# Firefighters' Pension System

# **ANNUAL REPORT 2022**





### **Human Resources Department**



Retirement Division

The Firefighters' Pension System

10<sup>th</sup> Floor City Hall 414 East 12<sup>th</sup> Street Kansas City, Missouri 64106

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 2022 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, 2022. The System's fiscal year 2022 operating results and financial position are presented in conformity with generally accepted accounting principles.

(816) 513-1928

Fax: (816) 513-1280

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 five 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 Investment Section includes the investment overview, summary and results. The Financial Section includes the Independent Auditor's Report and historical financial highlights. The Membership Section details pensions awarded and member deaths during the fiscal year.

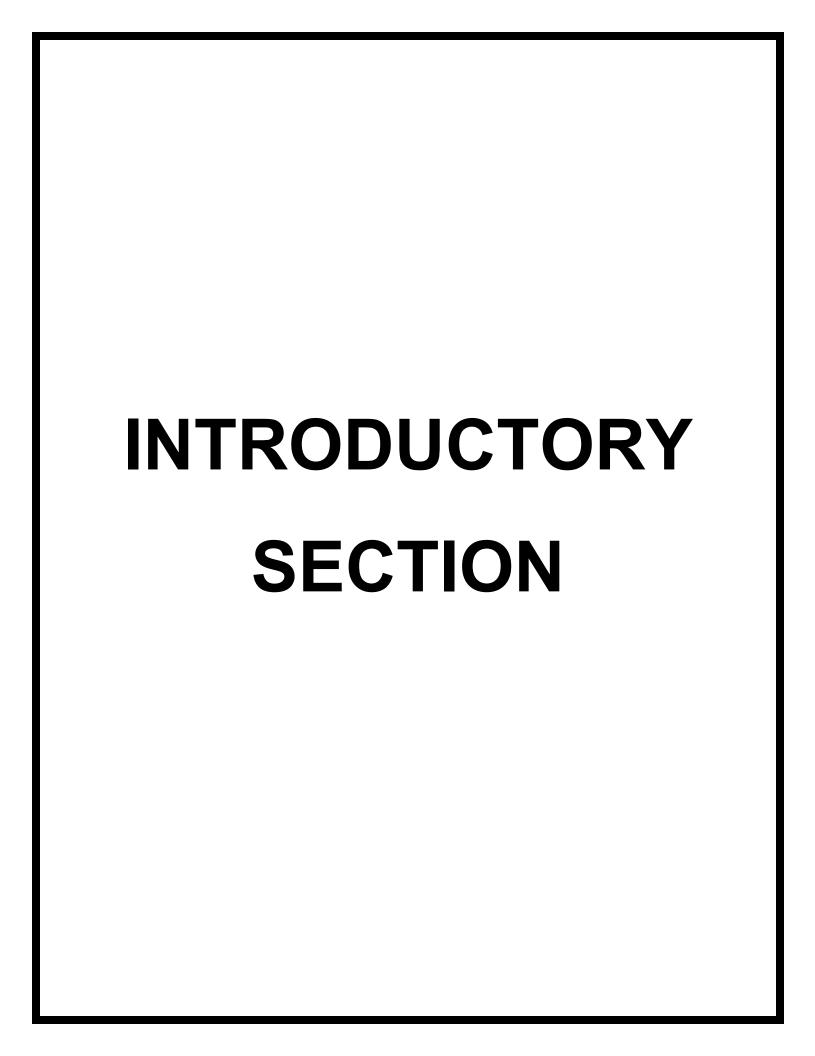
The Board of Trustees and staff remain focused on our mission of paying promised benefits and prudently investing trust assets. We are also committed to delivering a high level of customer service to active and retired members of the System. The reports, charts and schedules contained in this publication summarize the results of our efforts for the fiscal year 2022. 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 APRIL 30, 2022

Daniel G. Heizman

Chairman Fire Captain Term Expires June 30, 2023

D. Matthew Black

Battalion Chief Term Expires June 30, 2022

Kim Carter

City Treasurer Ex-Officio

Teri P. Casey

Director of Human Resources Ex-Officio

Donna M. Lake

Fire Chief & Director Ex-Officio

**Tammy Queen** 

Vice Chairperson Director of Finance Ex-Officio

Konsta M. Myrick

Fire Captain Term Expires June 30, 2024

Eric M. Rose

Firefighter
Term Expires June 30, 2022

**Travis S. Williams** 

Battalion Chief Term Expires June 30, 2022

**Louie Wright** 

Retired Member Non–Voting

### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ADVISORY RELATIONSHIPS April 30, 2022

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 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 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.

### PROFESSIONAL CONSULTANTS

### **CUSTODY INSTITUTION**

The Northern Trust Company Chicago, IL

### INVESTMENT CONSULTANT

Asset Consulting Group St. Louis, MO

### PROXY VOTING CONSULTANT

Segal Marco Advisors Chicago, IL

### **GENERAL COUNSEL**

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

### **ACTUARY**

Cheiron Washington, DC

### INDEPENDENT AUDITOR

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

### **INVESTMENT ADVISORS**

### **DOMESTIC EQUITY ADVISORS**

American Century Investments Kansas City, MO

Eagle Capital Management New York, NY

Northern Trust Quantitative Advisors, Inc. Chicago, IL

Polen Capital Management, LLC Boca Raton, FL

William Blair & Company Chicago, IL

### INTERNATIONAL EQUITY ADVISORS

Marathon Asset Management, LLP London, United Kingdom

Mondrian Investment Partners, LTD London, United Kingdom

Morgan Stanley Investment Management New York, NY

### **GLOBAL EQUITY ADVISORS**

Acadian Asset Management Boston, MA

K2 Ascent, LLC Dublin, Ireland

### **FIXED INCOME ADVISORS**

Amundi Pioneer Boston, MA

BlackRock San Francisco, CA

Commerce Trust Company St. Louis, MO

### **REAL ASSETS ADVISORS**

J.P. Morgan Asset Management New York, NY

Principal Global Investors Des Moines, IA

### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM SUMMARY OF PLAN PROVISIONS April 30, 2022

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 net position of \$630 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 2022 was 38.47% of covered payroll as of May 1, 2021.

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 members and are only 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 and 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.

### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM SUMMARY OF PLAN PROVISIONS April 30, 2022

### 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 represented by 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 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 member's 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 are calculated based on the original base benefit, without regard to 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 caused by actual 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 self-employment. Members 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-of-living 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 27<sup>th</sup> 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. Effective for retirements after January 1, 2021, the adjustment is paid on all annuities effective on or before the preceding February 1.

### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM SUMMARY OF PLAN PROVISIONS April 30, 2022

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 monthly subsidy is \$500, as of May 1, 2021.

### 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 dies before retirement and the 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 the member's 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.

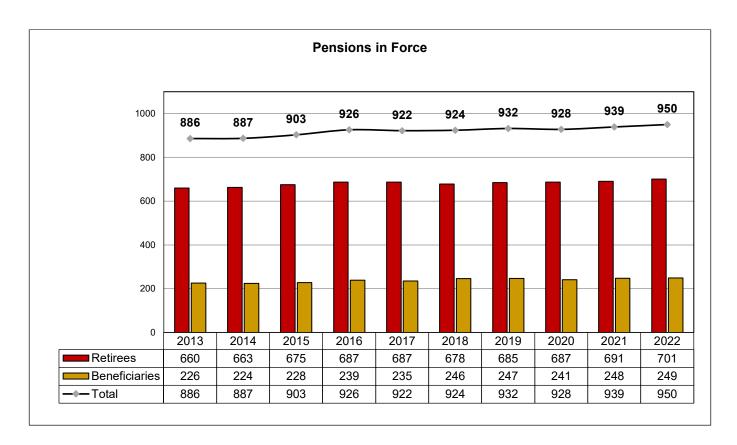
# **ACTUARIAL SECTION**

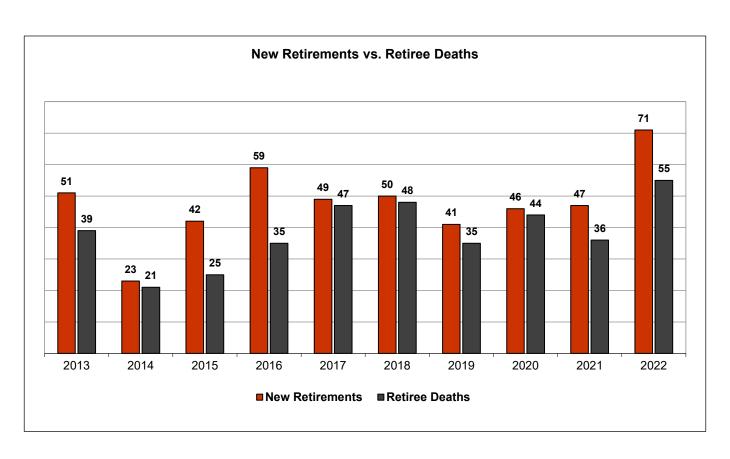
### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM ACTUARIAL OVERVIEW April 30, 2022

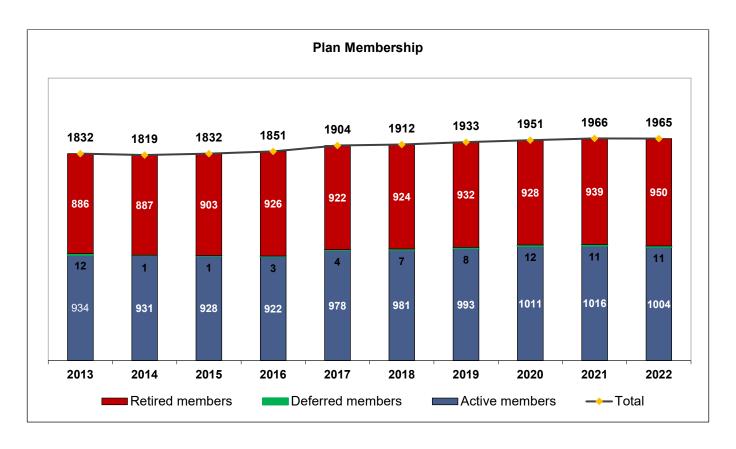
This section summarizes the results of the actuarial valuation of the Firefighters' Pension System of the City of Kansas City, Missouri Trust as of May 1, 2022. The purpose of the valuation is to determine the System's financial condition and the City's required contributions.

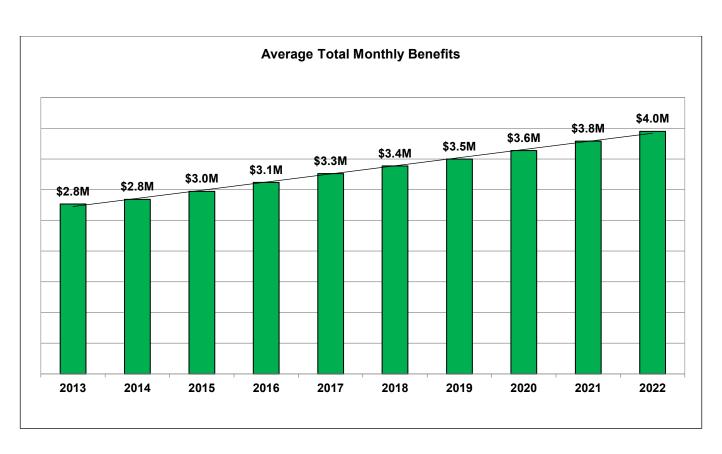
The experience over the past year is summarized as follows:

- The number of members who were active as of May 1, 2022, decreased from 1,016 to 1,004. The average age of members decreased from 40.24 to 40.23, the average service remained same from 14.04 to 14.04 years and the average annual salaries decreased from \$68,902 to \$71,220.
- During the past year, 71 new pensions were awarded to 34 voluntary pensions, 1 deferred pensions, 9 disability pensions, 22 widows and children of deceased firefighters, and 5 Qualified Domestic Relations Orders (QDROs). As of May 1, 2022, average pensions of \$3,950,822 per month were paid to 701 retired members and 249 beneficiaries and QDROs. The previous year, pensions totaling an average of \$3,789,379 per month were being paid to 691 retired members and 248 beneficiaries and QDROs.
- City contributions for the fiscal year 2022 totaled \$26.8 million and employee contributions totaled \$7.4 million. Benefit payments totaled \$47.4 million, and refunds of employee contributions totaled \$4.7 million.
- The actuarial value of assets decreased by \$26.8 million to \$637.4 million. The market value of assets decreased by \$44.1 million to \$625.5 million.
- The Fund achieved a rate of return on the actuarial value of assets of 6.85% for fiscal year 2022. On a market value basis, the rate of return was -4.46%. The Fund's actuarial assumed rate of return was 7.00%.
- The System's funded ratio is 72.8% on an actuarial basis.



