

CITY OF FOUNTAINS HEART OF THE NATION KANSAS CITY MISSOURI

Human Resources Department

Retirement Division

The Firefighters' Pension System

10th Floor City Hall 414 East 12th Street Kansas City, Missouri 64106

(816) 513-1928 Fax: (816) 513-1280

Honorable Mayor City Council Board of Trustees Members of the System

I am pleased to submit, on behalf of your Board of Trustees and staff, the 2019 Annual Report of the Firefighters' Pension System of the City of Kansas City, Missouri. The annual report covers the operations of the Pension System for fiscal year ended April 30, 2019. The System's fiscal year 2019 operating results and financial position are presented in conformity with generally accepted accounting principles.

This report is a product of the combined efforts of the Retirement Division staff and advisors functioning under the Board's leadership. The annual report is designed to provide you with complete and reliable information on the management and operations of the System.

The report consists of four sections: The Introductory Section includes a summary of plan provisions, Board information, and System Advisors and Advisory Relationships. The Actuarial Section details the System's funded status, plan liabilities and membership. The Financial Section includes the investment overview, Independent Auditor's Report and historical financial highlights. The Membership Section details pensions awarded and member deaths during the fiscal year. Also included in this section are forms to request information for active and retired members of the System.

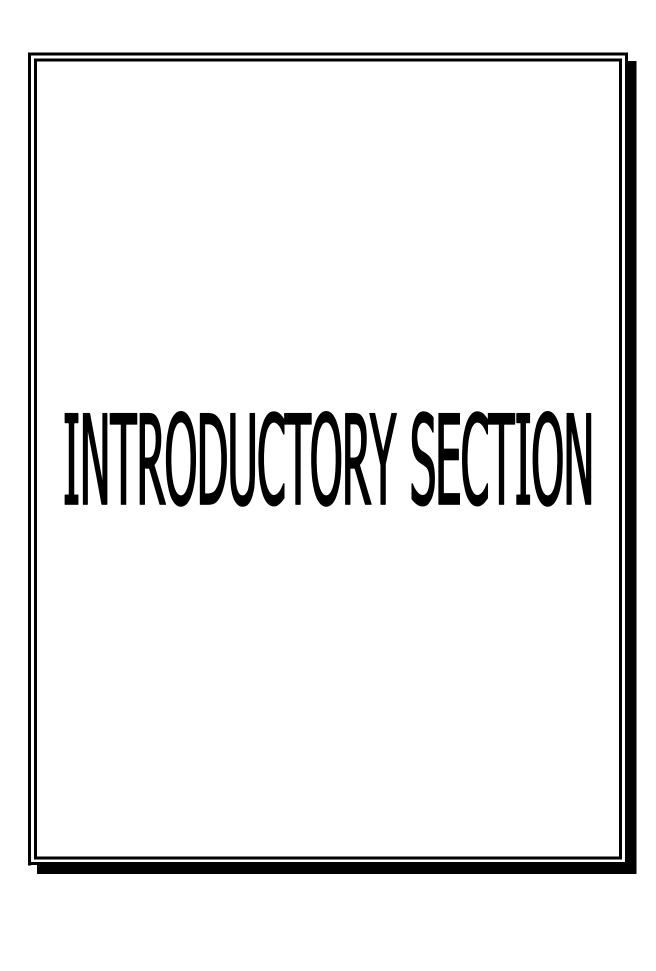
The Board of Trustees and staff remain focused on our mission of paying promised benefits and prudently investing trust assets. We are also committed to delivering a high level of customer service to active and retired members of the System. The reports, charts and schedules contained in this publication summarize the results of our efforts for the fiscal year 2019. We trust you will find this annual report helpful in understanding your retirement system.

Very truly yours,

Barbara J. Davis Executive Officer

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Board of Trustees

Timothy J. Dupin

Chairman
Fire Captain
Term Expires June 30, 2020

D. Matthew Black

Fire Captain Term Expires June 30, 2021

Douglas J. Buehler

City Treasurer Ex - Officio

Gary O'Bannon

Director of Human Resources Ex - Officio Gary A. Reese

Fire Chief & Director
Ex - Officio

Randall J. Landes

Director of Finance Ex-Officio

Eric M. Rose

Firefighter Term Expires June 30, 2019

Travis S. Williams

Battalion Chief Term Expires June 30, 2019

Louie Wright

Retiree Non - Voting

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM April 30, 2019

The Board of Trustees is a policy making body and is responsible for the System's proper operation. The System is administered under its guidance and direction, subject to such rules, regulations and directives as adopted.

The Board consists of four ex-officio members, four elected members and a retired member. The ex-officio members hold office by virtue of their positions with the City. They are the Fire Chief, the Directors of Finance and Human Resources and the City Treasurer. The elected Trustees are voted into office from the active membership of the System for three-year terms, with terms of office staggered in one-year increments. As a result, an election is held annually for the expiring term. The retiree member is jointly appointed by Local 42 and Local 3808 of the International Association of Firefighters.

The law firm of Arnold, Newbold, Sollars & Hollins, P.C., serves as the System's legal advisor. The Human Resources Department employs a full-time Executive Officer. The Executive Officer heads the Retirement Division of the City Human Resources Department, serves as Secretary to the Board of Trustees and, with Board approval, contracts for professional services. The City also provides office space and support services through the Human Resources Department and accounting services of the Finance Department. The Board of Trustees conducts monthly business meetings.

ADVISORY RELATIONSHIPS

Custodian

The Northern Trust Company Chicago, IL

Independent Auditor

Allen, Gibbs & Houlik, L.C. Wichita, KS

General Counsel

Arnold, Newbold, Sollars & Hollins, P.C. Kansas City, MO

Actuary

Cheiron

Washington, DC

Investment Consultant

Asset Consulting Group St. Louis, MO

Proxy Voting Agent

Segal Marco Advisors Chicago, IL

Domestic Equity Advisors

American Century Investments Kansas City, MO

Polen Capital Management, LLC Boca Raton, FL

William Blair & Company

Chicago, IL

Northern Trust Quantitative Advisors, Inc. Chicago, IL

Eagle Capital Management New York, NY

Global Long/Short Equity Advisor

Rock Creek Washington, DC

Real Estate Advisors

Principal Global Investors Des Moines, IA

J. P. Morgan Asset Management New York, NY

Global Equity Advisor

Acadian Asset Management Boston, MA

International Equity Advisors

Mondrian Investment Partners, LTD London, United Kingdom

Marathon Asset Management, LLP London, United Kingdom

Morgan Stanley International New York, NY

Fixed Income Advisors

Amundi Pioneer Investments

Boston, MA

Franklin Templeton San Mateo, CA

BlackRock

San Francisco, CA

Northern Trust Quantitative Advisors, Inc Chicago, IL

The following summarizes provisions of the Firefighters' Pension System of the City of Kansas City, Missouri Trust (System) as amended by City Ordinance through February 2016.

The System was established July 1, 1953, by Ordinance No. 16643. It is a contributory defined benefit plan as referenced in Section 414 of the IRS Code. The System's mandate is to provide retirement, survivor and disability benefits. Management of the System's investment portfolio facilitates this mandate, with a current market value of \$556 million.

Members of the System do not participate in Social Security. Effective March 1, 2001, the benefits provided are not subject to an offset or reduction for Workers' Compensation benefit payments received.

Eligibility:

Membership is required upon employment for all employees of the Fire Department with firefighting duties who are not simultaneously accumulating pension benefits or creditable service under another pension system. Employees hired prior to April 20, 2014, are Tier 1 members. Employees hired on or after April 20, 2014, are Tier 2 members.

Contributions:

Effective May 1, 2014, all members contribute 10.55% of base salary.

Contributions are excluded from Missouri and Federal Income Tax under employer pick-up provisions of the IRS Code Section 414(h)(2). The City pays the remaining cost of the System.

The employer contribution rate paid by the City for the fiscal year 2019 was 30.62% of covered payroll as of May 1, 2018.

Effective December 31, 1999, 1% of additional member and 2% of additional employer contributions fund the Firefighters' Health Insurance Subsidy Fund within the Trust.

City contributions are not identifiable by individual and only are received by members as part of a monthly retirement benefit.

Voluntary Retirement:

Tier 1: A member is eligible for voluntary retirement upon completion of 25 years of creditable service, regardless of age.

Tier 2: A member is eligible for voluntary retirement upon completion of 27 years of creditable service, regardless of age.

Creditable Service:

Creditable service is used in the calculation of the member's benefit.

Creditable service is the total years and months of service the member has accumulated in the System.

At retirement, a member may elect to convert accrued sick leave or vacation leave to creditable service up to the maximum number of hours allowed for conversion, but not to exceed 25 years of creditable service for Tier 1 members, or 27 years of creditable service for Tier 2 members.

The conversion rate is 215 hours to one month of creditable service. Hours converted to creditable service are not payable in cash to the member upon retirement.

Repurchase of Creditable Service:

Members who terminate service and later return to service may receive credit for such prior service after they have been reemployed for at least two, but not more than three, consecutive years, and have repaid withdrawn contributions plus interest at the rate then assumed for actuarial calculations

Portability of Creditable Service:

Members with at least 10 years creditable service may transfer or purchase creditable service from a previous Missouri public employer.

A purchase of service may be requested for any portion of the previous service. The member must accept the valuation of service as determined by the System's actuary.

The valuation is based upon the member's current salary and age.

The member is responsible for depositing with the System (from previous Pension Plan or member savings) the total value of service credited, including employee and employer contributions. After the transfer is finalized, the member's creditable service with the transferring organization is eliminated.

The value of creditable service purchased will be added to the member's creditable service with this System.

Benefits:

The base benefit formula for members of the System is 2.5% of average final compensation multiplied by creditable service.

Average final compensation is calculated using the highest 24 months of base salary in the last 10 years prior to retirement. The maximum benefit is 80% of average final compensation.

A minimum of 25 years creditable service for Tier 1 members and 27 years creditable service for Tier 2 members is required. Retirement benefits are paid according to options elected by the member with spousal approval, if applicable, prior to retirement. The options available include the following:

 a) Members may withdraw all or a portion of their accumulated

contributions and interest and receive an actuarially reduced lifetime pension. The members annual cost-of-living adjustment and surviving spouse annuity are not reduced by election of this option.

b) Members may elect a 100%, 75% or 66 2/3% surviving spouse annuity option. If one of these options is chosen, the member's base benefit is actuarially reduced, and upon the member's death, the surviving spouse receives 100%, 75% or 66 2/3% of the member's reduced base benefit. The member's annual cost-of-living adjustment is not reduced by election of this option.

Minimum Benefits:

Effective August 1, 1986, minimum monthly benefits were instituted for voluntary, disability and surviving spouse benefits. The minimum benefit is \$600 for members, calculated prior to any reductions for either withdrawal of member contributions or election one of the three optional surviving spouse annuities, and \$275 for surviving spouses. Any cost-of-living adjustments calculated based on the original base benefit, without regard these minimums.

Disability Retirement:

Disability is defined as a state or condition that prevents the member from performing the duties of a firefighter for the rest of the member's life. Two doctors approved by the System's Board

of Trustees must confirm the disability in writing. Retirement is effective on the first day of the month following Board approval of the disability.

- a) **Duty Disability** is a disability directly due to and caused by actual performance of duty as a firefighter. The pension is 62.5% of average final compensation, but not less than 62.5% of the then current maximum salary payable to the rank of a firefighter.
- b) Non-Duty Disability is a disability not associated with the performance of firefighting duties. No benefit is payable if the disability is caused while engaging in any occupation or performing any work for another employer or in selfemployment. The member must be under the age of 65 and have 10 or more years of creditable service. The pension is equal to 25% of the average final compensation plus 2.5% per year of average final compensation for the number of years and months of creditable service in excess of 10 years, not to exceed a maximum monthly pension equal to 80% of the member's average final compensation.

Cost-of-Living Adjustments:

An annual adjustment for retirement, disability and survivor benefits is paid under these conditions:

Tier 1: A 3% non-compounded cost-ofliving adjustment is paid to all System

beneficiaries who retired on or after June 28, 1970.

Tier 2: A non-compounded, cost-of-living adjustment will be paid to all System beneficiaries following the 27th anniversary of the Tier 2 member's employment if the funding ratio of the pension fund, as shown by the System's most recent actuarial report, is equal to or greater than 80%.

The increase will be equal to the percentage increase in the prior 12 months of the final national Consumer Price Index for All-Urban Consumers published prior to December 31 in advance of the next year's adjustment but shall not exceed 2.5%.

