all material respects, in relation to the financial statements as a whole.

Allen, Gibbs & Houlik, L.C.
CERTIFIED PUBLIC ACCOUNTANTS

September 21, 2018
Wichita, Kansas

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Management's Discussion and Analysis

April 30, 2018

This discussion and analysis of the Police Retirement System of Kansas City, Missouri (Police Retirement System or Plan) financial statements provides an overview of its financial activities during the year ended April 30, 2018. Please read it in conjunction with the more detailed financial statements, notes and required supplementary information which follow this section.

The Police Retirement System is the defined benefit retirement plan for law enforcement members of the Kansas City, Missouri Police Department. The Plan was established by the Missouri General Assembly in 1946 and is administered by the Retirement Board 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 Statement of Fiduciary Net Position as of April 30, 2018, and the Statement of Changes in Fiduciary Net Position for the year ended April 30, 2018. 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 are intended to provide financial statement users with a description of the Plan, a summary of significant accounting policies, the method used to value investments and a summary of Plan investments, and the methods and assumptions used to develop the actuarial valuation.
- Required Supplementary Information consists of schedules and related notes concerning significant actuarial information and assumptions. Beginning on page 26 through page 31, these schedules and notes emphasize the long-term nature of the pension plan and show the progress of the Plan in accumulating sufficient assets to pay future benefits.
- The Schedule of Changes in Net Pension Liability and Related Ratios presents detailed information about the pension liabilities for which the Plan's assets are held and managed. The schedule is intended to assist financial statement users in understanding the magnitude of the pension liability and the degree to which net position restricted for pensions is sufficient to cover the liability for the Plan.
- The Schedule of City Contributions shows the amount of actuarially determined required contributions relative to the actual contributions made during the year. This schedule also presents covered payroll and contributions as a percentage of covered payroll to provide an economic context for the amount of contributions reported for the Plan.
- The Schedule of Investment Returns shows the money-weighted rate of return on investments, net of investment expense. The money-weighted rate of return is a method for calculating investment performance on Plan investments that adjusts for the changing amounts actually invested.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Management's Discussion and Analysis

April 30, 2018

- The Supplementary Information includes the Schedule of Expenses and the Schedule of Additions by Source and Deductions by Type. The Schedule of Expenses includes the detail of the administrative and investment costs to operate the Plan. The Schedule of Additions by Source and Deductions by Type is a historical summary which shows how contributions and investments impact the additions to the Plan and how benefit payments and administrative expenses impact the deductions from the Plan.

Fiduciary Net Position

The following is a summary comparative statement of Fiduciary Net Position:

	April 30, 2018	April 30, 2017	Amount Change
Cash	\$ 362,994	\$ 32,585	\$ 330,409
Receivables	2,662,495	3,653,121	(990,626)
Investments	878,724,838	826,033,290	52,691,548
Securities lending collateral	52,284,894	41,396,928	10,887,966
Other assets	2,019	1,176	843
Total Assets	934,037,240	871,117,100	62,920,140
Accounts and refunds payable	1,386,409	691,389	695,020
Due to broker for purchases of investments	744,143	413,881	330,262
Pending foreign exchange sales	124,926	1,267,861	(1,142,935)
Securities lending collateral	52,284,894	41,396,928	10,887,966
Total Liabilities	54,540,372	43,770,059	10,770,313
Net Position Restricted for Pensions	\$ 879,496,868	\$ 827,347,041	\$ 52,149,827

Financial Analysis of Fiduciary Net Position

The Statement of Fiduciary Net Position presents information on the Plan's assets and liabilities with the difference between the two reported as Net Position Restricted for Pensions. This statement reflects, at fair value, the contributions and investments which are available to pay benefits.

The Police Retirement System's benefits are funded through member and City of Kansas City, Missouri contributions, and investment income. Net position of the Plan increased to \$879,496,868 as of April 30, 2018 from \$827,347,041 as of April 30, 2017. Plan income is generated through the investment of contributions in stocks, bonds and alternative assets.

Assets – Total assets of the Police Retirement System were \$934.0 million as of April 30, 2018 and included cash, receivables, investments and securities lending collateral. Total assets increased by \$62.9 million or 7.2% from FY 2017. Investable assets increased during the year by \$52.7 million while securities lending collateral increased by \$10.9 million. The increase in investable assets is due to positive investment performance in the stock, bond, and alternative asset portfolios. The Plan's global stock portfolio returned 15.6% for the fiscal year and had the greatest impact on the increase in investable assets. The increase in securities lending collateral was due to additional volatility in the markets which increased the demand for securities lending.

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Management's Discussion and Analysis

April 30, 2017

Liabilities – Total liabilities of the Police Retirement System were \$54.5 million as of April 30, 2018 and included payables for money manager fees and refunds, amounts due to brokers for purchases of investments, and securities lending collateral. Total liabilities increased by \$10.7 million during the year mainly due to the \$10.9 million increase in the offsetting liability for securities lending activity.

Net Position – Police Retirement System assets exceeded liabilities at April 30, 2018 by \$879.5 million. This increase of \$52.1 million or 6.3% from the prior year is primarily due to the growth in total assets as a result of positive market performance.

Changes in Fiduciary Net Position

The following is a summary comparative statement of Changes in Fiduciary Net Position:

	<u>April 30, 2018</u>	<u>April 30, 2017</u>	<u>Amount Change</u>
Member Contributions	\$ 11,390,571	\$ 11,751,066	\$ (360,495)
City Contributions	32,103,207	30,979,978	1,123,229
Total Net Investment Income	74,102,652	72,631,413	1,471,239
Total Additions	<u>117,596,430</u>	<u>115,362,457</u>	<u>2,233,973</u>
Benefits Paid to Members	63,777,210	59,554,625	4,222,585
Refunds of Contributions	954,437	609,139	345,298
Administrative Expenses	714,956	642,688	72,268
Total Deductions	<u>65,446,603</u>	<u>60,806,452</u>	<u>4,640,151</u>
Net Increase/(Decrease) in net position	<u>52,149,827</u>	<u>54,556,005</u>	<u>(2,406,178)</u>
Net Position Restricted for Pensions, Beginning of Year	<u>827,347,041</u>	<u>772,791,036</u>	<u>54,556,005</u>
Net Position Restricted for Pensions, End of Year	<u>\$ 879,496,868</u>	<u>\$ 827,347,041</u>	<u>\$ 52,149,827</u>

Financial Analysis of Changes in Fiduciary Net Position

The Statement of Changes in Fiduciary Net Position presents information showing how the Plan's Net Position Restricted for Pensions changed during the year ended April 30, 2018. This statement reflects contributions made by members and the City of Kansas City, Missouri. Investment activities during the fiscal year are also presented which include interest and dividends and the net appreciation or depreciation in fair value of the investments. Benefits paid to members, refunds of contributions and administrative expenses are also reported in the statement.