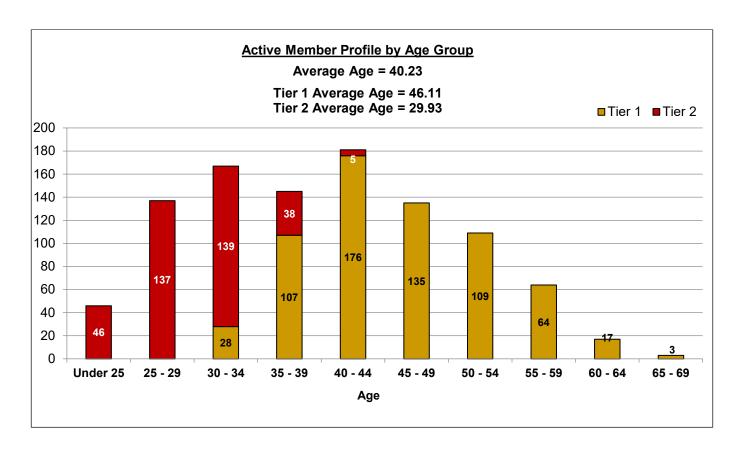


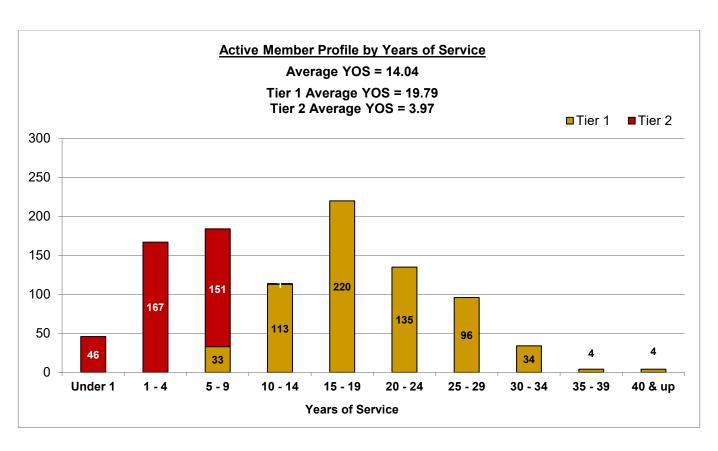


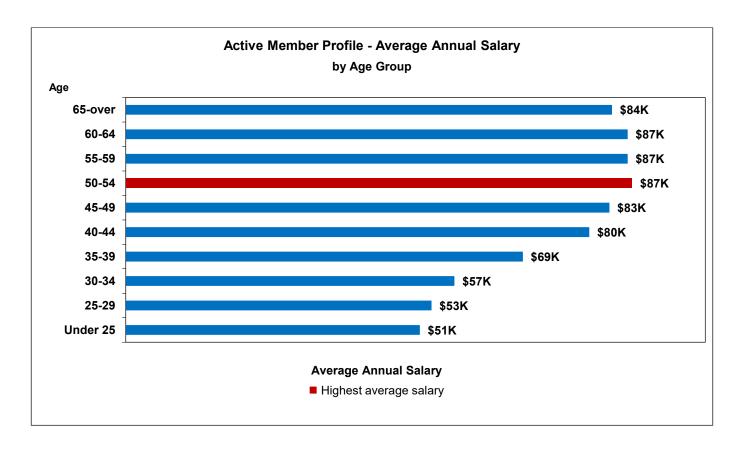


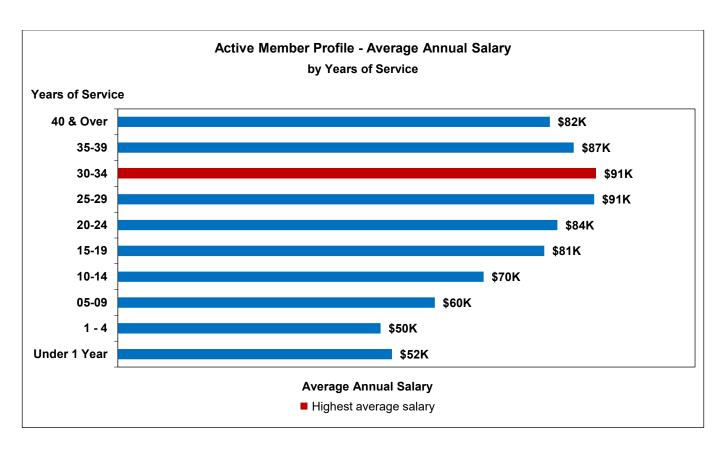
Pensions in Payment Status by Type and Monthly Amount as of May 1, 2022						
Monthly Amount	Total	Voluntary	Deferred	Disability	Widows & Children	QDROs
Under \$500	23	0	2	0	12	9
\$500-\$1,000	50	1	3	2	35	9
\$1,000-\$1,500	46	1	0	3	39	3
\$1,500-\$2,000	56	5	1	5	42	3
\$2,000-\$2,500	53	11	4	6	29	3
\$2,500-\$3,000	47	19	4	2	22	0
\$3,000-\$3,500	56	34	2	6	14	0
\$3,500-\$4,000	82	67	2	3	8	2
\$4,000-\$4,500	189	112	2	70	5	0
\$4,500-\$5,000	123	101	0	18	4	0
\$5,000-\$5,500	72	65	0	5	2	0
\$5,500-\$6,000	65	60	0	0	5	0
\$6,000-\$6,500	38	36	0	0	2	0
\$6,500-\$7,000	11	8	1	1	1	0
\$7,000 & over	39	39	0	0	0	0
Total	950	559	21	121	220	29