- a) The adjustment is applied to the annuity as calculated upon retirement date prior to any reduction for withdrawal and/or election of a joint survivor optional annuity.
- b) The adjustment is paid on all annuities effective on or before the preceding January 1.
- c) The adjustment is made on annuity payments dated May 1, and the adjusted annuity remains unchanged until the next May 1.

Health Insurance Subsidy:

The Board of Trustees annually determines the monthly health insurance subsidy. This subsidy is payable for life to eligible members.

To qualify for a subsidy, members must have at least 25 years of creditable service if a Tier 1 member, or 27 years of creditable service if a Tier 2 member or receive a duty disability annuity.

If a member dies in the line of duty, one subsidy is payable to the member's eligible surviving spouse or eligible surviving children. The 2019 monthly subsidy is \$480.

Death Benefits:

The System provides the following benefits upon a member's death:

- a) A funeral benefit of \$2,000 is paid to the surviving spouse or named beneficiary.
- b) A pension equal to 50% of the accrued pension, but not less than 25% of the member's average final compensation, is payable to the surviving spouse, unless the member elected a 100%, 75% or 66 2/3% surviving spouse option, provided the marriage occurred on or before retirement.

If the member's death is duty related, the surviving spouse's benefit is the member's accrued pension, but not less than 62.5% of the member's average final compensation or 62.5% of the then current maximum salary payable to the rank of a firefighter, whichever is greater.

The surviving spouse's pension of an active member who dies before retirement with at least 25 years of creditable service, Tier 1, or 27 years of creditable service, Tier 2, is calculated at the date of death as if the member elected the 100% joint survivor option.

c) A monthly child's allowance of \$100 is payable to each eligible child until age 18. The allowance may continue after age 18 if the child is unmarried and physically or mentally incapacitated from earning a livelihood.

A child also remains eligible until age 21 if enrolled as a full-time student at an accredited institution of higher learning. In the absence of a surviving spouse, the surviving spouse's pension is divided equally and payable to any eligible children.

Resignation from Service:

Upon termination of employment, members with less than 10 years of creditable service must withdraw their accumulated contributions and interest from the System. If a member has less than six years of service, a service charge ranging from 2% of contributions (five years of service) to 10% (less than one year of service) is applied.

Members with 10 or more years of service may elect a deferred pension and waive the option to withdraw their contributions and interest at the time of separation.

In situations of divorce, no Domestic Relations Order (DRO) distributions are paid to the ex-spouse until the member separates employment or retires. Payment is only made if there is an approved DRO on file with the Retirement Division.

Deferred Annuity:

Deferred annuities are calculated based upon the benefit formula described earlier. The annuity cannot exceed 62.5% of average final compensation.

Deferred annuities are payable at age 50.

Members may withdraw their contributions and interest and forfeit the deferred annuity at any time before benefit payments commence.

Members also may accumulate additional creditable service if re-employed by the City's Fire Department with firefighting duties before benefit payments commence.

If a member elects a deferred pension and dies before age 50, the member's contributions and interest are paid to the beneficiary. If death occurs after age 50, survivor benefits are payable, but are pro-rated based upon actual years of creditable service in relation to 25 years for Tier 1 members or 27 years for Tier 2 members.

ACTUARIAL SECTION

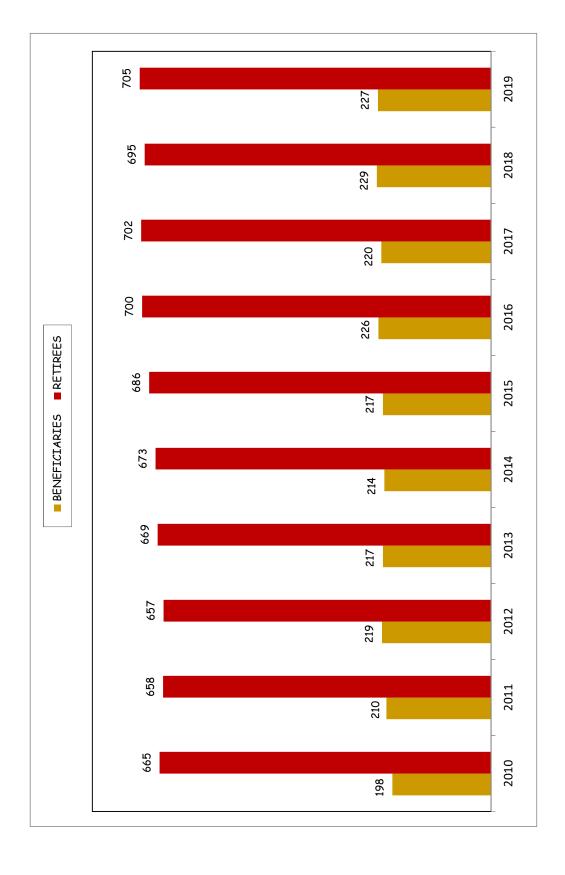
CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ACTUARIAL OVERVIEW April 30, 2019

This section summarizes the results of the actuarial valuation of the Firefighters' Pension System of the City of Kansas City, Missouri Trust as of May 1, 2019. The purpose of the valuation is to determine the System's financial condition and the City's required contributions.

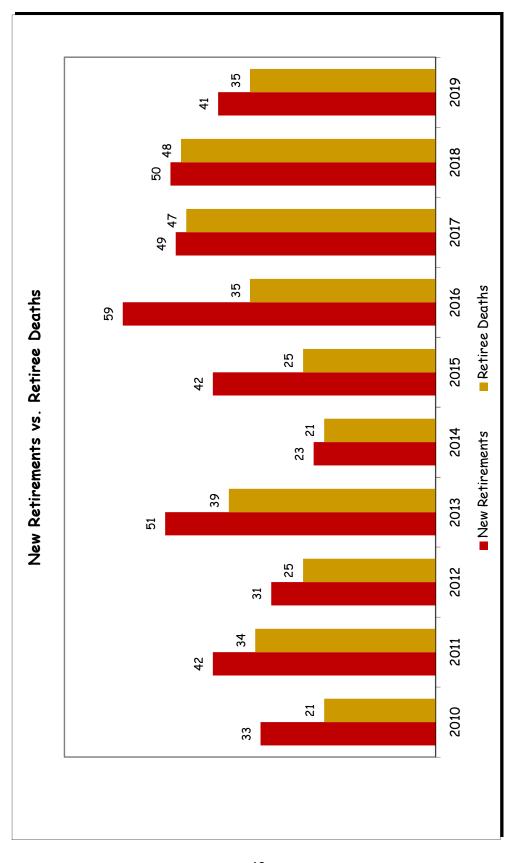
The experience over the past year is summarized as follows:

- * The number of members, who were active as of May 1, 2019, increased from 981 to 993. The average age of members increased from 40.09 TO 40.37, the average service increased from 13.92 to 14.18 years and the average annual salaries increased from \$67,548 to \$68,728.
- * During the past year, 41 new pensions were awarded to 16 voluntary pensions, 10 disability pensions, and 15 widows, QDROs and children of deceased firefighters. As of May 1, 2019, pensions totaling an average of \$3,502,931 per month were being paid to 705 retired members and 227 beneficiaries. The previous year, pensions totaling an average of \$3,394,008 per month were being paid to 695 retired members and 229 beneficiaries.
- * City contributions for the fiscal year 2019 totaled \$20 million and employee contributions totaled \$7.1 million. Benefit payments totaled \$38.3 million and refunds of employee contributions totaled \$863,232.
- * The actuarial value of assets increased by \$21 million to \$556.9 million. The market value of assets increased by \$11.9 million to \$552.3 million.
- * The Fund achieved a rate of return on the actuarial value of assets of 6.31% for fiscal year 2019. On a market value basis the rate of return was 4.56%.
- * The System's funded ratio is 70.3% on an actuarial basis.

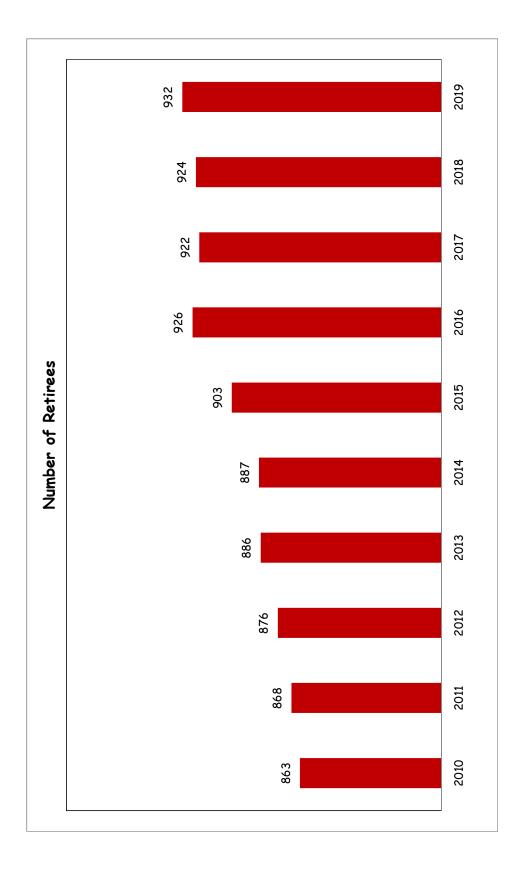
CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM PROGRESS of PENSIONS IN FORCE April 30, 2019



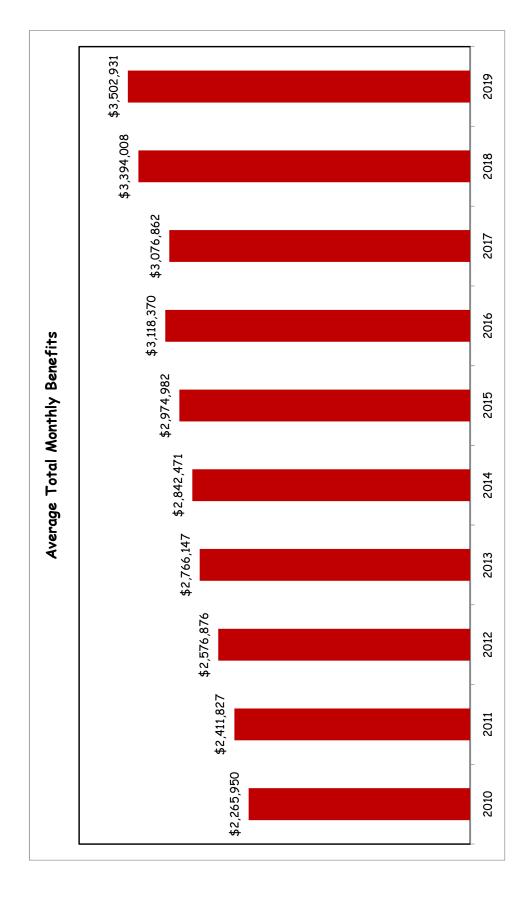
CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM PROGRESS OF PENSION ROLLS April 30, 2019



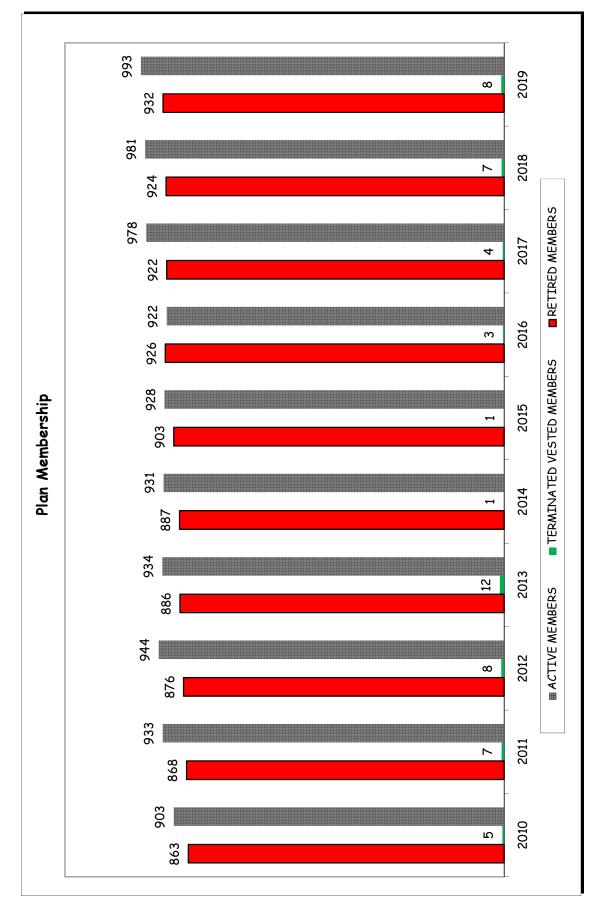
CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM PROGRESS OF PENSION ROLLS April 30, 2019



CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM PROGRESS OF PENSION ROLLS April 30, 2019



CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM PROGRESS of PLAN MEMBERSHIP April 30, 2019

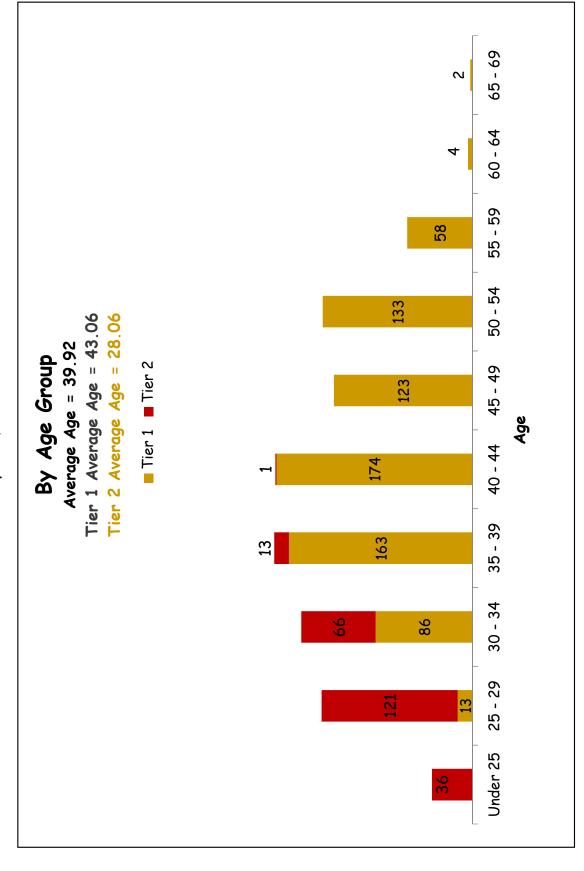


CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM BENEFIT PROFILE April 30, 2019

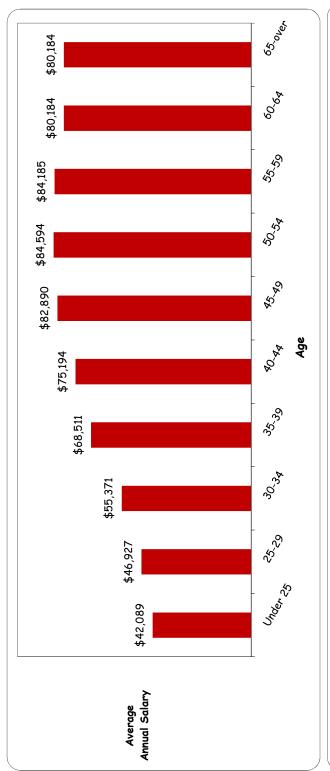
Kansas City Firefighters' Pension System Pensions in Payment Status by Type and Monthly Amount as of May 1, 2019						
Monthly Amount	Total	Voluntary	Deferred	Disability	Widows & Children	QDROs
Amount	TOtal	Voluntary	Deletted	Disability	Cillidien	QDIOS
Under \$500	27	0	3	0	19	5
\$500-1,000	58	1	4	2	46	5
1,000-1,500	56	3	2	5	43	3
1,500-2,000	68	11	1	11	41	4
2,000-2,500	62	19	3	5	34	1
2,500-3,000	53	31	5	2	15	0
3,000-3,500	70	55	2	5	8	0
3,500-4,000	108	90	2	9	5	2
4,000-4,500	182	108	0	68	6	0
4,500-5,000	85	76	0	7	2	0
5,000-5,550	67	62	0	0	5	0
5,500-6,000	52	51	0	0	1	0
6,000-6,500	12	8	1	1	2	0
6,500-7,000	7	7	0	0	0	0
7,000 & over	25	25	0	0	0	0
Total	932	547	23	115	227	20

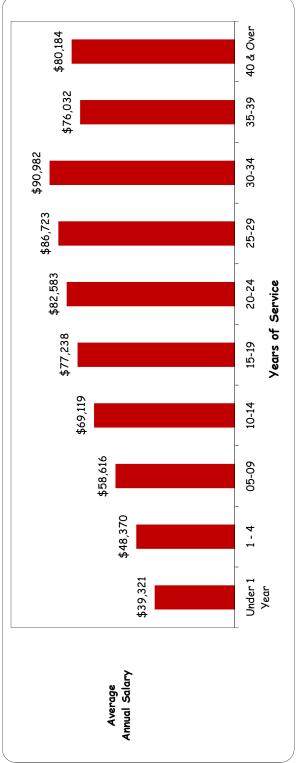
During the year ended April 30, 2019, there were 41 new pensions awarded (16 Voluntary, 0 Deferred, 10 Disability, and 15 Widows, QDROs and Children)

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ACTIVE MEMBER PROFILE April 30, 2019

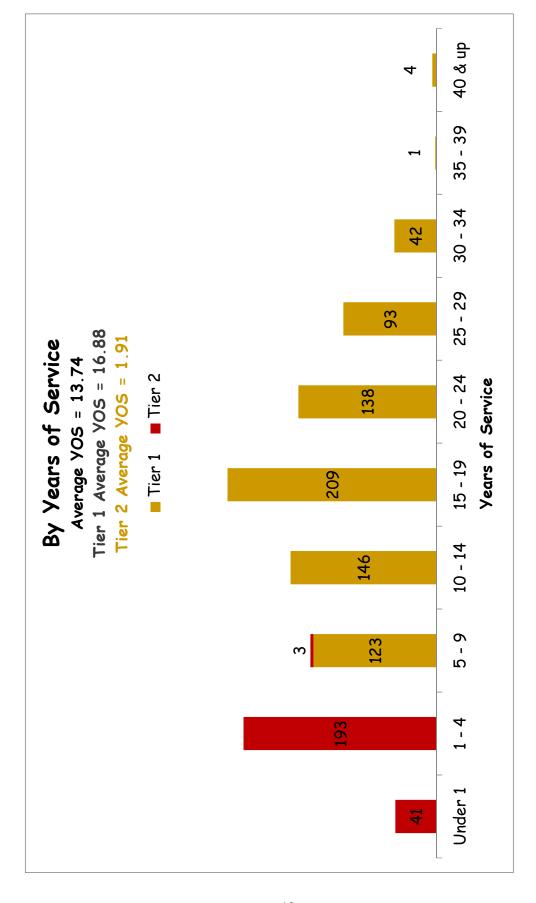


CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ACTIVE MEMBER PROFILE April 30, 2019





CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ACTIVE MEMBER PROFILE April 30, 2019



FINANCIAL SECTION

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM INVESTMENT OVERVIEW April 30, 2019

The investments of the System are based primarily on an investment authority known as the "prudent person rule". The prudent person rule establishes a standard to all fiduciaries which includes anyone that has authority with respect to the System. This standard states that fiduciaries will discharge their duties solely in the interest of fund participants and beneficiaries with the degree of diligence, care and skill which prudent men and women would ordinarily exercise under similar circumstances in a like position.

The prudent person rule permits the fund to establish an investment policy based upon certain investment criteria and allows for the delegation of investment authority to professional investment advisors. The Board's adapted Investment Policy outlines responsibility for the investment of the fund and the degree of risk that is deemed appropriate for the System. Investment advisors are retained to execute the investment strategy in accordance with Board policy.

The Board of Trustees, with input from staff and consultants, evaluates risk and return factors of potential investment strategies and opportunities and approves appropriate alternatives.

Proper funding and healthy investment returns are very important to the financial soundness of the System. The ratio of investment earnings to total revenue is evidence of the System's solid financial management.

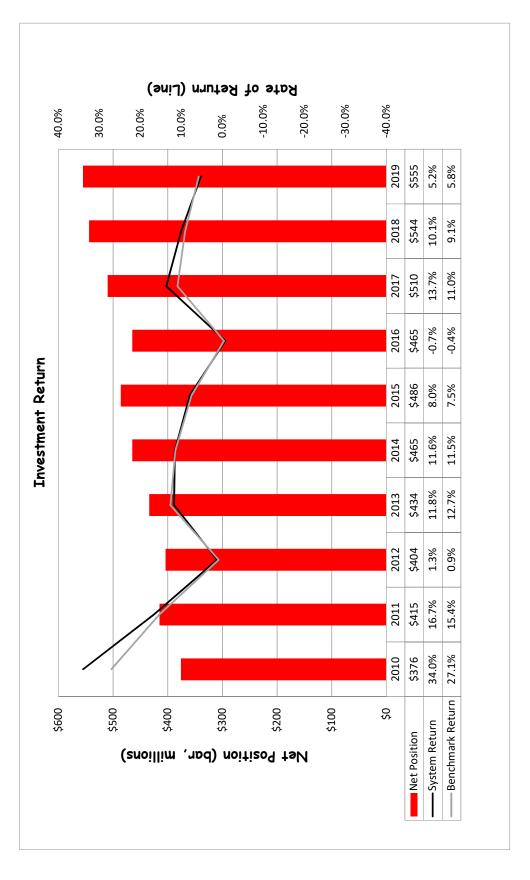
An integral part of the overall investment policy is the strategic asset allocation policy. This allocation mix is designed to provide an optimal mix of asset categories. This emphasizes a maximum diversification of the portfolio that protects the System from declines that a particular asset class may experience in a given period.

Investment decisions are made based on expected return for a given level of risk. The goal is to optimize the return of the portfolio, as opposed to maximizing the rate of return. The optimal portfolio mix is one that carefully equates expected rate of return, with expected risk of all investment categories utilized by the System. In setting the optimal mix of assets for the portfolio, the Board has developed a strategic (long-term) asset allocation policy, which incorporates a diversified mix.

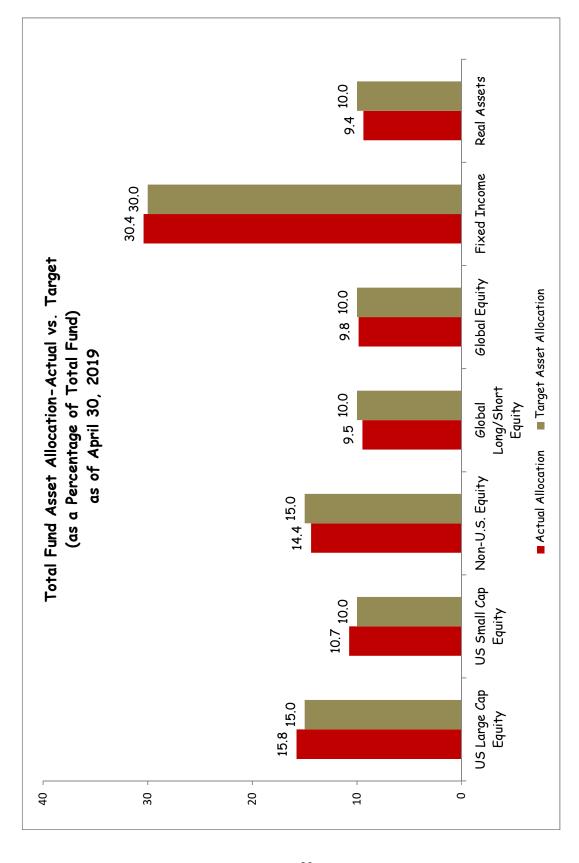
The System invests in traditional assets (domestic stocks, government and corporate bonds, mortgages, and cash) and non-traditional assets (international and global stocks and international bonds). A modest amount of System assets has also been diversified into real estate.

During fiscal 2019 the System remained well diversified.