Revenues – Additions to Fiduciary Net Position – Member contributions, City contributions and investment income are the sources of revenue for the Police Retirement System. Members contributed 11.55% of covered payroll to the Plan while City contributions totaled \$32.1 million or 29.08% of projected covered payroll. Member contributions decreased during the year due to a decrease in members electing to purchase creditable service in the Plan. City contributions increased to pay the required contributions as determined by the Plan's actuary. The City also paid \$200 per month for each member eligible to receive the supplemental benefit which totaled \$3.1 million. Net investment income increased due to positive investment market performance. The portfolio's investment rate of return, net of investment expenses, was 9.06% with net investment income of \$74.1 million. Investment expenses, including custodial bank fees, manager fees, and investment consultation totaled \$5.5 million. Investments in global stocks, bonds, real estate, absolute return, and private equity all posted gains for the year.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Management's Discussion and Analysis

April 30, 2018

Expenses – Deductions from Fiduciary Net Position – Benefits paid to members, refunds of member contributions and administrative expenses are the sources of expenses for the Police Retirement System. Benefit payments and refunds represent 98.9% of the total deductions. Benefits paid to members increased over the prior year because of new retirements and a cost of living adjustment for retirees. The amount of refunds to members leaving the Police Department increased over the prior year. Administrative expenses increased due to additional staff expenses and actuarial fees.

City contributions continued to equal the amount recommended by the Plan's actuary. For the fiscal year beginning May 1, 2018, City contributions are budgeted to total the actuarial required contribution amount of \$29.1 million. The contribution amount is calculated at 30.01% of projected covered payroll.

The Retirement Board has approved an asset allocation which over time is expected to realize a long-term investment rate of return of 7.5%. The Retirement Board continues to review investment allocations on a monthly basis and to rebalance the portfolio, as needed, with guidance from an independent financial consulting firm.

Requests for Information

This financial report is designed to provide members of the Police Retirement System, citizens, investors and creditors of the City of Kansas City, Missouri with a general overview of the Plan's finances and to demonstrate its accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Kansas City Police Employees' Retirement System, 9701 Marion Park Drive B, Kansas City, Missouri 64137.

There are no other currently known facts, conditions or decisions that are expected to have a significant effect on the financial position or results of operations of the Police Retirement System.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Statement of Fiduciary Net Position

April 30, 2018

Assets

Investments

U.S. government securities	\$ 47,835,207
Corporate bonds and notes	81,377,562
Common and preferred stock	82,870,846
All country world index fund	133,627,879
Government mortgage-backed securities	6,132,050
Partnerships - equity	15,945,992
Partnerships - fixed income	118,429,599
Real estate funds	119,561,923
Short-term investment funds	11,370,145
Hedge fund of funds	92,351,215
Equity funds	53,817,757
International small cap equity funds	14,109,790
Emerging market equity funds	29,345,525
Foreign equities	71,949,348
Total investments	<u>878,724,838</u>

Securities Lending Collateral	<u>52,284,894</u>
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Receivables

City contributions	264,000
Accrued interest and dividends	2,122,481
Due from broker for sales of investments	151,277
Pending foreign exchange purchases	124,737
Total receivables	<u>2,662,495</u>

Other assets	<u>2,019</u>
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Cash	<u>362,994</u>
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Total assets	<u>934,037,240</u>
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Liabilities

Accounts and refunds payable	1,386,409
Due to broker for purchases of investments	744,143
Pending foreign exchange sales	124,926
Securities lending collateral	52,284,894
Total liabilities	<u>54,540,372</u>

Net Position Restricted for Pensions	<u>\$ 879,496,868</u>
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See Notes to Financial Statements.

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri Statement of Changes in Fiduciary Net Position

Year Ended April 30, 2018

Additions

Investment Income

Net appreciation in fair value of investments	\$ 60,272,338
Interest and dividends	19,222,745
Investment expense	<u>(5,509,157)</u>
Net investment income	<u>73,985,926</u>

Securities Lending Income

Securities lending gross income	<u>693,571</u>
Securities lending expenses	
Borrower rebates	(526,854)
Management fees	<u>(49,991)</u>
Total securities lending expenses	<u>(576,845)</u>

Net securities lending income 116,726

Total net investment income 74,102,652

Contributions

City	32,103,207
Members	<u>11,390,571</u>
Total contributions	<u>43,493,778</u>

Total additions 117,596,430

Deductions

Benefits Paid

Retired members	44,709,760
Spouses	7,832,883
Children	145,203
Disabled	8,870,241
Partial lump sum option	2,186,123
Death benefits	<u>33,000</u>
Total benefits paid	<u>63,777,210</u>

Other Deductions

Refunds of contributions	954,437
Administrative expenses	<u>714,956</u>
Total other deductions	<u>1,669,393</u>

Total deductions 65,446,603

Net Increase in Net Position 52,149,827

Net Position Restricted for Pensions, Beginning of Year 827,347,041

Net Position Restricted for Pensions, End of Year \$ 879,496,868

See Notes to Financial Statements.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Notes to the Financial Statements

April 30, 2018

Note 1: Summary of Significant Accounting Policies

Reporting Entity

The Police Retirement System of Kansas City, Missouri (Plan) is considered a component unit of the City of Kansas City, Missouri (City) financial reporting entity and included in the City's financial reports as a pension trust fund due to the nature of the Plan's reliance on funding from the City of Kansas City, Missouri. Accounting principles generally accepted in the United States of America require that the financial reporting entity include the primary government, organizations for which the primary government is financially accountable and other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete. Based on these criteria, there are no other organizations or agencies whose financial statements should be combined and presented with these financial statements.