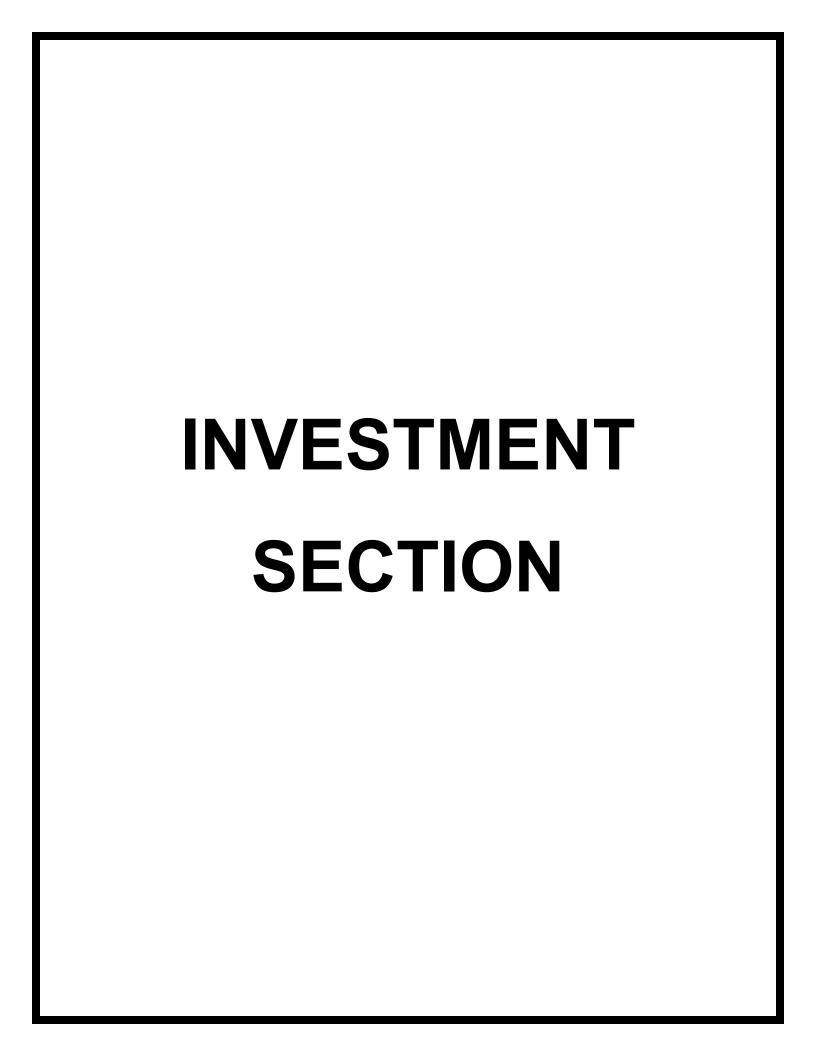
During the year ended April 30, 2022 there were 71 new pensions awarded (34 Voluntary, 1 Vested, 9 Disabled, 22 Widows and Children, and 5 QDROs)











### CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM INVESTMENT OVERVIEW April 30, 2022

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 for 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 adopted Statement of Investment Policy outlines the 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 the Board's 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.

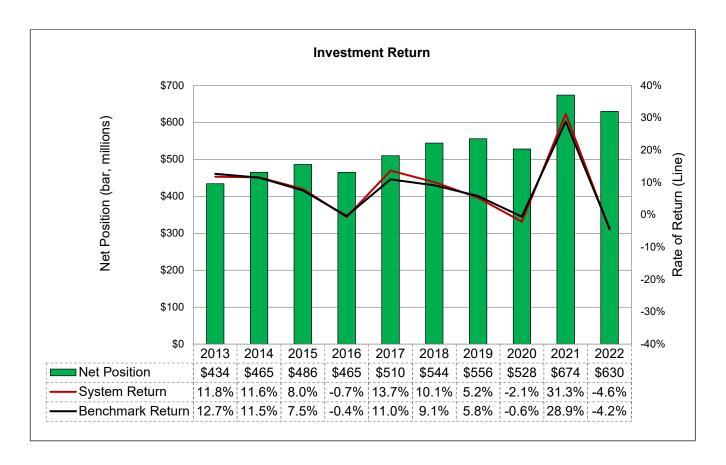
Proper funding and healthy investment returns are very important to the financial soundness of the System. The ratio of investment earnings to total revenue is evidence of the System's solid financial management.

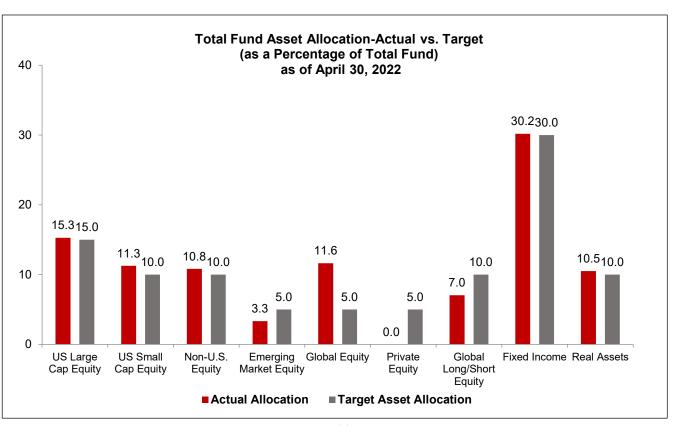
An integral part of the overall investment policy is the strategic asset allocation policy. This allocation mix is designed to provide an optimal mix of asset categories. This emphasizes a maximum diversification of the portfolio that protects the System from declines that a particular asset class may experience in any 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 stocks and international bonds). A modest amount of System assets has also been diversified into real estate and hedge funds.

During the fiscal year 2022, the System remained well diversified.





## **Investment Summary**

Year Ending April 30, 2022

Investment Manager	Date Hired	Asset Class	Portfolio Fair Value	% of Total Fair Value
Cash			\$ 18,072,680	2.9%
Eagle Capital Management	April 2012	U.S. Equity	\$ 15,740,488	2.5%
Polen Capital Management	July 2017	U.S. Equity	\$ 13,968,537	2.2%
Northern Trust Company	November 2011	U.S. Equity	\$ 65,874,085	10.5%
American Century Investments	November 2004	U.S. Equity	\$ 38,932,635	6.2%
William Blair & Company	June 2011	U.S. Equity	\$ 31,488,739	5.0%
Marathon Asset Management	October 2015	Non-U.S. Equity	\$ 52,560,019	8.4%
Mondrian Investment Partners	March 2016	Non-U.S. Equity	\$ 15,166,090	2.4%
Morgan Stanley	April 1997	Emerging Markets Equity	\$ 20,822,782	3.3%
Acadian Asset Management	September 2007	Global Equity	\$ 72,753,876	11.6%
K2 Ascent	June 2020	Global Long/Short Equity	\$ 47,294,490	7.5%
Rock Creek	January 2011	Global Long/Short Equity		0.0%
Amundi Pioneer Investments	February 2014	Fixed Income	\$ 57,237,734	9.1%
Commerce Trust Company	January 2020	Fixed Income	\$ 54,811,718	8.7%
BlackRock	July 2017	Fixed Income	\$ 58,788,859	9.3%
Principal Global Investors	May 2003	Real Assets	\$ 26,402,052	4.2%
J.P. Morgan Asset Management	July 2012	Real Assets	\$ 39,426,590	6.3%
	Total		\$629,341,374	100.0%