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM INVESTMENT RETURN April 30, 2019



CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ASSET ALLOCATION April 30, 2019



Investment Summary

Year Ending April 30, 2019

				Portfolio Fair	
			Vo	alue As of April	% of Total
Investment Manager	Date Hired	Asset Class		30, 2019	Fair Value
Cash			\$	7,499,995.01	1.4%
			•	, ,	
Eagle Capital Management	April 2012	U.S. Equity	\$	12,449,417.57	2.2%
Polen Capital Management	July 2017	U.S. Equity	\$	12,659,695.56	2.3%
Northern Trust Company	November 2011	U.S. Equity	\$	62,465,097.02	11.3%
American Century Investments	November 2004	U.S. Equity	\$	28,611,541.93	5.2%
William Blair & Company	June 2011	U.S. Equity	\$	30,966,592.38	5.6%
Marathon Asset Management	October 2015	Non-U.S. Equity	\$	46,261,010.63	8.3%
Mondrian Investment Partners	March 2016	Non-U.S. Equity	\$	14,171,014.45	2.6%
Morgan Stanley	April 1997	Emerging Market Equity	\$	20,206,533.05	3.6%
Acadian Asset Management	September 2007	Global Equity	\$	54,632,646.23	9.9%
Rock Creek	January 2011	Global Long/Short Equity	\$	51,216,749.82	9.2%
Amundi Pioneer Investments	February 2014	Fixed Income	\$	68,197,880.52	12.3%
Franklin Templeton	February 2014	Fixed Income	\$	31,071,196.37	5.6%
Northern Trust Company	March 2008	Fixed Income	\$	14,711,177.83	2.7%
BlackRock	July 2017	Fixed Income	\$	47,223,580.22	8.5%
Principal Global Investors	May 2003	Real Assets	\$	21,434,112.47	3.9%
J.P. Morgan Asset Management	July 2012	Real Assets	\$	30,608,129.86	5.5%
	Total		\$	554,386,370.92	100.0%

Schedule of Investment Results (Gross of Fees)

Annualized Manager Returns as of April 30, 2019

		One	Three	Five	Ten	Since
Investment Manager	Asset Class	Year	Years	Years	Years	Inception
	U.S. EQUITY					
Eagle Capital Management	Large-cap Value Equity	13.4%	16.9%	12.3%		14.6%
Russell 1000 Value Index	, , , ,	9.1%	11.0%	8.3%	13.8%	11.6%
Polen Capital Management	Large-cap Growth Equity	27.8%				23.1%
Russell 1000 Growth Index		17.4%	18.6%	14.5%	17.0%	18.5%
Northern Trust Company	Large-cap Core Equity	13.5%	14.9%	11.6%		13.7%
S&P 500 Index		13.5%	14.9%	11.6%	15.3%	13.7%
American Century Investments	Small-cap Value Equity	3.5%	12.7%	9.2%	15.0%	10.3%
Russell 2000 Value Index		2.2%	11.5%	6.9%	12.9%	7.6%
William Blair & Company	Small-cap Growth Equity	14.7%	19.6%	15.0%		14.5%
Russell 2500 Growth Index		12.0%	16.6%	11.3%	16.3%	11.6%
	NON-U.S. EQUITY					
Marathon Asset Management	Non-U.S. Equity	-2.6%	6.8%			7.0%
MSCI EAFE Index		-2.7%	7.8%	3.1%	8.5%	7.9%
Mondrian International Partners	Non-U.S. Equity	-0.4%	9.2%			11.5%
MSCI World ex U.S. Index		-7.2%	7.6%	4.7%	11.4%	11.0%
Morgan Stanley	Emerging Market Equity	-6.4%	9.3%	3.7%	8.3%	7.6%
MSCI Emerging Markets Index	3 3 4 4 4 4	-4.7%	11.7%	4.4%	7.9%	6.1%
5 5	GLOBAL EQUITY					
Acadian Asset Management	Global Equity	1.9%	13.3%	7.9%	12.3%	4.5%
MSCI ACWI Index		5.6%	12.0%	7.5%	11.7%	5.3%
Rock Creek	Global Long/Short Equity	3.9%	7.5%	5.7%		6.1%
50% MSCI EAFE Index/50% S&P 500 Index		5.2%	11.4%	7.4%	11.9%	9.2%
· · · · · · · · · · · · · · · · · · ·	FIVED INCOME					
	FIXED INCOME	. ==4		2.20/		2.00/
Amundi Pioneer Investments	Core Plus Fixed Income	4.5%	4.0%	3.2%	4.30/	3.6%
BloomBar Universal Index	Marile: a sake a Pierral to a save	5.4%	2.5%	2.9%	4.3%	3.0%
Franklin Templeton	Multi-sector Fixed Income	0.8%	5.1%	2.5%	2.20/	3.1%
BloomBar Multiverse Index	Comp Sixed In comp	1.0%	1.3%	0.9%	3.2%	1.4%
Northern Trust Company	Core Fixed Income	5.3%	1.9%	2.6%	3.8%	3.6%
BloomBar U.S. Aggregate Index		5.3%	1.9%	2.6%	3.7%	3.7%
Blackrock	Absolute Return	3.2%				3.4%
U.S. T-Bills 90 day + 3%		5.2%	4.3%	3.8%	3.5%	4.8%
BloomBar U.S. Aggregate Index		5.3%	1.9%	2.6%	3.7%	2.3%
	REAL ASSETS					
Principal Global Investors	Core Real Estate	8.2%	9.3%	11.2%	9.2%	7.8%
NFI ODCE Index		6.6%	7.0%	9.2%	7.7%	7.3%
J.P. Morgan Asset Management	Value Add Real Estate	10.1%	9.8%	12.7%		14.0%
NFI ODCE Index		6.6%	7.0%	9.2%	7.7%	9.6%
Total Fund		E 20/	0.70/	7 20/	10.7%	0.49/
		5.2%	9.7%	7.2%	10.7%	9.4%
Policy Index		5.8%	8.6%	6.5%	9.8%	



INDEPENDENT AUDITOR'S REPORT

Board of Trustees
City of Kansas City, Missouri
Firefighters' Pension System
Kansas City, Missouri

Report on the Financial Statements

We have audited the accompanying financial statements of the City of Kansas City, Missouri Firefighters' Pension System (Plan), which comprise the statement of fiduciary net position as of April 30, 2019, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic 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 Plan as of April 30, 2019, 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 of the Plan as of and for the year ended April 30, 2018, were audited by other auditors, whose previous report, dated October 3, 2018, 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 included in the required supplementary information section listed in the table of contents be presented to supplement the 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 financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information as of and for the year ended April 30, 2019 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.

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

October 16, 2019 Wichita, Kansas

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Firefighters' Pension System of the City of Kansas City, Missouri is a single-employer defined benefit plan covering firefighters of the City of Kansas City, Missouri (City). The Firefighters' Pension System was established by City ordinance in 1953 and is administered by a nine-person Board of Trustees to provide retirement, disability and survivor benefits to its members.

This discussion and analysis of the financial performance of the Firefighters' Pension System provides an overview of financial activities for the fiscal years ended April 30, 2019 and 2018, with selected comparative information for the fiscal year ended April 30, 2017, and should be read along with the financial statements and notes to the financial statements which follow this section.

Overview of the Financial Statements and Accompanying Information

- The financial statements presented in this report are the Statements of Plan Net Position as
 of April 30, 2019 and 2018 and the Statements of Changes in Plan Net Position for the years
 ended April 30, 2019 and 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 includes a description of the Plan, a summary of significant accounting policies, the method used to value investments and a summary of investments.
- Required supplementary information presents schedules related to employer contributions and the funding of the Plan.

2019 and 2018 Summary Comparative Information of Plan Net Position

	April 30, 2019	April 30, 2018	Amount Change	Percentage Change
Receivables Investments at fair value Securities lending collateral	\$ 2,989,885 554,386,371 23,834,490	\$ 2,429,085 543,435,871 30,466,536	\$ 560,800 10,950,500 (6,632,046)	23.09% 2.02% -21.77%
Total assets	581,210,746	576,331,492	4,879,254	0.85%
Due to broker for purchases of Administrative and investment	834,809	842,447	(7,638)	-0.91%
expenses payable	671,845	966,412	(294,567)	-30.48%
Securities lending collateral	23,834,490	30,466,536	(6,632,046)	-21.77%
Total liabilities	25,341,144	32,275,395	(6,934,251)	-21.48%
Net position	\$ 555,869,602	\$ 544,056,097	\$ 11,813,505	2.17%

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS

2019 and 2018 Summary Comparative Information of Changes in Plan Net Position

	April 30,	April 30,	Amount	Percentage
	2019	2018	Change	Change
Member contributions	\$ 7,785,106	\$ 7,562,958	\$ 222,148	2.94%
Employer contributions	22,954,283	20,392,560	2,561,723	12.56%
Net investment income	24,387,613	47,512,382	(23,124,769)	-48.67%
Total additions	55,127,002	75,467,900	(20,340,898)	-26.95%
Benefits paid to members	42,035,175	40,728,098	1,307,077	3.21%
Refunds of contributions	863,232	531,748	331,484	62.34%
Administrative expenses	415,090	386,608	28,482	7.37%
Total deductions	43,313,497	41,646,454	1,667,043	4.00%
Net increase	11,813,505	33,821,446	(22,007,941)	-65.07%
Net position, Beginning of year	544,056,097	510,234,651	33,821,446	6.63%
Net position, End of year	\$ 555,869,602	\$ 544,056,097	\$ 11,813,505	2.17%

2019 Financial Highlights

The global financial markets were volatile throughout the year due to trade tensions between the U.S. and China, Brexit issues in the United Kingdom, the Federal Reserve's actions of raising interest rates through December and then unexpectedly decreasing rates in March and fears of a possible recession. The investment portfolio posted a positive gross return of 5.2 percent, which underperformed the 5.8 percent increase in the Policy Portfolio benchmark. All segments of the fund performed relatively well, with the exceptions of fixed income and non-U.S. equity. U.S. equity was the best performing asset class on a relative and absolute basis, followed by real assets. Non-U.S. equity was the only asset class with negative performance, with emerging markets equity posting the worst return.

The 2.2 percent rise in plan net position to \$556 million, was largely due to investment income of \$24.4 million. Employee contributions and benefits paid to members grew in ordinary fashion while employer contributions increased by \$2.5 million due to an increase in the actuarial required contribution rate. Refunds of contribution significantly increased, with much of the increase attributable to distribution elections made by retiring employees, while benefits paid to members increased at an expected pace. Administrative expenses were \$28,000 higher than the previous year, primarily due to medical evaluation and legal fees.

2019 Operational Highlights

The only change in the Plan's service providers during the year was the addition of a new securities monitoring and litigation firm. There were no significant changes in the investment structure of the fund. On-going cash needs were met primarily through the sale of appreciating equity securities.

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS

2018 and 2017 Summary Comparative Information of Plan Net Position

	April 30, 2018	April 30, 2017	Amount Change	Percentage Change
Receivables Investments at fair value Securities lending collateral	\$ 2,429,085 543,435,871 30,466,536	\$ 2,242,711 510,118,808 28,575,689	\$ 186,374 33,317,063 1,890,847	8.31% 6.53% 6.62%
Total assets	576,331,492	540,937,208	35,394,284	6.54%
Due to broker for purchases of Administrative and investment	842,447	1,206,479	(364,032)	-30.17%
expenses payable	966,412	920,389	46,023	5.00%
Securities lending collateral	30,466,536	28,575,689	1,890,847	6.62%
Total liabilities	32,275,395	30,702,557	1,572,838	5.12%
Net position	\$ 544,056,097	\$ 510,234,651	\$ 33,821,446	6.63%

2018 and 2017 Summary Comparative Information of Changes in Plan Net Position

	April 30,	April 30,	Amount	Percentage
	2018	2017	Change	Change
Member contributions	\$ 7,562,958	\$ 7,150,987	\$ 411,971	5.76%
Employer contributions	20,392,560	19,650,554	742,006	3.78%
Net investment income	47,512,382	58,937,463	(11,425,081)	-19.39%
Total additions	75,467,900	85,739,004	(10,271,104)	-11.98%
Benefits paid to members	40,728,098	39,168,674	1,559,424	3.98%
Refunds of contributions	531,748	1,017,015	(485,267)	-47.71%
Administrative expenses	386,608	345,060	41,548	12.04%
Total deductions	41,646,454	40,530,749	1,115,705	2.75%
Net increase	33,821,446	45,208,255	(11,386,809)	-25.19%
Net position, Beginning of year	510,234,651	465,026,396	45,208,255	9.72%
Net position, End of year	\$ 544,056,097	\$ 510,234,651	\$ 33,821,446	6.63%

2018 Financial Highlights

Global financial markets soared during the first three quarters of the year due to U.S. fiscal policy stimulus and expectations of continued global growth. Then in the fourth quarter, volatility was reintroduced in the markets due to expectations of inflation, a repricing of the yield curve and headlines related to global trade negotiations, which somewhat muted the overall positive equity returns and caused slightly negative returns in fixed income. Albeit, the investment portfolio had a strong gross return of 10.1 percent, which compared quite favorably to the 9.1 percent rise in the

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

MANAGEMENT'S DISCUSSION AND ANALYSIS

Policy Portfolio benchmark. All segments of the fund performed relatively well. Non-U.S. equities were the best performing asset class, followed by U.S. equities.

The 6.63 percent rise in plan net position to \$544 million, was largely due to investment income of \$47.5 million. Contributions and benefits grew in ordinary fashion. Administrative expenses rose, primarily due to staffing costs.