Measurement Focus and Basis of Accounting

The Plan uses a fund to report on its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. The Plan's fund is classified as a pension trust fund of fiduciary fund type. Pension trust funds account for assets held by the Plan in a trustee capacity or as an agent on behalf of others and are accounted for on the flow of economic resources measurement focus and the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. City contributions to the Plan are recognized when due and the City has made a formal commitment to provide the contributions. Interest and dividend income are recorded when earned. Expenses are recorded when the corresponding liabilities are incurred. Realized gains and losses on security transactions are based on the difference between sales proceeds and carrying value of the securities, and are recognized on the transaction date. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Valuation of Investments and Income Recognition

Marketable securities, including mutual funds, are stated at fair value. Securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the Plan year; investments traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the average of the last reported bid and ask prices.

For certain investments consisting of corporate bonds and notes, U.S. Treasury obligations, U.S. agency obligations and government mortgage-backed securities that do not have an established fair value, the Plan has established a fair value based on yields currently available on comparable securities of issuers with similar credit ratings and quotations are obtained from brokerage firms or national pricing services.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Notes to the Financial Statements

April 30, 2018

The private equity partnerships, equity funds, hedge fund of funds and real estate funds consist primarily of non-marketable investments in various venture capital, corporate finance funds and private partnerships (collectively referred to as "Portfolio Funds"). These funds are primarily invested in the technology, communications, energy, real estate markets, as well as U.S. fixed income instruments and alternative or non-traditional investments. A portion of these funds is also invested in foreign operations under certain partnership agreements. These investments are recorded at fair value based on financial data, which is generally at an amount equal to the net asset value per share on the Fund's proportionate interest in the net position or net equity of the Portfolio Funds as determined by each Portfolio Fund's general partner or investment manager.

The Plan is obligated to pay certain capital commitments to the partnerships. These unrecorded outstanding commitments totaled \$1,071,424 at April 30, 2018.

Securities, which are not traded on a national security exchange, are valued by the respective investment manager or other third parties based on similar sales.

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

Administrative Expenses

Actuarial, investment management and bank trustee fees and expenses are included in the Plan's expenses when incurred. These expenses are financed through investment income. The Kansas City, Missouri Police Department provides office space without any direct cost to the Plan.

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 the reported amounts of assets and liabilities and changes therein and, disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Plan Tax Status

The Plan obtained its most recent determination letter on December 17, 2014, in which the Internal Revenue Service stated that the Plan, as designed, was in compliance with the applicable requirements of the Internal Revenue Code and, therefore, not subject to tax. The Plan's management believes that the Plan is designed and is being operated in compliance with the applicable requirements of the IRC exempting it from federal income taxes.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Notes to the Financial Statements

April 30, 2018

Note 2: Plan Description

The following summary description of the Police Retirement System of Kansas City, Missouri provides only general information. Participants should refer to the Plan Statutes (Sections 86.900 to 86.1280 RSMo) for a more complete description of the Plan’s provisions.

The Plan is a single-employer, contributory, defined benefit plan established by the State of Missouri’s General Assembly and administered by the Retirement Board of the Police Retirement System of Kansas City, Missouri (“Board”). The Board is composed of nine members, two are appointed by the Board of Police Commissioners, two are appointed by the City Council and five are elected by the membership of the Retirement System. The elected members must include one member of the Civilian Employees’ Retirement System, one member retired from active service in the Police Retirement System and one active member of the Police Retirement System who has not attained the rank of Sergeant or higher. Elections are held annually and Board members are elected to serve for three-year terms.

Eligibility – All police officers who serve as law enforcement officers for compensation become members as a condition of employment.

Tier I member – A person who became a member prior to August 28, 2013 and remained a member on August 28, 2013.

Tier II member – A person who became a member on or after August 28, 2013.

At April 30, 2018, the Plan’s membership consisted of the following:

	Tier I Members	Tier II Members	Total
Retirees and beneficiaries currently receiving benefits	1,330	2	1,332
Terminated members entitled to but not yet receiving benefits	28	-	28
Active members			
Vested	658	-	658
Non-vested	438	193	631
Total	2,454	195	2,649

Contributions – State statutes set out the funding requirements for the Plan which can only be amended by the Missouri General Assembly. The Retirement Board establishes a rate based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by Plan members during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the employer actuarially determined contribution rate. For the year ended April 30, 2018, active members contributed at a rate of 11.55% of base pay, and the City contributed at a rate of 29.08% of annual projected covered payroll. In addition, the City was obligated to make contributions of \$200 per month of supplemental benefit for eligible members.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Notes to the Financial Statements

April 30, 2018

Benefits Provided – Benefit terms for the Plan are established in Missouri Revised Statutes 86.900 to 86.1280 and can only be amended by the Missouri General Assembly. The Plan provides retirement benefits, as well as pre-retirement death benefits, duty and non-duty related disability benefits and termination benefits to sworn law enforcement employees of the Kansas City, Missouri Police Department.

Service Retirement

Eligibility –

Tier I member – 25 years of service, without regard to age, or at age 60 with at least 10 years of service.

Tier II member – 27 years of service, without regard to age, or at age 60 with at least 15 years of service.

All members must retire at the completion of 35 years of service, or at age 65, whichever occurs first.

Amount of Pension – For a member retiring prior to August 28, 2000, benefit equal to 2% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 60% of Final Compensation.

For a member retiring on or after August 28, 2000 and before August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 75% of Final Compensation.

For a member retiring on or after August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 80% of Final Compensation.

Final Compensation –

Tier I member – Average annual compensation during the two years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than two years.