## Schedule of Investment Results (Gross of Fees)

Annualized Manager Returns as of April 30, 2022

Investment Manager	Asset Class	One	Three	Five	Ten	Since
- Invocation manager		Year	Years	Years	Years	Inceptio
	U.S. EQUITY					
Eagle Capital Management	Large Cap Value Equity	-13.6%	17.5%	10.5%	12.8%	12.6%
Russell 1000 Value Index		1.3%	21.6%	9.1%	11.2%	11.0%
Northern Trust Company	Large Cap Core Equity	0.2%	21.0%	13.7%	13.7%	13.7%
S&P 500 Index		0.2%	21.0%	13.7%	13.7%	13.7%
Polen Capital Management	Large Cap Growth Equity	-14.5%	12.8%		-	16.5%
Russell 1000 Growth Index		-5.4%	19.7%	17.3%	15.6%	17.4%
American Century Investments	Small Cap Value Equity	-5.9%	35.6%	10.9%	12.9%	11.0%
Russell 2000 Value Index		-6.6%	29.3%	6.8%	9.8%	7.7%
William Blair & Company	Small Cap Growth Equity	-19.0%	14.0%	12.3%	13.9%	12.8%
Russell 2500 Growth Index		-23.1%	13.4%	10.1%	11.4%	10.4%
	NON-U.S. EQUITY					
Marathon Asset Management	Non-U.S. Equity	-10.3%	15.0%	5.2%		6.3%
MSCI EAFE Index		-8.2%	13.4%	4.8%	5.8%	6.0%
Mondrian International Partners	Non-U.S. Equity	-17.4%	11.2%	4.4%		6.9%
MSCI World ex U.S. SC Index		-11.8%	16.8%	5.9%	7.5%	8.8%
Morgan Stanley	Emerging Market Equity	-20.4%	10.3%	3.1%	3.2%	6.9%
MSCI Emerging Markets Index		-18.1%	10.6%	4.7%	3.3%	5.7%
	GLOBAL EQUITY					
Acadian Asset Management	Global Equity	2.6%	23.9%	12.8%	11.60	6.44
MSCI ACWI Index		-5.0%	17.9%	10.0%	9.8%	6.2%
K2 Ascent	Global Long/Short Equity	-18.0%		-		2.2%
MSCI ACWI Index		-5.0%	17.9%	10.0%	9.8%	16.1%
HFRI FOF: Strategic		-5.2%	10.8%	4.5%	4.1%	9.7%
<u> </u>	FIXED INCOME					
Commerce Trust Company	Core Fixed Income	-7.7%	-2.9%			-0.2%
BloomBar U.S. Aggregate Index		-8.5%	-4.5%	1.2%	1.7%	-1.8%
Amundi Pioneer Investments	Core Plus Fixed Income	-5.7%	4.0%	2.9%		3.3%
BloomBar Universal Index		-8.6%	-3.5%	1.4%	2.1%	2.1%
Blackrock	Absolute Return	-2.4%	4.7%			3.6%
U.S. T-Bills 90 day + 3%		-8.5%	-4.5%	1.2%	1.7%	1.1%
BloomBar U.S. Aggregate Index		3.1%	3.1%	4.2%	3.7%	4.2%
	REAL ASSETS	0.170	0.170	1.270	070	
Principal Global Investors	Core Real Estate	30.5%	16.4%	11.2%	12.1%	8.6%
NFI ODCE Index	2010 Rout Louito	28.5%	14.7%	9.9%	10.9%	8.6%
J.P. Morgan Asset Management	Value Add Real Estate	30.6%	16.5%	12.0%	10.976	13.8%
NFI ODCE Index	value Auu Neal Lolale	28.5%	14.7%	9.9%	10.9%	10.8%
IN I ODOL IIIQEX		20.5%	14.1 /0	3.3/0	10.9/0	10.0%
Total Fund		-4.6%	7.0%	7.3%	8.0%	9.2%
Total Tuliu		-4.0%	7.0/0	1.3/0	0.0 /0	J. 2 /0

# **FINANCIAL SECTION**



### INDEPENDENT AUDITOR'S REPORT

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

### Opinion

We have audited the financial statements of the City of Kansas City, Missouri Firefighters' Pension System (the Plan) as of and for the years ended April 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan as of April 30, 2022 and 2021, and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Plan, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional

omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to
  fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
  include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
  statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that
  raise substantial doubt about the Plan's ability to continue as a going concern for a reasonable period
  of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

### **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 basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

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

Overland Park, KS October 19, 2022

### MANAGEMENT'S DISCUSSION AND ANALYSIS

The Firefighters' Pension System of the City of Kansas City, Missouri (the Plan) is the defined benefit retirement plan for firefighters of Kansas City, Missouri (City). The Firefighters' Pension System was established by City ordinance in 1953 and is administered by the Retirement System Board of Trustees to provide retirement, disability, survivor and death benefits to its members and beneficiaries.

This discussion and analysis of the Firefighters' Pension System's financial statements provides an overview of the Firefighters' Pension System's operations and investment performance for the fiscal years then ended April 30, 2022 and 2021, with selected comparative information for the year ended April 30, 2020, and should be read in conjunction 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 fiduciary net position as of April 30, 2022 and 2021 and the statements of changes in fiduciary net position for the years ended April 30, 2022 and 2021. 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.

### 2022 and 2021 Comparative Summary of Fiduciary Net Position

	April 30, 2022	April 30, 2021	Amount Change	Percentage Change
Receivables Investments at fair value Securities lending collateral	\$ 2,241,983 629,341,374 29,512,345	\$ 1,715,476 673,811,367 31,820,609	\$ 526,507 (44,469,993) (2,308,264)	30.69% -6.60% -7.25%
Total assets	661,095,702	707,347,452	(46,251,750)	-6.54%
Due to broker for purchases of investments  Administrative and investment	1,173,450	627,787	545,663	86.92%
expenses payable Securities lending collateral	752,188 29,512,345	744,059 31,820,609	8,129 (2,308,264)	1.09% -7.25%
Total liabilities	31,437,983	33,192,455	(1,754,472)	-5.29%
Net position	\$ 629,657,719	\$ 674,154,997	\$ (44,497,278)	-6.60%