2018 Operational Highlights

A U.S. equity manager was terminated due to performance issues. A search was conducted and the manager was replaced. In conjunction with this change, the U.S. large-cap equity allocation was restructured to increase the exposure to passive equities and decrease the exposure to active equities.

The fixed income allocation was also restructured to reduce overall risk. An absolute return strategy was added and funded from a reduction to two existing fixed income managers. Ongoing cash needs were met primarily through the sale of appreciating equity securities.

Request for Information

This financial report is designed to provide members of the Firefighters' Pension System, citizens, investors and creditors of the City of Kansas City, Missouri with a general overview of the Firefighters' Pension System'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 Firefighters' Pension System, City Hall, 414 East 12th Street, 10th Floor, Kansas City, Missouri 64106-2705. 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 Firefighters' Pension System.

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

STATEMENTS OF FIDUCIARY NET POSITION

April 30, 2019 and 2018

	2019	2018
Assets		
Investments, at Fair Value		
Short-term investment funds	\$ 10,405,729	\$ 6,902,566
Domestic common stock	76,615,337	83,710,720
Foreign equities	1,992,406	2,701,980
Partnerships	14,980,288	14,293,589
Collective trusts - equities	182,764,325	188,900,580
Collective trusts - fixed income	161,203,304	146,060,263
Collective trusts - hedge funds	52,599,029	51,026,560
Collective trusts - real estate	53,825,953	49,839,613
Total investments	554,386,371	543,435,871
Securities Lending Collateral	23,834,490	30,466,536
Receivables		
Contributions	1,421,855	1,214,111
Investment income	194,772	165,939
Due from broker for sales of investments	1,373,258	1,049,035
Total receivables	2,989,885	2,429,085
Total assets	581,210,746	576,331,492
Liabilities		
Due to broker for purchases of investments	834,809	842,447
Administrative and investment expenses payable	671,845	966,412
Securities lending collateral	23,834,490	30,466,536
Total liabilities	25,341,144	32,275,395
Net Position Restricted for Pensions	552,265,610	540,393,237
Net Position Restricted for Health Care Subsidy	3,603,992	3,662,860
Total Net Position	\$ 555,869,602	\$ 544,056,097
		<u> </u>

The accompanying notes are an integral part of these financial statements.

CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended April 30, 2019 and 2018

Additions	2019	2018
Investment Income Interest income Dividend income Net increase in fair value of investments Less investment expense	\$ 2,094,948 2,581,135 22,195,745 (2,587,597)	\$ 1,989,807 2,210,573 45,733,786 (2,501,269)
Net investment income	24,284,231	47,432,897
Securities Lending Income Securities lending gross income Securities lending expenses	701,742	450,693
Borrower fees	(554,146)	(337,244)
Management fees	(44,214)	(33,964)
Total securities lending expenses	(598,360)	(371,208)
Net securities lending income	103,382	79,485
Total net investment income	24,387,613	47,512,382
Contributions Contributions from the City of Kansas City, Missouri		
Pension	20,015,327	17,435,993
Health subsidy	1,351,956	1,361,167
Health supplemental	1,587,000	1,595,400
Contributions from members	7,785,106	7,562,958
Total contributions	30,739,389	27,955,518
Total additions	55,127,002	75,467,900
Deductions		
Benefits Paid		
Retirement benefits	41,992,175	40,648,098
Funeral benefits	43,000	80,000
Total benefits paid	42,035,175	40,728,098
Refunds		
Termination	110,691	110,342
Retirement	752,541	421,406
	•	
Administrative Expenses	415,090	386,608
Total deductions	43,313,497	41,646,454
Net Increase in Net Position	11,813,505	33,821,446
Net Position, Beginning of Year	544,056,097	510,234,651
Net Position, End of Year	\$ 555,869,602	\$ 544,056,097

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity - The City of Kansas City, Missouri Firefighters' Pension System (Plan) is a contributory, single-employer, defined benefit pension plan, covering all employees of the Firefighting Division of the City of Kansas City, Missouri (City). The Plan is considered part of the City's financial reporting entity and is included in the City's comprehensive annual financial report as a pension trust fund. Employees should refer to the Plan Agreement for more complete information.

<u>Basis of Accounting</u> - The financial statements are prepared on the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to the Plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when paid in accordance with the terms of each plan.

Investments - Investments are valued at fair value as follows:

Common stock and foreign equities are valued at fair value based on closing prices reported on the composite summary of national securities exchanges or on over-the-counter or bid prices.

Collective trusts, partnerships and short-term investment funds consist primarily of non-marketable investments in various venture capital, corporate finance funds and private partnerships (collectively, Portfolio Funds). These funds are primarily invested in a diversified portfolio of equities, fixed income, real estate and alternative or non-traditional investments. 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 or the Portfolio Fund's proportionate interest in the net assets or net equity of the Portfolio Funds as determined by each Portfolio Fund's general partner or investment manager. The estimated value of such investments is subject to uncertainty and, therefore, may differ from the value that would have been used had a market for such investments existed.

Investment transactions are accounted for on a trade-date basis (date order to buy or sell is executed), and dividend income is recognized on the ex-dividend date. Interest income is recognized on an accrual basis. Realized gains and losses from investments are determined on an average cost basis.

<u>Tax Status</u> - The Retirement Board (Board) believes that the Plan is designed in accordance with applicable sections 401(a) of the Internal Revenue Code (Code) and is currently being operated in compliance with the applicable requirements of the Code.

<u>Administrative Expenses</u> - Plan administrative salary, duplicating, telecommunications and travel expenses are included in the Plan's administrative expenses when incurred. The City provides office space, a portion of administrative and clerical services of the Human Resources Department and accounting services of the Finance Department without any direct charge to the Plan.

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

<u>Use of Estimates</u> - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the plan administrator to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

2. PLAN DESCRIPTION

The Plan is established by City ordinances enacted by the City Council. The Plan is administered by the Board of Trustees of the Firefighters' Pension System of Kansas City, Missouri (Board). The Board is composed of nine members, four of which are the Director of the Fire Department, the Director of Human Resources, the Director of Finance, and the City Treasurer. One is an appointed retired member and the remaining four are elected by the members of the pension system.

Tier I Member - Those employees hired before April 20, 2014.

<u>Tier II Member</u> - Those employees hired on or after April 20, 2014.

At April 30, 2019 and 2018, the Plan's membership consists of the following:

		2019	
	Tier I	Tier II	
	Members	Members	Total
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but			
not yet receiving them	938	2	940
Current employees	930	2	940
Vested	000		600
	633	-	633
Nonvested	123	237	360
Inactive	-	8	8
Total	1,694	247	1,941
		2018	
	Tier I	Tier II	
	Members	Members	Total
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but			
not yet receiving them	004		931
	931	-	
Current employees	931	-	001
Current employees Vested	931 643	- -	643
		- 194	
Vested	643	- 194 1	643
Vested Nonvested	643 144	_	643 338

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

<u>Contributions</u> - Funding is provided by contributions from the Plan's members, the City and earnings on investments. Firefighters contribute 10.55 percent of their base salary and an additional 1 percent to fund the health insurance subsidy. The City's contribution is set by the City Council in conjunction with its approval of the City's annual budget, based on the actuarially determined contribution rate set by the Plan's consulting actuary.

Based upon the May 1, 2017 and 2016 valuations, the actuary recommended City contribution rates of 30.62 percent and 30.05 percent, respectively, of covered payroll. The Board of Trustees recognized a scheduled City contribution rate of 30.62 percent of covered payroll based on this valuation. The City Council contributed 2 percent toward the health insurance subsidiary for 2019 and 2018.

<u>Retirement Benefits</u> - Benefit terms for the Plan are established in the City administrative code and can only be amended by the City Council. The Plan provides retirement, survivor, disability as well as pre-retirement death benefits as noted below:

<u>Tier I Members</u> - Members become vested for retirement benefits after 10 years of service. Members who retire with 25 years or more of creditable service are entitled to an annual pension of 2.5 percent of final average compensation multiplied by the number of years of creditable service, subject to a maximum limit of 80 percent of final compensation as defined in the Plan.

If members terminate prior to retirement and before rendering 10 years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. Such refunds result in the forfeiture of all other benefits under the Plan and are reduced by a service charge if the terminated employee has less than five years of service.

An automatic annual cost-of-living adjustment of 3.0 percent non-compounded, per year is provided in the Plan. The Plan also provides for a minimum monthly payment of \$600 to all current and future service and disability retirees.

Tier II Members - Members become vested for retirement benefits after 10 years of service. Members who retire with 27 years or more of creditable service are entitled to an annual pension of 2.5 percent of final average compensation multiplied by the number of years of creditable service, subject to a maximum limit of 80 percent of final compensation as defined in the Plan.

If members terminate prior to retirement and before rendering 10 years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. Such refunds result in the forfeiture of all other benefits under the Plan and are reduced by a service charge if the terminated employee has less than five years of service.

An annual cost-of-living adjustment, not to exceed 2.5 percent non-compounded, per year is provided in the Plan if the prior year funding ratio is equal to or greater than 80 percent and will be equal to the percentage increase in the prior 12 months of the final national consumer price index. The Plan also provides for a minimum monthly payment of \$600 to all current and future service and disability retirees.

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

<u>Death Benefits</u> - If an active member dies, the following benefits shall be paid:

A funeral benefit of \$2,000 to the spouse or named beneficiary.

To the member's spouse until death, a pension equal to one-half of the member's accrued pension, but not less than 25 percent of the member's average final compensation. The minimum monthly benefit is \$275 to all spouses. Certain benefit provisions have been established for deaths sustained in the performance of a member's duties, or deaths of active members prior to retirement who have achieved 25 years or more of creditable service.

To the member's children, an allowance of \$100 a month each until the attainment of age 18, unless certain conditions are met whereby benefits may continue.

To the member's designated beneficiary or estate, if there is no surviving spouse or qualifying child, any remaining member contributions and interest.

If a retired member dies, the following benefits shall be paid:

To the member's spouse until death, a retirement benefit equal to one-half of the member's normal retirement benefit.

To the member's designated beneficiary or estate, if there is no surviving spouse, any remaining member contributions and interest.

<u>Disability Benefits</u> - Disability benefits are available for members and are based on an average final compensation. The Plan provides for a minimum monthly payment of \$600 to all current and future disability retirees.

<u>Health Care Subsidy</u> - Effective May 1, 1991, the Plan established a subsidy fund (subsidy). The City and active firefighters each contribute 2 percent and 1 percent of salary, respectively. Prior to April 1 of each year, the Board of Trustees of the Plan establishes the dollar value of the monthly subsidy. The monthly subsidy for the years ended April 30, 2019 and 2018 were \$470 and \$450, respectively.

The subsidy is invested in both fixed income and equity securities and is stated at fair value. Investments totaled \$3,603,992 and \$3,662,860 at April 30, 2019 and 2018, respectively.

The actuarial valuations do not consider the subsidy's fiduciary net position, which at April 30, 2019 and 2018 were \$3,603,992 and \$3,662,860, respectively. According to the City ordinance that established the subsidy, if the fiduciary net position available for the subsidy is zero, the subsidy will no longer be available. For the years ended April 30, 2019 and 2018, City contributions for the subsidy were \$2,938,956 and \$2,956,567, respectively, and employee contributions were \$675,978 and \$680,583, respectively.

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS

The City administrative code and ordinances passed by the City Council provide that Plan investments may include, but are not limited to, obligations of the U.S. government, state of Missouri and municipal corporations, including school districts, corporate bonds, real estate mortgages and common and preferred stocks. The Plan purchases investments from Securities and Exchange Commission registered securities broker-dealers and banks through its investment managers. Investments in U.S. Treasury obligations are held at the Federal Reserve Bank through the customer account of a financial institution.

<u>Investment Policy</u> - The asset type and classes, target allocation and ranges that have been approved by the Board are shown below. All percentages are based on fair values. The Board has authorized Plan staff, with the guidance from the investment consultant, to rebalance the portfolio in accordance with the strategy guidelines below.

Asset Type and Class	Range	Target
Large Cap Equity	10% - 20%	15%
Small Cap Equity	5% - 15%	10%
Non-U.S. Equity	10% - 20%	15%
Long/Short Equity	5% - 15%	10%
Global Equity	5% - 15%	10%
Fixed Income	25% - 35%	30%
Real Estate	5% - 15%	10%

<u>Securities Lending Transactions</u> - City ordinances 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 The Northern Trust Company as its third-party lending agent to lend domestic equity and debt securities for cash collateral of not less than 102 percent of the fair value and international debt and equity securities of not less than 105 percent of the fair value. At April 30, 2019 and 2018, management believes the Plan has no credit risk exposure to borrowers because the amounts the Plan owes the borrowers exceed the amounts the borrowers owe the Plan. 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. All securities loaned under securities lending agreements at April 30, 2019 and 2018 are investments in domestic equity securities.