Tier II member – Average annual compensation during the three years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than three years.

Deferred Retirement (Vested Termination)

Eligibility – 15 years of creditable service.

Tier I member – Benefit begins at age 55.

Tier II member – Benefit begins at age 60.

Police Retirement System of Kansas City, Missouri
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Notes to the Financial Statements

April 30, 2018

Amount of Pension – Computed as service retirement but based on service, Final Compensation and benefit formula in effect at termination of employment. Benefits are unreduced.

Disability

Duty Disability Eligibility – A member in active service who has become permanently unable to perform the full and unrestricted duties of a police officer, as determined by the Board of Police Commissioners, as the exclusive result of an accident or disease occurring in the line of duty.

Amount of Pension – For a member retiring on or after August 28, 2001 and before August 28, 2013, benefit equal to 75% of Final Compensation payable for life or as long as the permanent disability continues.

For a member retiring on or after August 28, 2013, benefit equal to 80% of Final Compensation payable for life or as long as the permanent disability continues.

Non-Duty Disability Eligibility – A member in active service, with a minimum of 10 years of service, who has become permanently unable to perform the full and unrestricted duties of a police officer as determined by the Board of Police Commissioners. Disability is not exclusively caused by the actual performance of official duties.

Amount of Pension – 2.5% of Final Compensation multiplied by years of creditable service payable for life or as long as the permanent disability continues.

Disability benefits may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law. A disability retiree who is not age 60 may be required by the Retirement Board to undergo continuing eligibility reviews once every three years which may include a medical re-examination.

Death in Service – Duty or Non-Duty

Eligibility – Benefit payable to a surviving spouse, if any, upon the death of an active member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18. No service requirement.

Amount of Pension – 40% of Final Compensation payable to surviving spouse for life.

Child Benefit – \$600 annually for each child under the age of 18, if any, until the child reaches age 18 or age 21, if a full time student. A child who is mentally or physically incapacitated from wage earning at the time of a member's death shall qualify, without regard to age, for life or so long as the incapacity existing at time of member's death continues.

Funeral Benefit – \$1,000 payable upon the death of an active member.

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Notes to the Financial Statements

April 30, 2018

Line of Duty Death

Eligibility – Benefit payable to a surviving spouse. If no surviving spouse, benefit payable to children under age 21 or children over age 21 if mentally or physically incapacitated from wage earning, in equal shares. Death resulting from performance of official duties; no service requirement.

Amount of Benefit – In addition to benefits payable under Death in Service shown above, a lump sum of \$50,000.

Death After Retirement

Eligibility – Benefit payable to an eligible surviving spouse, if any, upon the death of a retired member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18.

Amount of Pension –

Tier I member – Benefit equal to 80% of the straight life pension the deceased member was receiving at time of death.

Tier II member – Benefit equal to 50% of the straight life pension the deceased member was receiving at time of death. In lieu of the 50% surviving spouse benefit, a Tier II member may elect, at the time of retirement, a reduced actuarially equivalent annuity of either a 75% or 100% surviving spouse benefit.

Funeral Benefit – \$1,000 payable upon the death of a retired member.

Non-Vested Termination

Eligibility – Termination of employment and no pension is or will become payable.

Amount of Benefit – Refund of member's contributions without interest.

Minimum Pension Benefit

Eligibility – Any retired member who is entitled to a pension benefit and who either has at least 25 years of creditable service or is retired as a result of an injury or illness. A surviving spouse qualifies for the minimum monthly benefit if the member had at least 25 years of creditable service, died in service or was retired as a result of an injury or illness.

Amount of Benefit – Minimum monthly benefit of not less than \$600 in combined pension benefit and cost-of-living adjustments. The minimum monthly pension benefit is in addition to the Supplemental Retirement Benefit.

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Post-Retirement Benefit Increases

Eligibility –

Tier I members and surviving spouses – Member’s pension must have commenced by December 31 of prior calendar year.

Tier II members and surviving spouses – Service retirements generally eligible in the year following the year in which member would have attained thirty-two years of service. Duty Disability retirements eligible in year following retirement. Non-duty Disability retirements eligible earlier of year following fifth year after retirement or year following the year in which they would have attained thirty-two years of service. Surviving spouses of retired members eligible at same time member would have been if living.

Amount of Benefit – May receive an annual cost-of-living adjustment (COLA) in an amount not to exceed 3% of their respective base pension. Base pension is the pension computed under the provisions of the law at the date of retirement, without regard to COLAs. The COLA is normally effective with the May 31st benefit payment.

Statutes require that the Retirement Board must act upon the advice of a qualified actuary when granting cost of living adjustments.

Supplemental Retirement Benefit

Tier I member – Current and future retired and disabled members and their surviving spouses are eligible to receive \$420 per month in addition to pension benefits.

Tier II member – Current and future retired and disabled members and their surviving spouses are eligible to receive \$200 per month in addition to pension benefits.

Optional Form of Benefit Payment

Tier I member – Member retiring with at least 26 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Tier II member – Member retiring with at least 28 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Members electing PLOP will receive an actuarially reduced monthly benefit for their lifetime.

Social Security and Medicare

Tier I member – Members do not participate in Social Security although members hired after 1986 do contribute to Medicare.

Tier II member – Members do not participate in Social Security but do contribute to Medicare.

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Note 3: Deposits, Investments and Investment Income

Deposits

Custodial credit risk is the risk that, in the event of a bank failure, a government's deposits may not be returned to it. The Plan's deposit policy for custodial credit risk requires compliance with the provisions of state law.

State law requires collateralization of all deposits with federal depository insurance; bonds and other obligations of the U.S. Treasury, U.S. agencies or instrumentalities of the State of Missouri; bonds of any city, county, school district or special road district of the State of Missouri; bonds of any state; or a surety bond having an aggregate value at least equal to the amount of the deposits.

The Plan had no bank balances exposed to custodial credit risk at April 30, 2018.