### MANAGEMENT'S DISCUSSION AND ANALYSIS

### 2022 and 2021 Comparative Summary of Changes in Fiduciary Net Position

	April 30,	April 30,	Amount	Percentage
	2022	2021	Change	Change
Member contributions City contributions Net investment income (loss)	\$ 8,128,036	\$ 8,118,095	\$ 9,941	0.12%
	29,854,395	27,283,214	2,571,181	9.42%
	(29,874,153)	158,993,249	(188,867,402)	-118.79%
Total additions	8,108,278	194,394,558	(186,286,280)	-95.83%
Benefits paid to members	47,470,864	45,516,551	1,954,313	4.29%
Refunds of contributions	4,705,949	2,592,773	2,113,176	81.50%
Administrative expenses	428,743	280,419	148,324	52.89%
Total deductions	52,605,556	48,389,743	4,215,813	8.71%
Net change	(44,497,278)	146,004,815	(190,502,093)	-130.48%
Net position, Beginning of year	674,154,997	528,150,182	146,004,815	27.64%
Net position, End of year	\$ 629,657,719	\$ 674,154,997	\$ (44,497,278)	-6.60%

### 2022 Financial Highlights

The Plan's net position decreased by 6.6%, as seen in the statement of fiduciary net position. Global markets started out strong but turned in September, due to the spread of the coronavirus Delta variant, persistent high inflation, and supply chain bottlenecks. Then in December, the Federal Open Market Committee (FOMC) confirmed it would end its bond-buying program earlier than anticipated to reduce inflationary pressures on the economy. Additionally, projections indicated that the FOMC would increase the federal funds rates as many as three times in 2022, to stem inflationary pressures. In February, markets continued to contract, as geopolitical tensions in Ukraine and Russia led to Russia's invasion, and the U.S., along with many other counties, implemented economic sanctions against Russia. Then in March, the FOMC instituted its first increase in the federal funds rate since 2018. Finally, in April, as CPI reached 8.5%, the FOMC signaled it would evaluate all options to tame inflation, both through an aggressive wind down of balance sheet assets and additional increases in the federal funds rate. The U.S. GDP also unexpectedly contracted in the first quarter of 2022, at an annualized rate of 1.4%, due to several factors including the widening trade deficit, a deceleration in the pace of inventory accumulation and decreasing government spending. The Plan's investment portfolio returned -4.5% for the year, which underperformed the return of the Policy Portfolio benchmark. All segments of the Plan posted negative returns except for real assets. Real assets was the best performing asset class, while non-U.S. equities had the lowest returns on an absolute basis.

Total additions, as shown on the statement of changes in fiduciary net position, were \$8.1 million, a 95.8% decrease from the prior year. Contributions grew \$2.6 million, due an increase in the actuarial required contribution rate, and net investment income decreased by -\$188.9 million, compared to the prior year, due to negative performance. Benefits paid to members increased by 4.3%, due in large part to cost-of-living adjustments, and refunds of contributions increased 81.5%, as more retiring members exercised their option at retirement to withdraw some or all of their employee contributions and interest. The 52.9% increase in administrative expenses was mainly due to an increase in disability medical evaluation fees, actuarial fees and legal fees.

### MANAGEMENT'S DISCUSSION AND ANALYSIS

### **2022 Operational Highlights**

No investment manager or other service provider changes occurred in the period. Ongoing cash needs were met through liquidation of domestic and global equities.

### 2021 and 2020 Comparative Summary of Fiduciary Net Position

	April 30, 2021	April 30, 2020	Amount Change	Percentage Change
Receivables	\$ 1,715,476	\$ 50,769,080	\$ (49,053,604)	-96.62%
Investments at fair value	673,811,367	479,042,442	194,768,925	40.66%
Securities lending collateral	31,820,609	35,702,433	(3,881,824)	-10.87%
-			<u> </u>	
Total assets	707,347,452	565,513,955	141,833,497	25.08%
Due to broker for purchases of				
investments	627,787	1,142,428	(514,641)	-45.05%
Administrative and investment			,	
expenses payable	744,059	518,912	225,147	43.39%
Securities lending collateral	31,820,609	35,702,433	(3,881,824)	-10.87%
, and the second				
Total liabilities	33,192,455	37,363,773	(4,171,318)	-11.16%
Net position	\$ 674,154,997	\$ 528,150,182	\$ 146,004,815	27.64%

### 2021 and 2020 Comparative Summary of Changes in Fiduciary Net Position

	April 30, 2021	April 30, 2020	Amount Change	Percentage Change
Member contributions	\$ 8,118,095	\$ 8,082,064	\$ 36,031	0.45%
Employer contributions	27,283,214	24,724,212	2,559,002	10.35%
Net investment income	158,993,249	(14,510,911)	173,504,160	1,195.68%
Total additions	194,394,558	18,295,365	176,099,193	962.53%
Benefits paid to members	45,516,551	43,699,528	1,817,023	4.16%
Refunds of contributions	2,592,773	1,914,858	677,915	35.40%
Administrative expenses	280,419	400,399	(119,980)	-29,97%
Total deductions	48,389,743	46,014,785	2,374,958	5.16%
Net increase	146,004,815	(27,719,420)	173,724,235	626.72%
Net position, Beginning of year	528,150,182	555,869,602	(27,719,420)	-4.99%
·				
Net position, End of year	\$ 674,154,997	\$ 528,150,182	\$ 146,004,815	27.64%

### MANAGEMENT'S DISCUSSION AND ANALYSIS

### 2021 Financial Highlights

The Plan's net position increased by 27.6%, as seen in the statement of fiduciary net position. Global markets continued their remarkable recovery from the swiftest market correction in history that occurred in March 2020, due to the spread of COVID-19. Amid periodic market volatility, this tremendous recovery was aided by the development and distribution of three vaccines, the reopening of economies around the world and the vast amount of monetary and fiscal stimulus that was funneled into the markets through stimulus payments and the Federal Reserve's actions to keep interest rates low and continue their quantitative easing program. The Plan's investment portfolio returned 30.6% for the year, which outperformed the return of the Policy Portfolio benchmark. All segments of the Plan posted positive returns and performed extremely well on a relative basis. U.S. small-cap equity was the best performing asset class, while real estate had the lowest returns on an absolute basis.

Total additions, as shown on the statement of changes in fiduciary net position, were positive \$176.1 million, a 962.5% increase from the prior year. Contributions grew \$2.6 million, due to an increase in the actuarial required contribution rate, and net investment income increased by \$173.5 million, due to strong performance. Benefits paid to members increased by 4.2%, due in large part to cost-of-living adjustments, while refunds of contributions increased 35.4%, mostly related to retirements. The 30% reduction in administrative expenses was mainly due to decreased legal fees and travel expenses.