	2019	_	2018
Fair value of securities loaned	\$ 23,254,256		\$ 29,650,278
Fair value of cash collateral received from borrowers	\$ 23,834,490		\$ 30,466,536

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

All security loans 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.

<u>Custodial Credit Risk</u> - 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 investments or collateral securities that are in the possession of an outside party. Consistent with the Plan's securities lending policy, \$23,254,256 and \$29,650,278 was held by the counterparty that was acting as the Plan's agent in securities lending transactions at April 30, 2019 and 2018, respectively.

<u>Investment Concentrations</u> - The following presents investments that represent 5 percent or more of the fiduciary net position of the Plan, as of April 30, 2019:

Investment	Fair Value
Pioneer Multi-Sector Fixed Income Trust	\$ 68,197,881
NT Common S&P 500 Index Fund - Non-Lending	62,463,424
Acadian Global Equity Fund	54,632,104
Georgetown Diversified Fund, Ltd.	52,599,028
Blackrock Strategic Income Opportunities Portfolio	47,223,268
Marathon-London International Fund	45,462,264
Franklin Templeton Global Multisector Plus Trust	31,071,196
JPMCB Special Situation Property Fund	30,608,117

The following presents investments that represent 5 percent or more of the fiduciary net position of the Plan, as of April 30, 2018:

Investment	Fair Value
Northern Trust Collective Funds	\$ 72,481,834
Acadian Global Equity Fund	61,769,650
Pioneer Multi-Sector Fixed Income Trust	60,261,731
Rock Creek Georgetown LTD CL	51,026,560
Marathon-London International Fund	46,852,545
Blackrock Strategic Income	40,999,281
Franklin Templeton Global Multisector Plus Trust	30,829,994
JPMCB Special Situation Property Fund	28,937,229

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

<u>Credit Risk</u> - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the Plan. As of April 30, 2019 and 2018, the Plan's fixed income assets that are not government guaranteed represented 100 percent of the fixed income portfolio. The Plan has not established a policy with regard to credit risk. The following tables summarize the Plan's fixed income portfolio exposure levels and credit qualities at April 30, 2019 and 2018:

Average Credit Quality and Exposure Levels of Nongovernment Guaranteed Securities

Fixed Income Security Type	Fair Value April 30, 2019	Percentage of all Fixed Income Assets	Weighted Average Credit Quality
Money market funds Collective trusts - fixed income	\$ 10,405,729 161,203,304	6% 94%	Not rated Not rated
	\$ 171,609,033	100%	
		Percentage of	Weighted
Fixed Income Security Type	Fair Value April 30, 2018	all Fixed Income Assets	Average Credit Quality
Fixed Income Security Type Money market funds Collective trusts - fixed income			•

Each portfolio is managed in accordance with operational guidelines that are specific as to permissible credit quality ranges, exposure levels within individual quality tiers and the average credit quality of the overall portfolios.

<u>Interest Rate Risk</u> - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Plan has not established a policy with regard to interest rate risk. The Plan actually owns an interest in the underlying assets of the collective trusts and the money market funds and the unit values are based on the fair value of their underlying assets.

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

Effective Duration of Fixed Income by Security Type

Fixed Income Security Type	Fair Value April 30, 2019	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
Money market funds** Collective trusts - fixed income	\$ 10,405,729 161,203,304	6% 94%	** 2.68
	\$ 171,609,033	100%	
Fixed Income Security Type	Fair Value April 30, 2018	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
Money market funds** Collective trusts - fixed income	\$ 6,902,566 146,060,263	5% 95%	** 13.23
	\$ 152,962,829	100%	

^{**}The Plan actually owns an interest in the underlying assets of the money market funds and the unit values are based on the fair value of their underlying assets. The money market funds do not have a maturity date, even though their underlying assets do have maturity dates of less than one year.

<u>Foreign Currency Risk</u> - Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The Plan's currency risk exposure, or exchange rate risk, primarily reside within the Plan's foreign debt obligations and foreign equity holdings through the Plan's various asset managers. The Plan's policy for each specific portfolio does not place limits on the amount of foreign exposure that can be held by the individual asset managers.

<u>Annual Money-Weighted Rate of Return</u> - For the years ended April 30, 2019 and 2018, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was 4.62 and 9.53 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTES TO THE FINANCIAL STATEMENTS

4. NET PENSION LIABILITY

The components of the net pension liability of the City at April 30, 2019 and 2018 were as follows:

	2019	2018
Total pension liability	\$ 787,888,848	\$ 756,871,994
Plan fiduciary net position	(552,265,610)	(540,393,237)
City's net pension liability	\$ 235,623,238	\$ 216,478,757
Fiduciary net position as a % of total pension liability	70.09%	71.40%

5. ACTUARIAL METHODS AND ASSUMPTIONS

An actuary from Cheiron determines the total pension liability. The total pension liability as of April 30, 2019 and 2018 was determined based on an actuarial valuation prepared as of May 1, 2018 and 2017, respectively, rolled forward one year, using the following actuarial assumptions:

Price inflation Salary increases, including wage inflation Long-term investment rate of return, net of plan investment expense, including inflation Mortality tables:	2.50% 3.0% to 8.0% 7.25%
Healthy	RP-2000 Combined Mortality Table set forward
Disabled	one year for males and females RP-2000 Combined Mortality Table set forward

The actuarial assumptions used in the May 1, 2018 and 2017 valuations were based on the results of the most recent actuarial expense study for the period of May 1, 2011 to April 30, 2016. The actuarial experience study is dated February 9, 2017.

three years for males and females

For purposes of calculating the total pension liability, future ad hoc COLAs of 3.0 percent (simple COLA) were assumed to be granted in all future years, for Tier I Members. For Tier II Members, COLA will only be payable if the prior year's funding ratio is greater than or equal to 80 percent and will be equal to the percentage increase in the consumer price index, up to a maximum of 2.50 percent, payable at the 27th anniversary date of hire.

Long-Term Expected Real 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

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

return by the target asset allocation percentage and by adding expected inflation. Bestestimates arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of April 30, 2019 and 2018 are summarized in the following table:

	April 30, 2018		April 30	0, 2019
Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Long-Term Expected Real Rate of Return
Large Cap Equity	15%	8.5%	15%	8.5%
Small Cap Equity	10%	9.8%	10%	9.8%
Non-U.S. Equity	15%	9.7%	15%	9.7%
Long/Short Equity	10%	7.3%	10%	7.3%
Global Equity	10%	9.3%	10%	9.3%
Fixed Income	30%	5.2%	30%	5.2%
Real Estate	10%	0.1%	10%	7.5%

<u>Discount Rate</u> - The discount rate used to measure the total pension liability was 7.25 percent as of April 30, 2019 and 2018. In the professional judgment of the Plan's actuary, the funding policy of the Plan will result in the pension plan's projected Fiduciary Net Position being greater than or equal to the benefit payments projected for each future period. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments.

<u>Sensitivity Analysis</u> - The following sensitivity analysis presents the net pension liability of the City, calculated using the discount rate 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 or one percentage point higher than the current rate as of April 30, 2019 and 2018:

		2019	
	1%	Current	1%
	Decrease	Discount Rate	Increase
	(6.25%)	(7.25%)	(8.25%)
Total pension liability	\$ 892,509,562	\$ 787,888,848	\$ 701,686,686
Fiduciary net position	(552,265,610)	(552,265,610)	(552,265,610)
Net pension liability	\$ 340,243,952	\$ 235,623,238	\$ 149,421,076
		2018	
	1%	Current	1%
	Decrease	Discount Rate	Increase
	(6.25%)	(7.25%)	(8.25%)
Total pension liability	\$ 857,446,344	\$ 756,871,994	\$ 674,002,538
Fiduciary net position	(540,393,237)	(540,393,237)	(540,393,237)
Net pension liability	\$ 317,053,107	\$ 216,478,757	\$ 133,609,301

NOTES TO THE FINANCIAL STATEMENTS

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 that such changes could materially affect the amounts reported in the statements of fiduciary net position.

Plan contributions are made and the total pension liability 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.

7. 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

Recurring Measurements - The following tables present 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, 2019 and 2018:

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

			April 30, 2019	
	Total Fair Value	Level 1	Level 2	Level 3
Investments by fair value level				
Domestic common stock	\$ 76,615,337	\$ 76,615,337	\$ -	\$ -
Foreign equities	1,992,406	1,992,406	-	-
Collective trusts - equities	62,463,424	-	62,463,424	-
Collective trusts - fixed income	14,710,960	-	14,710,960	-
Short-term investment funds	10,405,729	10,405,729		<u> </u>
Total investments measured				
at fair value	166,187,856	\$ 89,013,472	\$ 77,174,384	
Investments measured at net asset value (NAV) (A)				
Collective trusts - fixed income	\$ 146,492,344			
Collective trusts - equities	120,300,901			
Partnerships	14,980,288			
Collective trusts - real estate	53,825,953			
Collective trusts - hedge funds	52,599,029			
Total investments measured at				
net asset value (NAV)	388,198,515			
Total investments measured				
at fair value	\$ 554,386,371			

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

			Apr	il 30, 2018	
	Total				
	Fair Value	Level 1		Level 2	Level 3
Investments by fair value level					
Domestic common stock	\$ 83,710,720	\$ 83,710,720	\$	-	\$ -
Foreign equities	2,701,980	2,701,980		-	-
Collective trusts - equities	58,512,577	-		58,512,577	-
Collective trusts - fixed income	13,969,257	-		13,969,257	-
Short-term investment funds	6,902,566	6,902,566			
Total investments measured at fair value	165,797,100	\$ 93,315,266	\$	72,481,834	\$

Investments measured at net asset value (NAV) (A)

Collective trusts - fixed income	\$ 132,091,006
Collective trusts - equities	130,388,003
Partnerships	14,293,589
Collective trusts - real estate	49,839,613
Collective trusts - hedge funds	51,026,560
Total investments measured at	
net asset value (NAV)	377,638,771
Total investments measured at	
fair value	\$ 543,435,871
Collective trusts - hedge funds Total investments measured at net asset value (NAV) Total investments measured at	\$ 51,026,560 377,638,771

(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 statements 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. Certain collective trusts 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.

The fair value estimates presented herein are based on pertinent information available to management as of April 30, 2019 and 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.

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

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.

			April 30, 2019 Redemption Frequency	
		Unfunded	(If Currently	
	Fair Value	Commitments	Eligible)	Notice Period
Collective trusts - fixed income (A)	\$ 146,492,344	\$ -	Daily	1 Business Day
Collective trusts - equity (B)	120,300,901	-	Daily/Monthly	3-30 Days
Partnerships (C)	14,980,288	-	Monthly	15 Days
			Once per	45 days prior to
Collective trusts - real estate (D)	30,608,117	-	Quarter	quarter end
Collective trusts - real estate (D)	23,217,836	-	Daily	1 Business Day
Collective trusts - hedge funds (E)	52,599,029	-	Quarterly	90 Days
Total investments measured at NAV	\$ 388,198,515			
		Unfunded	April 30, 2018 Redemption Frequency (If Currently	
	Fair Value	Unfunded Commitments	Redemption Frequency	Notice Period
Collective trusts - fixed income (A)	Fair Value \$ 132,091,006		Redemption Frequency (If Currently	Notice Period 1 Business Day
Collective trusts - fixed income (A) Collective trusts - equity (B)		Commitments	Redemption Frequency (If Currently Eligible)	
· ,	\$ 132,091,006	Commitments	Redemption Frequency (If Currently Eligible) Daily	1 Business Day
Collective trusts - equity (B)	\$ 132,091,006 130,388,003	Commitments	Redemption Frequency (If Currently Eligible) Daily Daily/Monthly	1 Business Day 3-30 Days
Collective trusts - equity (B)	\$ 132,091,006 130,388,003	Commitments	Redemption Frequency (If Currently Eligible) Daily Daily/Monthly Monthly	1 Business Day 3-30 Days 15 Days
Collective trusts - equity (B) Partnerships (C)	\$ 132,091,006 130,388,003 14,293,589	Commitments	Redemption Frequency (If Currently Eligible) Daily Daily/Monthly Monthly Once per	1 Business Day 3-30 Days 15 Days 45 days prior to
Collective trusts - equity (B) Partnerships (C) Collective trusts - real estate (D)	\$ 132,091,006 130,388,003 14,293,589 28,938,229	Commitments	Redemption Frequency (If Currently Eligible) Daily Daily/Monthly Monthly Once per Quarter	1 Business Day 3-30 Days 15 Days 45 days prior to quarter end

- (A) This category is a fixed income fund that is traded daily. The fund includes U.S. and Non-U.S. government, securitized and corporate bonds, and currencies across the entire quality spectrum.
- (B) This category includes collective trust funds. Each invests in equity securities both on the national and international markets listed on public market exchanges.