Investments

For the year ended April 30, 2018, The Northern Trust Company (Northern Trust) was the master custodian for substantially all of the securities of the Plan. The investments held by the Plan are managed by 14 Board-appointed money managers. Each of the money managers has a different asset allocation based on Board-approved policy. The Plan may legally invest in direct obligations of and other obligations guaranteed as to principal by the U.S. Treasury and U.S. agencies and instrumentalities, real estate, partnerships, corporate bonds, commodities and equity securities.

The asset type and classes, target asset allocation and ranges to be used in the Plan are shown below. All percentages are based on fair values. The Board has authorized Plan staff, with guidance from the Investment Consultant, to rebalance the portfolio in accordance with the strategy guidelines below:

<u>Asset Type and Class</u>	<u>Range</u>	<u>Target</u>
Equities		
Global Equity	32% - 42%	37%
Private Equity	0% - 3%	2%
Fixed Income	25% - 35%	30%
Alternatives		
Real Estate	5% - 15%	11%
Absolute Return	10% - 20%	15%
Direct Lending	0% - 10%	5%
Cash	0% - 5%	0%

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Securities Lending Transactions

State statutes and the Plan's Board policies permit the Plan to use investments of the Plan to enter into securities lending transactions – loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future.

The Plan has contracted with Northern Trust as its third-party lending agent to lend domestic equity and debt securities for cash collateral of not less than 102% of the fair value and international debt and equity securities of not less than 105% of the fair value. Contracts with the lending agent require it to indemnify the Plan if borrowers fail to return the securities, if the collateral is inadequate to replace the securities lent or if the borrowers fail to pay the Plan for income distributions by the securities' issuers while the securities are on loan; therefore, non-cash collateral is not recorded as an asset or liability on the financial statements.

Fair value of securities loaned	<u>\$ 51,077,151</u>
Fair value of cash collateral received from borrowers	<u>\$ 52,284,894</u>
Total fair value of collateral	<u>\$ 52,284,894</u>

All securities lent can be terminated on demand by either the Plan or the borrower. The cash collateral received on each security loan was invested, in accordance with the Plan investment guidelines, in short-term funds. The maturities of the resulting investments generally match the maturities of the securities lending arrangements themselves. The Plan is not permitted to pledge or sell collateral received unless the borrower defaults.

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At April 30, 2018, the Plan had the following investments and maturities:

Type	Fair Value	Maturities in Years				Loans Under Securities Lending Agreements
		Less than 1	1-5	6-10	More than 10	
U.S. agencies obligations	\$ 10,426,861	\$ -	\$ 5,303,840	\$ 2,339,625	\$ 2,783,396	\$ 22,876,794
U.S. Treasury obligations	37,408,346	8,197,891	2,442,188	7,033,572	19,734,695	-
Corporate bonds and notes	81,377,562	9,476,342	43,270,526	17,726,866	10,903,828	13,273,695
Government mortgage-backed securities	6,132,050	-	103,053	-	6,028,997	-
Short term investment funds	11,370,145	11,370,145	-	-	-	-
		<u>\$ 29,044,378</u>	<u>\$ 51,119,607</u>	<u>\$ 27,100,063</u>	<u>\$ 39,450,916</u>	
Common and preferred stock	82,870,846					12,559,022
All country world index fund	133,627,879					-
Real estate funds	119,561,923					-
Hedge fund of funds	92,351,215					-
Partnerships - equity	15,945,992					-
Partnerships - fixed income	118,429,599					-
Foreign equities	71,949,348					2,367,640
Equity funds	53,817,757					-
International small cap equity funds	14,109,790					-
Emerging market equity funds	29,345,525					-
	<u>\$ 878,724,838</u>					<u>\$ 51,077,151</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 short term investment funds are presented as an investment with a maturity of less than one year because they are redeemable in full immediately. The debt securities are presented in their respective category based on final maturity date. The Plan’s investment policy does not specifically address exposure to fair value losses arising from rising interest rates.

Credit Risk – Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. It is the Plan’s policy to invest in corporate bonds that are rated BBB or better by credit rating agencies. Core fixed income managers may hold bonds with a rating equal to or above BB. At April 30, 2018, the Plan’s investments in corporate bonds were rated BBB or better by *Standard & Poor’s*. U.S. Treasury obligations were explicitly guaranteed by the U.S. Government. At the same date, the Plan’s investments in U.S. agencies obligations not directly guaranteed by the U.S. Government (including Federal National Mortgage Association, Federal Home Loan Banks and Federal Home Loan Mortgage Corporation) and in government mortgage- backed securities were rated AA+ or better by *Standard & Poor’s*. The Plan’s investments in short term investment funds were not rated by *Standard & Poor’s*.

The following table summarizes the Plan’s fixed income portfolio exposure level and credit qualities at April 30, 2018:

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<u>Fixed Income Security Type</u>	<u>Fair Value April 30, 2018</u>	<u>S&P Weighted Average Credit Quality</u>
U.S. agencies obligations	\$ 10,426,861	AA+
Corporate bonds and notes	81,377,562	A
Government mortgage-backed securities	6,132,050	AA+
Short term investment funds	11,370,145	Not rated

Custodial Credit Risk – For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Consistent with the Plan’s securities lending policy, \$51,077,151 was held by the counterparty that was acting as the Plan’s agent in securities lending transactions.

Investment Concentrations – The following presents investments that represent 5% or more of the Plan’s net position as of April 30, 2018:

<u>Investment</u>	<u>Fair Value</u>
FCI Core Fixed Income	\$ 135,344,819
Northern Trust Collective All Country World Investable Market Index Fund - Non Lending	133,627,879
Grosvenor FOB Fund, L.P.	92,351,215
PIMCO - Fixed Income Fund	88,429,599
LSV Global Value	77,552,686
Artisan Global Opportunities Trust Fund	77,267,508
Prudential PRISA II	65,687,830
Morgan Stanley - Prime Property Fund, LLC	53,874,094

Foreign Currency Risk – This risk relates to adverse effects on the fair value of an investment from changes in exchange rates. The Plan’s investment policy permits investments in international equities, American Depository Receipts (ADRs), warrants, rights, 144A securities, convertible bonds and U.S. registered securities whose principal markets are outside of the United States. All foreign equities and emerging market equities held are denominated in U.S. dollars.