### 2021 Operational Highlights

A global fixed income manager was terminated due to performance issues. Proceeds from the manager were reallocated to the Plan's 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.

### STATEMENTS OF FIDUCIARY NET POSITION

April 30, 2022 and 2021

	2022	2021
Assets		
Investments, at Fair Value	<b>A A A A A A A A B A</b>	<b>4</b> 40.070.005
Short-term investment funds	\$ 22,084,858	\$ 18,073,385
U.S. Treasuries	4,967,160	7,282,834
U.S. government-backed mortgages	3,039,084	3,058,243
Municipal bonds Asset-backed securities	2,388,804	1,880,886
	7,193,367	6,535,263 33,750,329
Corporate bonds - domestic Corporate bonds - foreign	30,260,646 1,461,567	999,773
Domestic debt obligations	3,497,745	4,171,927
Domestic debt obligations  Domestic common stock	79,845,026	107,957,321
Foreign equities	2,736,936	2,456,801
Partnerships	15,889,525	19,277,395
Collective trusts - equities	225,952,201	244,431,464
Collective trusts - fixed income	116,026,593	115,286,255
Collective trusts - hedge funds	47,294,490	54,243,698
Collective trusts - real estate	66,703,372	54,405,793
Total investments	629,341,374	673,811,367
Securities Lending Collateral	29,512,345	31,820,609
Receivables		
Contributions	709,390	696,716
Investment income	499,334	463,552
Due from broker for sales of investments	1,033,259	555,208
Total receivables	2,241,983	1,715,476
Total assets	661,095,702	707,347,452
Liabilities		
Due to broker for purchases of investments	1,173,450	627,787
Administrative and investment expenses payable	752,188	744,059
Securities lending collateral	29,512,345	31,820,609
Cooking of the state of the sta		01,020,000
Total liabilities	31,437,983	33,192,455
Net Position Restricted for Pensions	625,484,968	669,546,458
Net Position Restricted for Health Care Subsidy	4,172,751	4,608,539
Total Net Position	\$ 629,657,719	\$ 674,154,997

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

### STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended April 30, 2022 and 2021

	2022	2021
Additions Investment Income Interest income Dividend income Net change in fair value of investments	\$ 3,794,464 2,402,928 (32,855,852)	\$ 3,711,474 1,939,454 156,103,805
Less investment expense	(3,284,533)	(2,841,796)
	(29,942,993)	158,912,937
Securities Lending Income Securities lending gross income Securities lending expenses	80,272	120,992
Borrower rebates (fees)  Management fees	18,009 (29,441)	(6,320) (34,360)
Total securities lending expenses	(11,432)	(40,680)
Net securities lending income	68,840	80,312
Total net investment (loss) income	(29,874,153)	158,993,249
Contributions Contributions from the City of Kansas City, Missouri Pension Health subsidy Health supplemental Contributions from members  Total contributions  Total additions	26,813,483 1,409,912 1,631,000 8,128,036 37,982,431 8,108,278	24,258,707 1,408,307 1,616,200 8,118,095 35,401,309 194,394,558
Deductions Benefits Paid Retirement benefits Funeral benefits	47,409,864 61,000	45,472,551 44,000
Total benefits paid  Refunds  Termination  Retirement	47,470,864 301,007 4,404,942	45,516,551 227,945 2,364,828
Administrative Expenses	428,743	280,419
Total deductions	52,605,556	48,389,743
Net Change in Net Position	(44,497,278)	146,004,815
Net Position, Beginning of Year	674,154,997	528,150,182
Net Position, End of Year	\$ 629,657,719	\$ 674,154,997

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

### NOTES TO THE FINANCIAL STATEMENTS

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity - The City of Kansas City, Missouri Firefighters' Pension System (the 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 annual comprehensive 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 they are due and when the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when paid in accordance with the terms of the Plan.

<u>Investments</u> - Investments are valued at fair value as follows:

Government securities, asset-backed securities, corporate bonds and domestic debt obligations are valued at fair value based on prices quoted by a major dealer in such securities.

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 fund, 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, 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 believes that the Plan is designed in accordance with section 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 salaries, 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.

<u>Subsequent Events</u> - These financial statements considered subsequent events through October 19, 2022, the date the financial statements were available to be issued.

### 2. PLAN DESCRIPTION

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

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

Tier II Member - Those employees hired on or after April 20, 2014.

At April 30, 2022 and 2021, the Plan's membership consists of the following:

		2022	
	Tier I	Tier II	_
	Members	Members	Total
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but			
not yet receiving them	960	1	961
Current employees			
Vested	606		606
Nonvested	33	365	398
Inactive	2	32	34
Total	1,601	398	1,999

### NOTES TO THE FINANCIAL STATEMENTS

### 2. PLAN DESCRIPTION (CONTINUED)

		2021	
	Tier I	Tier II	
	Members	Members	Total
Retirees and beneficiaries currently receiving benefits			
and terminated employees entitled to benefits but			
not yet receiving them	949	1	950
Current employees			
Vested	615		615
Nonvested	68	333	401
Inactive	4	21	25
Total	1,636	355	1,991

<u>Contributions</u> - Funding is provided by contributions from the Plan's members and 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, 2020 and 2019 valuations, the actuary recommended City contribution rates of 38.47 percent and 35.14 percent, respectively, of covered payroll. For the years ended April 30, 2022 and 2021, the City contributed at rates of 34.65 percent and 34.82 percent, respectively, of annual covered payroll. The City Council also contributed 2 percent toward the health insurance subsidy for 2022 and 2021.

<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 and 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 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.

### NOTES TO THE FINANCIAL STATEMENTS

### 2. PLAN DESCRIPTION (CONTINUED)

<u>Tier II Members</u> - 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 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.

<u>Death Benefits</u> - If an active member dies, the following benefits are 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 are 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.

### NOTES TO THE FINANCIAL STATEMENTS

### 2. PLAN DESCRIPTION (CONTINUED)

<u>Health Care Subsidy</u> - Effective May 1, 1991, the Plan established a subsidy fund (subsidy). The City and active firefighters 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, 2022 and 2021 was \$500 and \$485, respectively.

The subsidy is invested in both fixed income and equity securities and is stated at fair value. Investments totaled \$4,172,751 and \$4,608,539 at April 30, 2022 and 2021, respectively.

The actuarial valuations do not consider the subsidy's fiduciary net position, which at April 30, 2022 and 2021 was \$4,172,751 and \$4,608,539, 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, 2022 and 2021, City contributions for the subsidy were \$3,040,912 and \$3,024,507, respectively, and employee contributions were \$704,956 and \$704,154, respectively.