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

- (C) This category is a limited partnership. Investments are open-ended Global Core/Core Plus infrastructure investments.
- (D) This category is a common collective trust redeemable quarterly with a 45 day and 1 day notice period, respectively. Investments are open-ended U.S. Commercial real estate.
- (E) This category is a limited partnership domiciled in the Cayman Islands. Investments provide exposure to more than 60 "hedge fund risk premiums" across nine broad strategy groups (event driven, convertible arbitrage, equity market neutral, dedicated short bias, long/short equity, emerging markets, global macro, managed futures and fixed income relative value) with a dynamic and disciplined investment process that aims to provide risk-balanced, long-term exposure to the underlying strategies. The result is a high risk-adjusted expected return stream with low correlation to traditional asset classes.

8. RELATED PARTY TRANSACTIONS

The Plan reimburses the City for the cost of providing financial and other services. Amounts charged are expensed during the period incurred.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last Ten Fiscal Years

	2019	2018	2017	2016	2015
Service cost	\$ 15,499,462	\$ 15,135,242	\$ 12,886,414	\$ 13,124,510	\$ 13,137,551
Interest on total pension liability	54,607,607	52,444,755	46,425,259	44,922,139	43,442,934
Differences between expected and actual experience	78,742	6,556,970	(1,411,774)	(1,569,538)	•
Changes of assumptions	•	•	73,346,941	•	•
Benefit payments, including member refunds	(39,168,957)	(37,245,710)	(36,922,344)	(35,808,161)	(34,761,116)
Net change in total pension liability	31,016,854	36,891,257	94,324,496	20,668,950	21,819,369
Total pension liability - beginning	756,871,994	719,980,737	625,656,241	604,987,291	583,167,922
Total pension liability - ending	787,888,848	756,871,994	719,980,737	625,656,241	604,987,291
Fiduciary net position					
Net investment income (loss)	24,331,965	47,009,524	58,651,918	(2,690,067)	32,672,401
City contributions	20,015,327	17,435,993	16,754,798	16,631,844	16,258,533
Member contributions	7,109,128	6,882,375	6,534,349	6,173,154	6,258,482
Benefits paid	(38,305,725)	(36,713,962)	(35,905,329)	(33,876,851)	(32,536,750)
Refunds of contributions	(863,232)	(531,748)	(1,017,015)	(1,931,310)	(1,956,321)
Administrative expenses	(415,090)	(386,608)	(345,060)	(300,479)	(264,100)
Net change in fiduciary net position	11,872,373	33,695,574	44,673,661	(20,993,709)	20,432,245
Fiduciary net position - beginning	540,393,237	506,697,663	462,024,002	483,017,711	462,585,466
Fiduciary net position - ending	552,265,610	540,393,237	506,697,663	462,024,002	483,017,711
Net pension liability, ending	\$ 235,623,238	\$ 216,478,757	\$ 213,283,074	\$ 163,632,239	\$ 121,969,580
Fiduciary net position as a percentage of total pension					
liability		71.40%	%86.02	73.85%	79.84%
Covered payroll	\$ 66,264,508	\$ 64,492,241	\$ 57,625,619	\$ 59,294,555	\$ 59,410,476
Net pension liability as a percentage of covered payroll	355.58%	335.67%	370.12%	275.97%	205.30%

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

SCHEDULE OF CITY CONTRIBUTIONS

Last Ten Fiscal Years

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined employer contribution	\$ 19,747,524	\$ 19,747,524 \$ 17,316,499 \$ 16,726,994	\$ 16,726,994	\$ 16,581,464	\$ 16,162,139	\$ 16,581,464 \$ 16,162,139 \$ 16,182,139	\$ 15,400,040	\$ 14,045,886	\$ 12,827,773	\$ 17,123,835
Actual City contributions	20,015,327	17,435,993	16,754,798	16,631,844	16,258,533	11,795,883	13,120,169	11,603,818	10,297,638	10,465,322
Annual contribution deficiency (excess) \$ (267,803) \$ (119,494) \$ (27,804) \$ (50,380) \$ (96,394) \$ 4,386,256 \$ 2,279,871 \$ 2,442,068 \$ 2,530,135 \$ 6,658,513	\$ (267,803)	\$ (119,494)	\$ (27,804)	\$ (50,380)	\$ (96,394)	\$ 4,386,256	\$ 2,279,871	\$ 2,442,068	\$ 2,530,135	\$ 6,658,513
Covered payroll	\$ 66,264,508	\$ 64,492,241	\$ 57,625,619	\$ 59,294,555	\$ 59,410,476	\$ 59,410,476 \$ 58,356,072	\$ 60,062,558	\$ 51,983,293	\$ 51,934,305	\$ 53,612,509
Actual contributions as a percentage of covered payroll	30.21%	27.04%	29.08%	28.05%	27.37%	20.21%	21.84%	22.32%	19.83%	19.52%

SCHEDULE OF INVESTMENT RETURNS

Last Ten Fiscal Years

Fiscal Year Ending April 30	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return,	4.62%	9.53%	12.89%	-1.50%	7.19%	10.85%
net of investment expense						

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

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

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

5/01/2018 Valuation

No changes to benefit or funding terms.

5/01/2017 Valuation

• No changes to benefit or funding terms.

5/01/2016 Valuation

No changes to benefit or funding terms.

5/01/2015 Valuation

No changes to benefit or funding terms.

5/01/2014 Valuation

• Effective April 20, 2014, member contribution rates increased by 1.00 percent and Tier II have been added to the Plan.

5/01/2011 Valuation

- According to Ordinance No. 100606, members can now designate at retirement that a qualified domestic partner receive death benefits.
- Changes in actuarial assumptions and methods The following changes to the Plan provisions were reflected in the valuations as listed below:

5/01/2018 Valuation

No changes in actuarial assumptions or methods.

5/01/2017 Valuation

- All assumptions have been revised based on the results of the experience study conducted for the period May 1, 2011 to April 30, 2016.
- Administrative expense assumption was increased from 0.35 percent of payroll to 0.37 percent of payroll.

5/01/2016 Valuation

No changes in actuarial assumptions or methods.

5/01/2015 Valuation

• An administrative expense assumption of 0.35 percent of payroll was added. Retirement rates added for Tier II.

5/01/2014 Valuation

The investment return assumption decreased from 7.75 percent to 7.50 percent.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

5/01/2012 Valuation

- An actuarial experience study was conducted and resulted to changes in the following assumptions:
 - o Inflation
 - o Real wage growth
 - Termination rates
 - Retirement rates
 - Disability rates
 - Duty related disability percentage
 - o Spouse age difference
 - Marriage assumption
 - Health mortality
 - Disabled mortality

5/01/2009 Valuation

- The minimum asset corridor, used in the asset smoothing method, changed from 85 percent to 80 percent and the maximum asset corridor changed from 110 percent to 120 percent.
- The Amortization of UAL changed from a 20-year fixed level percent of pay amortization method for changes to the UAL for the years on and after May 1, 2009 to a 30-year fixed level percent of pay amortization method for changes to the UAL for the years on and after May 1, 2009.

5/01/2008 Valuation

- The minimum asset corridor, used in the asset smoothing method, changed from 90 percent to 85 percent.
- The Amortization of UAL changed from a 30-year rolling level percent of pay amortization method to a 30-year fixed level percent of pay amortization of the May 1, 2008 UAL and a 20year fixed level percent of pay amortization method for changes to the UAL for the years on and after May 1, 2009.
- The investment return assumption was changed from 8.00 percent to 7.75 percent.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The following actuarial methods and assumptions were used to determine the actuarially determined employer contribution reported in the most recent fiscal year, which was based on the May 1, 2017 actuarial valuation:

Valuation Date May 1, 2017

Timing Actuarially determined contribution rates are calculated based on

the actuarial valuation one year prior to the beginning of the plan

year.

Key Methods and Assumptions Used to Determine Contribution Rates:

Asset valuation method 5-year smoothed market. 80% / 120% corridor around market value

Amortization method 30-year layered amortization as a level percent of pay for changes to

the unfunded actuarial liability on or after 5/1/2008.

Discount rate 7.25%

Amortization growth rate 3.00%

Price inflation 2.50%

Salary increases Ranges from 8.0% to 3.0%

Cost-of-living adjustments Tier I: 3.00% simple

Tier II: 2.50% simple payable at 27th anniversary of date of hire if

the prior year's funding ratio is greater than or equal to 80%

Mortality Healthy: RP-2000 Combined Mortality Table set forward one year for

males and females

Disabled: RP-2000 Combined Mortality Table set forward three

years for males and females

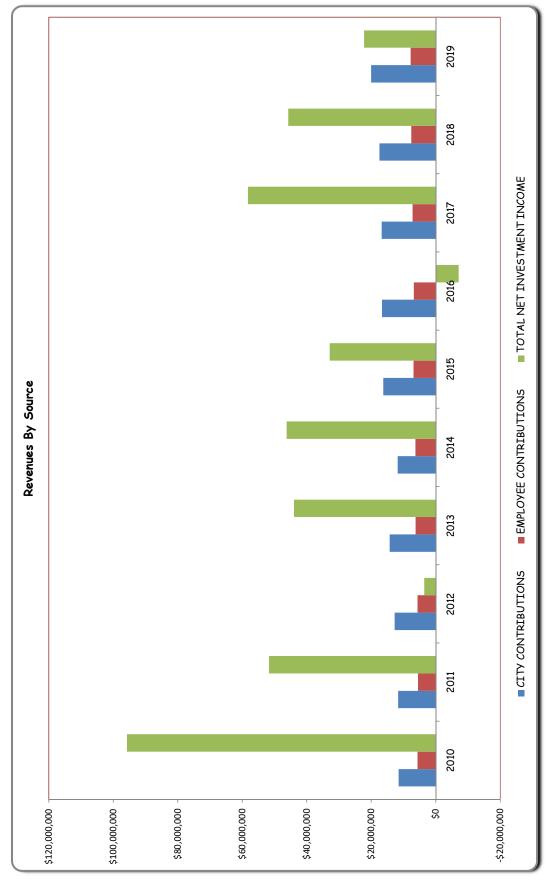
CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM HISTORICAL REVIEW REVENUES-EXPENSES-NET POSITION April 30, 2019

	2019	2018	2017	2016	2015
Additions Contributions					
Employer Contributions Member Contributions	\$22,954,283 7,785,106	\$20,392,560 7,562,958	\$19,650,554 7,150,987	\$19,270,269 6,769,093	\$18,998,552 6,851,791
Total Contributions	30,739,389	27,955,518	26,801,541	26,039,362	25,850,343
Investment Income Realized Gain (Loss)	26,975,210	50,013,651	61,300,906	(4,313,126)	35,698,532
Less Investment Expense	(2,587,597)	(2,501,269)	(2,363,443)	(3,016,135)	(2,848,171)
Total Net Investment Income	24,387,613	47,512,382	58,937,463	(7,329,261)	32,850,361
Total Additions	55,127,002	75,467,900	85,739,004	18,710,101	58,700,704
Deductions Benefit Payments					
Annuities	41,992,175	40,648,098	39,134,674	37,420,441	35,680,785
Funeral	43,000	80,000	34,000	28,000	19,000
Refunds					
Termination	110,691	110,342	41,992	136,626	21,215
Retirement	752,541	421,406	975,023	1,794,684	1,935,106
Total Benefit Payments	42,898,407	41,259,846	40,185,689	39,379,751	37,656,106
Administrative Expenses	415,090	386,608	345,060	300,479	264,100
Total Deductions	43,313,497	41,646,454	40,530,749	39,680,230	37,920,206
Net Increase (Decrease) in Net Position	11,813,505	33,821,446	45,208,255	(20, 970, 129)	20,780,498
Net Position - Beginning of Year Net Position - End of Year	\$555,869,602	\$10,234,651 \$544,056,097	465,026,396 \$510,234,651	485,996,525 \$465,026,396	465,216,027 \$485,996,525
Contributions - % of Payroll Employer Member	30.62% 10.55%	30.05% 10.55%	28.21% 10.55%	27.91% 10.55%	27.73% 10.55%