Investment Income

Investment income (loss) for the year ended April 30, 2018, consisted of:

Interest and dividend income	\$ 19,222,745
Net appreciation in fair value of investments	60,272,338
	<u>79,495,083</u>
Less investment expense	5,509,157
	<u>\$ 73,985,926</u>

Annual Money-Weighted Rate of Return – For the year ended April 30, 2018, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was 9.06%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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Note 4: Net Pension Liability

The components of the net pension liability of the City for this Plan at April 30, 2018, were as follows:

Total pension liability		\$ 1,204,038,915
Plan fiduciary net position		<u>(879,496,868)</u>
City's net pension liability		<u>\$ 324,542,047</u>
Fiduciary net position as a % of total pension liability		73.05%

Note 5: Actuarial Methods and Assumptions

An actuary from Cavanaugh Macdonald Consulting, LLC determines the total pension liability. The total pension liability as of April 30, 2018 was determined based on an actuarial valuation prepared as of April 30, 2017, rolled forward one year to April 30, 2018, using the following actuarial assumptions:

Price inflation		3.00%
Salary increases, including wage inflation		3.75% to 8.75%
Wage inflation		3.75%
Long-term investment rate of return, net of plan investment expense, including inflation		7.50%

Mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table for Males or Females as appropriate, with adjustments for mortality improvements based on Scale AA.

The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience study, which covered the 5-year period ending April 30, 2012. The actuarial experience study is dated October 3, 2013.

For purposes of calculating the total pension liability, future ad hoc COLAs of 2.5% (simple COLA) were assumed to be granted in all future years.

Long-term Expected Rate of Return – The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best-estimates arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of April 30, 2018 are summarized in the following table:

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Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37%	5.15%
Fixed Income	30%	1.00%
Absolute Return	15%	3.33%
Real Estate	11%	3.75%
Direct Lending	5%	4.50%
Private Equity	2%	8.25%

Discount Rate – The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the City contributions will be made at rates equal to the employer actuarially determined contribution rate.

A municipal bond rate was not used in determining the discount rate. If it were required, the rate would be 3.90% on the measurement date.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents the net pension liability of the City, calculated using the discount rate of 7.50% as well as what the City’s net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.50%) or one percentage point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Net pension liability	\$ 480,596,362	\$ 324,542,047	\$ 195,564,457

Note 6: Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. 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 such changes could materially affect the amounts reported in the statement of fiduciary net position.

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.

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April 30, 2018

Note 7: Litigation

The Plan is subject to claims and lawsuits that arise primarily in the ordinary course of operating a retirement system. It is the opinion of management that the disposition or ultimate resolution of such claims and lawsuits will not have a material adverse effect on the net position of the Plan.

Note 8: Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements must maximize the use of observable inputs and minimize the use of unobservable inputs. There is a hierarchy of three levels of inputs that may be used to measure fair value:

- Level 1** Quoted prices in active markets for identical assets or liabilities
- Level 2** Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities
- Level 3** Unobservable inputs supported by little or no market activity and are significant to the fair value of the assets or liabilities

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Recurring Measurements

The following table presents the fair value measurements of assets and liabilities recognized in the accompanying financial statements measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements fall at April 30, 2018:

	<u>Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investments by fair value level				
U.S. government securities	\$ 47,835,207	\$ -	\$ 47,835,207	\$ -
Corporate bonds and notes	81,377,562	-	81,377,562	-
Common and preferred stock	82,870,846	82,870,846	-	-
Government mortgage-backed securities	6,132,050	-	6,132,050	-
Short-term investment funds	11,370,145	11,370,145	-	-
All country world index fund	133,627,879	-	133,627,879	-
Foreign equities	71,949,348	71,949,348	-	-
Total Investments by fair value level	<u>\$ 435,163,037</u>	<u>\$ 166,190,339</u>	<u>\$268,972,698</u>	<u>\$ -</u>
Investments measured at the net asset value (NAV) (A)				
Real estate funds	\$ 119,561,923			
Partnerships - equity	15,945,992			
Partnerships - fixed income	118,429,599			
Hedge fund of funds	92,351,215			
Emerging markets equity funds	29,345,525			
International small cap equity fund	14,109,790			
Equity funds	53,817,757			
Total investments measured at the NAV	<u>443,561,801</u>			
Total investments	<u>\$ 878,724,838</u>			

(A) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts included above are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of fiduciary net position.

Equity and short-term investment funds classified as Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Corporate and Governmental debt securities classified as Level 2 of the fair value hierarchy are valued using third-party pricing services based on market observable information such as market quotes for similar assets, as well as normal market pricing considerations such as duration, interest rates and prepayment assumptions.

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The fair value estimates presented herein are based on pertinent information available to management as of April 30, 2018. Although management is not aware of any factors that would significantly affect the estimated fair value amounts, such amounts have not been comprehensively revalued for purposes of these financial statements since that date, and current estimates of fair value may differ significantly from the amounts presented herein.

Where quoted market prices are available in an active market, securities are classified within Level 1 of the valuation hierarchy. If quoted market prices are not available, then fair values are estimated by using quoted prices of securities with similar characteristics or independent asset pricing services and pricing models, the inputs of which are market-based or independently sourced market parameters, including, but not limited to, yield curves, interest rates, volatilities, prepayments, defaults, cumulative loss projections and cash flows. Such securities are classified in Level 2 of the valuation hierarchy. In certain cases where Level 1 or Level 2 inputs are not available, securities are classified within Level 3 of the hierarchy.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented below:

	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency</u>	<u>Redemption Notice Period</u>
Real estate funds (A)	\$ 119,561,923	\$ -	Quarterly	90 Days
Partnerships - equity (B)	15,945,992	1,071,424		
Partnerships - fixed income (C)	118,429,599	-	Monthly	10 Days
Hedge fund of funds (D)	92,351,215	-	Quarterly	70 Days
Emerging market equity funds (E)	29,345,525	-	Monthly	10 Days
International small cap equity funds (F)	14,109,790	-	Monthly	8 Days
Equity funds (G)	<u>53,817,757</u>	-	Daily	1 Day

Total investments measured at the NAV \$ 443,561,801

- (A) This category includes two open-ended real estate funds that invest in U.S. commercial real estate. Periodic distributions from each fund are made as the underlying investments of the funds are liquidated. Redemptions can be made quarterly.
- (B) This category includes two private equity fund of funds that invest primarily in U.S. and International Corporate Finance and Venture Capital. Distributions from each fund are made as the underlying investments of the funds are liquidated. It is estimated the underlying assets of the funds will be liquidated over the next three to five years.
- (C) This category includes a commingled core fixed income fund and comingled private debt fund. The fixed income fund is a mutual fund that invests in core fixed income. The underlying bonds, and mutual fund, trade daily on public markets. The private debt fund focuses on lending to U.S. based middle market and small cap companies. The underlying loans have an average duration of 2-4 years. Periodic distributions from the fund are made as underlying loans are repaid. Redemptions can be made quarterly.

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- (D) This category includes a hedge fund of funds which invests in 29 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The hedge funds' composite portfolio for this type includes investments in approximately 30% Equities, 28% Credit, 13% Relative Value, 5% Quantitative, 13% Macro and Commodities and 11% Multi-Strategy. Redemptions can be made quarterly.
- (E) This category includes a commingled emerging markets equity fund which trades monthly. The underlying emerging market stocks trade daily on public markets.
- (F) This category includes a commingled international small cap equity fund which trades monthly on public markets.
- (G) This category includes commingled equity funds which trade daily on public markets.

Note 9: Retirement Plan

The Plan has a 408(k) SEP retirement plan covering its employees that meet certain eligibility requirements. The Plan's contributions to its employees' SEP are determined by the Retirement Board. Contributions to the SEP were \$65,680 for fiscal year 2018.

Required Supplementary Information

Police Retirement System of Kansas City, Missouri
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Schedule of Changes in Net Pension Liability and Related Ratios

Year Ended April 30

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total pension liability				
Service cost	\$ 24,997,759	\$ 28,978,200	\$ 27,423,797	\$ 26,900,131
Interest on total pension liability	84,867,808	81,761,243	79,502,922	76,210,579
Differences between expected and actual experience	(4,446,480)	(13,081,322)	(11,656,885)	-
Effect of assumption changes or inputs	-	(76,763,170)	40,565,354	14,987,963
Benefit payments, including member refunds	<u>(64,731,647)</u>	<u>(60,163,764)</u>	<u>(58,588,761)</u>	<u>(55,405,669)</u>
Net change in total pension liability	40,687,440	(39,268,813)	77,246,427	62,693,004
Total pension liability - beginning	<u>1,163,351,475</u>	<u>1,202,620,288</u>	<u>1,125,373,861</u>	<u>1,062,680,857</u>
Total pension liability - ending	<u>1,204,038,915</u>	<u>1,163,351,475</u>	<u>1,202,620,288</u>	<u>1,125,373,861</u>
Plan fiduciary net position				
Net investment income	73,985,926	72,448,615	(3,094,475)	46,824,719
Net securities lending income	116,726	182,798	135,246	126,375
City contributions	32,103,207	30,979,978	30,272,063	28,933,261
Member contributions	11,390,571	11,751,066	10,748,236	10,874,921
Benefits paid	(63,777,210)	(59,554,625)	(57,970,768)	(55,006,617)
Refunds of contributions	(954,437)	(609,139)	(617,993)	(399,052)
Administrative expenses	<u>(714,956)</u>	<u>(642,688)</u>	<u>(561,591)</u>	<u>(549,742)</u>
Net change in fiduciary net position	52,149,827	54,556,005	(21,089,282)	30,803,865
Plan fiduciary net position - beginning	<u>827,347,041</u>	<u>772,791,036</u>	<u>793,880,318</u>	<u>763,076,453</u>
Plan fiduciary net position - ending	<u>879,496,868</u>	<u>827,347,041</u>	<u>772,791,036</u>	<u>793,880,318</u>
Net pension liability, ending	<u>\$ 324,542,047</u>	<u>\$ 336,004,434</u>	<u>\$ 429,829,252</u>	<u>\$ 331,493,543</u>
Fiduciary net position as a percentage of total pension liability	73.05%	71.12%	64.26%	70.54%
Covered-employee payroll	\$ 91,598,000	\$ 90,571,000	\$ 91,952,000	\$ 91,750,000
Net pension liability as a percentage of covered-employee payroll	354.31%	370.98%	467.45%	361.30%

Note to Schedule: This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

Police Retirement System of Kansas City, Missouri
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Schedule of City Contributions

Last Ten Fiscal Years

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Actuarially determined employer contribution	\$ 32,103,000	\$ 30,980,000	\$ 30,272,000	\$ 28,933,000	\$ 35,062,000	\$ 31,653,000	\$ 28,277,000	\$ 32,020,000	\$ 22,154,000	\$ 24,619,000
Actual City contributions	<u>32,103,000</u>	<u>30,980,000</u>	<u>30,272,000</u>	<u>28,933,000</u>	<u>22,242,000</u>	<u>16,934,000</u>	<u>16,477,000</u>	<u>16,532,000</u>	<u>16,645,000</u>	<u>16,701,000</u>
Annual contribution deficiency	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 12,820,000</u>	<u>\$ 14,719,000</u>	<u>\$ 11,800,000</u>	<u>\$ 15,488,000</u>	<u>\$ 5,509,000</u>	<u>\$ 7,918,000</u>
Covered payroll	\$ 91,598,000	\$ 90,571,000	\$ 91,952,000	\$ 91,750,000	\$ 89,320,000	\$ 86,036,000	\$ 83,784,000	\$ 87,105,000	\$ 84,494,000	\$ 84,775,000
Actual contributions as a percentage of covered payroll	35.05%	34.21%	32.92%	31.53%	24.90%	19.68%	19.67%	18.98%	19.70%	19.70%