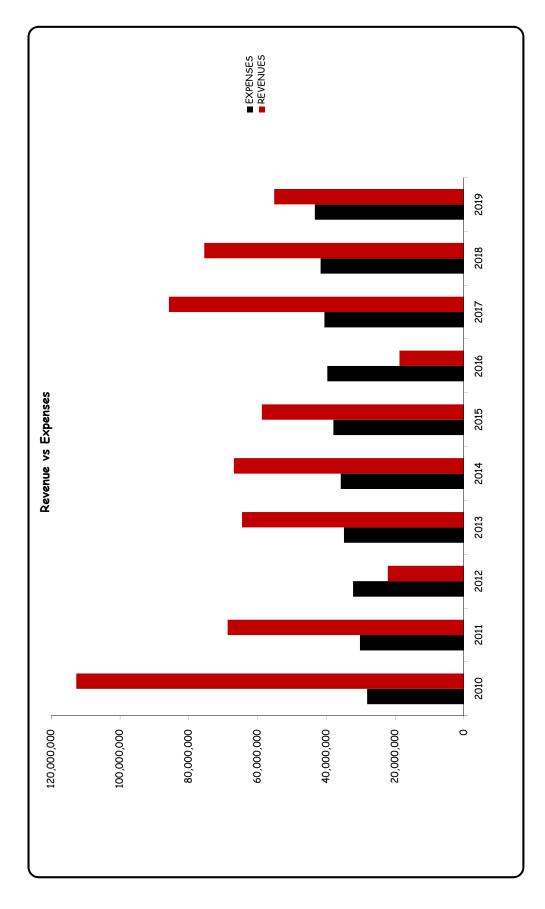
CITY of KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM
HISTORICAL REVIEW
REVENUES-EXPENSES-NET POSITION
April 30, 2019

	2014	2013	2012	2011	2010
Additions Contributions Employer Contributions Member Contributions	\$14,526,088 6,283,355	\$14,244,943 6,206,339	\$12,748,990 5,648,528	\$11,661,980 5,496,669	\$11,504,477 5,622,465
Total Contributions	20,809,443	20,451,282	18,397,518	17,158,649	17,126,942
Investment Income Realized Gain (Loss)	48,656,883	46,137,618	5,552,313	53,483,241	97,440,997
Less Investment Expense	(2,606,116)	(2,116,513)	(1,853,940)	(1,962,768)	(1,881,234)
Total Net Investment Income	46,050,767	44,021,105	3,698,373	51,520,473	95,559,763
Total Additions	66,860,210	64,472,387	22,095,891	68,679,122	112,686,705
Deductions Benefit Payments					
Annuities	34,109,649	33,193,766	30,888,511	28,941,927	27,191,405
Funeral	32,000	39,000	34,000	26,000	20,000
Refunds					
Termination	268,548	44,567	124,955	250,303	87,204
Retirement	1,155,167	1,421,776	988,302	854,939	708,361
Total Benefit Payments	35,565,364	34,699,109	32,035,768	30,103,169	28,006,970
Administrative Expenses	221,351	135,984	159,709	109,573	86,363
Total Deductions	35,786,715	34,835,093	32,195,477	30,212,742	28,093,333
Net Increase (Decrease) in Net Position	31,073,495	29,637,294	(10,099,586)	38,466,380	84,593,372
Net Position - Beginning of Year Net Position - End of Year	434,142,532 \$465,216,027	404,505,238 \$434,142,532	414,604,824 \$404,505,238	376,138,444 \$414,604,824	291,545,072 \$376,138,444
Contributions - % of Payroll Employer Member	19.60%	19.60% 9.55%	19.60% 9.55%	19.60% 9.55%	19.60% 9.55%

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM FINANCIAL REVIEW April 30, 2019



CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM FINANCIAL REVIEW April 30, 2019

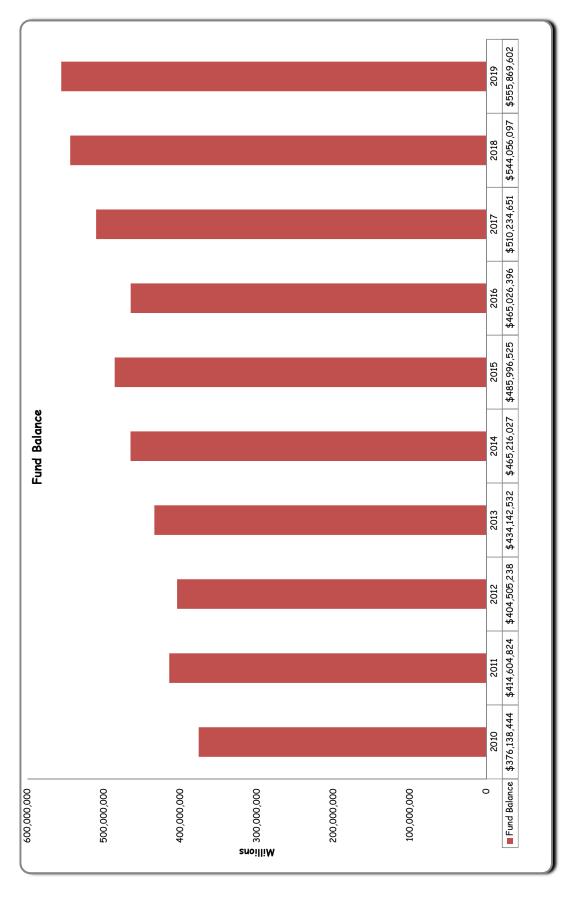


CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM FINANCIAL REVIEW April 30, 2019

ALLOCATION OF EXPENSES

EXPENSES BY TYPE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADMINISTRATIVE EXPENSES	\$86,363	\$109,573	\$159,709	\$135,984	\$221,351	\$264,100	\$300,479	\$345,060	\$386,608	\$415,090
REFUNDS OF EMPLOYEE										
CONTRIBUTIONS	\$795,565	\$1,105,242	\$1,113,257	\$1,466,343	\$1,423,715	\$1,956,321	\$1,931,310	\$1,017,015	\$531,748	\$863,232
RETIREMENT BENEFITS	\$27,211,405	\$27,211,405 \$28,997,927 \$30,922,511 \$33,232,766 \$34,141,649	\$30,922,511	\$33,232,766	\$34,141,649	\$35,699,785	\$37,448,441	\$39,168,674	\$40,728,098	\$42,035,175
GRAND TOTAL	\$28,093,333	\$30,212,742	\$32,195,477	\$34,835,093	\$35,786,715	\$37,920,206	\$39,680,230	\$28,093,333 \$30,212,742 \$32,195,477 \$34,835,093 \$35,786,715 \$37,920,206 \$39,680,230 \$40,530,749 \$41,646,454 \$43,313,497	\$41,646,454	\$43,313,497

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM FINANCIAL REVIEW April 30, 2019



MEMBERSHIP SECTION

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM MEMBERSHIP ACTIVITY April 30, 2019

VOLUNTARY RETIREMENTS

NAME DATE of RETIREMENT THURLO, DAVID F. 12/21/2018

VOLUNTARY RETIREMENTS DUE TO DISABILITY

NAME	DATE of RETIREMENT
CALLAHAN, JAMES K.	12/27/2018
CASCONE, MICHAEL J.	07/31/2018
CRICHLOW, JASON A.	05/28/2018
FIORELLO, WILLIAM A.	12/07/2018
FISHER, BRAD A.	06/23/2018
GARRETT, JR., JAMES T.	03/23/2019
HARRIS, MICHAEL J.	12/22/2018
JONES, PAUL W.	09/01/2018
LEWEY, RICHARD D.	12/25/2018
LOCKE, JOHN A.	09/28/2018
MARRA, MICHAEL T.	12/23/2018
PETERSEN, TROY T	03/29/2019

DUTY DISABILITY RETIREMENTS

NAME	DATE of RETIREMENT
DOWD, MATTHEW T.	03/01/2019
HAWKINS, JOSHUA D.	06/01/2018
HORNING, RANDY A.	10/01/2018
JONES, JUSTIN R.	02/01/2019
KATAMURA, ALFREDO L.	04/01/2019
LOPEZ, JR., JOSEPH A.	08/01/2018
OLDENKAMP, KEVIN A.	01/01/2019
OTTO, TIMOTHY A.	01/01/2019

DEFERRED ANNUITY

NAME	DATE of RETIREMENT
FRAIZER, BRENT J.	08/24/2018
JOHNSON, JEFFREY S.	06/16/2018
SAMUELS, JAMES A.	10/08/2018

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM MEMBERSHIP ACTIVITY April 30, 2019

IN MEMORIAM ACTIVE DEATHS

NAME SERRONE, SR., PETER A. **DATE of DEATH** 07/02/2018

IN MEMORIAM ANNUITANT DEATHS

NAME	DATE of DEATH
BRIDGES, DAVID L.	09/10/2018
CAPPER, JR., HARRY C.	03/22/2019
FISHER, CHARLES M.	11/27/2018
FORE, HENRY J.	08/18/2018
FOUTTS, HARVEY S.	07/10/2018
FULLER, CHARLES T.	06/18/2018
GABERT, CHARLES	02/27/2019
GARCIA, JOHN D.	06/06/2018
HALL, JAMES W.	07/31/2018
LENTZ, WAYNE L.	03/19/2019
MISTRETTA, MARION	07/15/2018
NADING, JR., BILLY E.	11/24/2018
SMITH, DONALD D.	01/22/2019
THOMAS, LOWELL C.	07/18/2018
VAZZANO, SALVATORE D.	06/22/2018
WENDEL, ROBERT C.	09/22/2018
WILLIAMS, HOWELL G.	08/09/2018
WILSON, ARTHUR	11/13/2018
WINKLER, PETER F.	06/18/2018

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM MEMBERSHIP ACTIVITY April 30, 2019

SURVIVING SPOUSE ANNUITIES

NAME	DATE of ANNUITY
CAPPER, ETTALOU E.	04/01/2019
FISHER, LAURA BETH	12/01/2018
FOUTTS, DELORES A.	08/01/2018
FULLER, NORMA C.	07/01/2018
GABERT, HELEN L.	03/01/2019
NADING, GEORGIA M.	12/01/2018
SERRONE, ALAINA L.	08/01/2018
VAZZANO, GLENNA E.	07/01/2018
WILLIAMS, DELORIS L.	09/01/2018

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM CURRENT EMPLOYEE REQUEST FOR INFORMATION

AME:		EMPLID:
TATION:	SHIFT:	PHONE #:
Check if y	ou wish to pick up information	in the Retirement Division, 10 th floor of City Hall.
	CHECK EACH CATEGO	RY of INFORMATION REQUESTED
B Retirem	ent Estimate	Single Married
Employee's	Birthdate:	Spouse's Birthdate:
Estimated	/Actual Retirement Date:	
<u> </u>	GENERAL RETIR	REMENT INFORMATION
Deferred Pe	ension (SEPARATING WITH MOI	RE THAN 10 YEARS of SERVICE)
Scheduled	Date of Separation:	(Also complete Section B above)
Actual Retir	rement (Call 816-513-1928 to 1	make an appointment at least one month prior to your
retirement	date; also complete Section B	above)
Retirement	System Overview	
Current Am	ount of Employee Contributions	
Repurchase	of Creditable Service (Period to	be Repurchased)
Other		
) Refund/	Rollover of Employee Contributi	ions
Birthdate:		Phone #:
Scheduled	Date of Separation:	
Mailing Ad	dress:	
Sionatura:		
Signature:		

Fax: 816-513-1280

Email: KCMO.Retirement@kcmo.org

CITY of KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM RETIRED EMPLOYEE CHANGE of INFORMATION

DATE SUBMITTED:			
NAME:			
PHONE #:			
		and/or PHONE NUMBER	
	C. I. HOL OF ADDRESS C	AINS OF THOME HOMBEN	
Old Phone #:		New Phone #:	
Old Address:		New Address:	
CHANGE of BENEF	ICIARY (BENEFICIARY	MUST BE AT LEAST 18 YEARS OF AGE)	
From:		To:	
SSN:		SSN:	
Address:		Address:	
	CHANGE of INSU	RANCE COVERAGE	
COMPANY:			
Medicare (Enclose Copy of 1	Medicare Card)		
 Cancel Coverage	Retiree	Spouse	
Retiree	Spouse	Dependent	
Effective Date:		_	
	CANCEL DE	DUCTIONS	
Cancel PFIA		ues Effective Date	
	<u> </u>	ON of PENSION BENEFIT	
SEND TO:	<u> </u>		
001100			
Signature:			
Return this form to the Retireme	nt Division by:		

Fax: 816-513-1280

Email: KCMO.Retirement@kcmo.org

Mail: 414 East 12th St, 10th Floor, Kansas City, MO 64106