Police Retirement System of Kansas City, Missouri
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Schedule of Investment Returns

Fiscal Year Ending April 30	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expense	9.06%	9.62%	-0.41%	6.08%

Note to Schedule: This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

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Notes to Required Supplementary Information

April 30, 2018

Changes of benefit and funding terms – The following changes to the plan provisions were reflected in the valuation performed as of April 30 listed below:

2013 – The 2013 Missouri General Assembly passed Senate Bill 215/House Bill 418 which provided for the following changes to the System:

- Increased the number of years of creditable service from 30 to 32 (which results in the maximum benefit increasing from 75% to 80% of final average pay).
- Created a new benefit tier for new hires with the same benefit structure except final compensation is based on the average of the highest three years, eligibility for service retirement is the earlier of 27 years of service or age 60 with 15 years of service, and the form of payment is a joint and 50% survivor benefit, if married.
- Required the City to contribute the full employer actuarial contribution plus an additional \$200 per month for every member entitled to receive a supplemental benefit.

The Retirement Board increased the employee contribution rate by 1.00% from 10.55% to 11.55%.

2011 – A new employer policy allowed police officers to continue working until they reach 32 years of service, although benefit accruals and member contributions ended at 30 years.

Police Retirement System of Kansas City, Missouri
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Notes to Required Supplementary Information

April 30, 2018

Changes in actuarial assumptions and methods – The following changes to the plan provisions were reflected in the valuations as listed below:

4/30/2017 Valuation

- The amortization of the unfunded actuarial accrued liability at April 30, 2017 is amortized over a closed 30-year period. Subsequent changes in the unfunded actuarial liability due to experience are amortized in a separate base with payments over a closed 20-year period.

4/30/2013 Valuation:

- Reduction of the investment return assumption from 7.75% to 7.50%.
- Reduction of the assumed cost of living adjustment from 3.00% to 2.50%.
- Reduction of the general wage increase assumption from 4.00% to 3.75%.
- Modification of retirement rates to reflect the change in the benefit structure (years of creditable service increasing from 30 to 32), the change in the mandatory retirement policy of the Police Department (from 32 to 35 years of service), and to better reflect the actual, observed experience.
- Lowered termination rates.
- Adjusted the merit scale component of the salary scale to reflect the current pay scale.
- The amortization of the UAAL was changed to be a single base, recalculated each year and amortized as a level percentage of payroll over an open 30-year period.

4/30/2011 Valuation:

- The Board of Trustees adopted a change in the asset smoothing method and implemented it by resetting the actuarial value of assets equal to the fair value of assets as of April 30, 2011. The new smoothing method recognizes the difference between the actual and expected return on the fair value of assets evenly over a five-year period.

Police Retirement System of Kansas City, Missouri
A Component Unit of the City of Kansas City, Missouri
Notes to Required Supplementary Information

April 30, 2018

The Actuarially Determined Contribution rates, as a percentage of pensionable payroll, used to determine the Actuarially Determined Contribution amounts in the Schedule of City Contributions are calculated as of April 30, two years prior to the end of the year in which Actuarially Determined Contribution amounts are reported. In the 12 years prior to FY 2014, the City contributed a fixed contribution rate (19.70%) of covered payroll, regardless of the amount of the actuarial determined contribution rate. Beginning September 1, 2013, the City began to contribute the full dollar amount of the Actuarially Determined Contribution.

The following actuarial methods and assumptions were used to determine the Actuarially Determined City Contribution reported in the most recent fiscal year (April 30, 2018), which was based on the April 30, 2016 actuarial valuation:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5 years smoothing of actual vs expected return on fair value
Price inflation	3%
Wage inflation	3.75%
Salary increases	3.75% to 8.75%, including inflation
Investment rate of return	7.50%, net of investment expenses and including inflation
Future cost-of-living adjustments	2.50% (simple)

Supplementary Information

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Supplementary Information

Schedule of Expenses

Year Ended April 30, 2018

Investment Expenses

Bank custodial fees and expenses	\$	116,632
Financial management expenses		5,259,553
Financial consultation		132,972

Total	\$	<u>5,509,157</u>
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Administrative Expenses

Salaries and payroll taxes	\$	418,807
Legal		36,660
Audit		23,647
Medical fees		23,498
Actuarial fees		67,048
Fringe benefits		82,989
Printing and office expense		12,191
Postage		5,613
Board meetings		736
Travel and education expense		9,545
Insurance		3,777
Legislative consultation		25,944
Other		4,501

Total	\$	<u>714,956</u>
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Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Supplementary Information

Schedule of Additions by Source and Deduction by Type

Years Ended April 30, 2011 through 2018

Fiscal Year Ended	Additions by Source			Total
	Employee Contributions	City Contributions	Total Investment Income (Loss)	
2011	\$ 9,223,994	\$ 16,532,015	\$ 82,002,086	\$ 107,758,095
2012	8,894,208	16,476,608	(3,584,270)	21,786,546
2013	9,343,416	16,933,694	55,542,099	81,819,209
2014	10,198,831	22,241,769	66,842,964	99,283,564
2015	10,874,921	28,933,261	46,951,094	86,759,276
2016	10,748,236	30,272,063	(2,959,229)	38,061,070
2017	11,751,066	30,979,978	72,631,413	115,362,457
2018	11,390,571	32,103,207	74,102,652	117,596,430

Fiscal Year Ended	Deductions by Type			Total
	Benefits	Administrative Expenses General	Refunds	
2011	\$ 46,377,135	\$ 631,281	\$ 557,214	\$ 47,565,630
2012	48,578,196	552,751	549,026	49,679,973
2013	50,979,009	576,470	816,459	52,371,938
2014	52,627,501	535,628	361,910	53,525,039
2015	55,006,617	549,742	399,052	55,955,411
2016	57,970,768	561,591	617,993	59,150,352
2017	59,554,625	642,688	609,139	60,806,452
2018	63,777,210	714,956	954,437	65,446,603