### 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 current 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	0% - 10%	5%	
Private Equity	0% - 10%	5%	
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, which are 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.

### NOTES TO THE FINANCIAL STATEMENTS

### 3. DEPOSITS AND INVESTMENTS (CONTINUED)

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, 2022 and 2021, 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.

	2022	2021	
Fair value of securities loaned	\$ 28,301,770	\$ 30,823,886	
Fair value of cash collateral received from borrowers	\$ 29,512,345	\$ 31,820,609	

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.

At April 30, 2022, the Plan had the following investments and maturities:

	Maturities in Years					Loaned Under Securities
Туре	Fair Value	Less than 1	1 - 5	6 - 10	More than 10	Lending Agreements
U.S. Treasuries	\$ 4,967,160	\$	\$ 2,405,511	\$	\$ 2,561,649	\$ 3,390,870
U.S. government-backed mortgages	3,039,084			526,513	2,512,571	
Municipal bonds	2,388,804	500,465	730,893	907,008	250,438	
Asset-backed securities	7,193,367		1,959,989	935,650	4,297,728	
Corporate bonds - domestic	30,260,646	1,206,041	16,552,196	7,174,275	5,328,134	7,025,659
Corporate bonds - foreign	1,461,567		1,215,758		245,809	208,588
Domestic debt obligations	3,497,745		563,200	223,966	2,710,579	
Short-term investment funds	22,084,858	22,084,858				
	74,893,231	\$ 23,791,364	\$ 23,427,547	\$ 9,767,412	\$ 17,906,908	
Domestic common stock	79,845,026					16,006,042
Foreign equities	2,736,936					1,670,611
Partnerships	15,889,525					
Collective trusts - equities	225,952,201					
Collective trusts - fixed income	116,026,593					
Collective trusts - hedge funds	47,294,490					
Collective trusts - real estate	66,703,372					
	\$ 629,341,374					\$ 28,301,770

## NOTES TO THE FINANCIAL STATEMENTS

## 3. DEPOSITS AND INVESTMENTS (CONTINUED)

At April 30, 2021, the Plan had the following investments and maturities:

			Maturities in	Years		Loaned Under Securities
Туре	Fair Value	Less than 1	1 - 5	6 - 10	More than 10	Lending Agreements
U.S. Treasuries	\$ 7,282,834	\$ 4,063,750	\$ 825,480	\$	\$ 2,393,604	\$ 7,352,142
U.S. government-backed mortgages	3,058,243			793,032	2,265,211	
Municipal bonds	1,880,886		1,273,248	607,638		
Asset-backed securities	6,535,263		1,129,861	509,581	4,895,821	
Corporate bonds - domestic	33,750,329	1,252,318	18,688,617	7,684,052	6,125,342	7,915,106
Corporate bonds - foreign	999,773		346,756	653,017		432,615
Domestic debt obligations	4,171,927		1,190,412	348,989	2,632,526	
Short-term investment funds	18,073,385	18,073,385				<del></del>
	75,752,640	\$ 23,389,453	\$ 23,454,374	\$ 10,596,309	\$ 18,312,504	
Domestic common stock	107,957,321					13,760,202
Foreign equities	2,456,801					1,196,419
Partnerships	19,277,395					
Collective trusts - equities	244,431,464					
Collective trusts - fixed income	115,286,255					
Collective trusts - hedge funds	54,243,698					
Collective trusts - real estate	54,405,793					167,402
	\$ 673,811,367					\$ 30,823,886

<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, \$28,301,770 and \$30,823,886 were held by the counterparty that was acting as the Plan's agent in securities lending transactions at April 30, 2022 and 2021, 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, 2022:

Investment	Fair Value
Acadian Global Equity Fund	\$ 72,753,876
NT Collective S&P 500 Index Fund - Non-Lending	65,874,085
Blackrock Strategic Income Opportunities Portfolio	58,788,859
Pioneer Multi-Sector Fixed Income Trust	57,237,734
Marathon-London International Fund	52,560,019
JPMCB Special Situation Property Fund	39,399,307

## NOTES TO THE FINANCIAL STATEMENTS

## 3. DEPOSITS AND INVESTMENTS (CONTINUED)

The following presents investments that represent 5 percent or more of the fiduciary net position of the Plan, as of April 30, 2021:

Investment	Fair Value
NT Collective S&P 500 Index Fund - Non-Lending	\$ 80,081,597
Acadian Global Equity Fund	79,067,310
Marathon-London International Fund	58,886,905
Pioneer Multi-Sector Fixed Income Trust	57,732,809
Blackrock Strategic Income Opportunities Portfolio	57,553,445

<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, 2022 and 2021, the Plan's fixed income assets that are not government guaranteed represented 96 percent and 95 percent, respectively, 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, 2022 and 2021:

## Average Credit Quality and Exposure Levels of Nongovernment Guaranteed Securities

Fixed Income Security Type	Fair Value April 30, 2022	Percentage of all Fixed Income Assets	Weighted Average Credit Quality
Short-term investment funds Municipal bonds Asset-backed securities Corporate bonds - domestic Corporate bonds - foreign Domestic debt obligations Collective trusts - fixed income	\$ 22,084,858 2,388,804 7,193,367 30,260,646 1,461,567 3,497,745 116,026,593 \$ 182,913,580	11.5% 1.3% 3.8% 15.8% 0.8% 1.8% 60.8%	Not rated Aa2 Aaa A3 Baa1 Aaa Not rated
Fixed Income Security Type  Short-term investment funds Municipal bonds Asset-backed securities Corporate bonds - domestic Corporate bonds - foreign Domestic debt obligations Collective trusts - fixed income	Fair Value April 30, 2021  \$ 18,073,385	Percentage of all Fixed Income Assets  9.5% 1.0% 3.4% 17.7% 0.5% 2.2% 60.3% 94.6%	Weighted Average Credit Quality  Not rated Aa2 Aaa A3 Baa1 Aaa Not rated

## NOTES TO THE FINANCIAL STATEMENTS

## 3. DEPOSITS AND INVESTMENTS (CONTINUED)

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.

Interest Rate Risk - 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.

## Effective Duration of Fixed Income by Security Type

Fair Value April 30, 2022	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
\$ 22,084,858 4,967,160	11.5% 2.6%	** 11.32
3,039,084 2,388,804 7,193,367 30,260,646 1,461,567	1.6% 1.3% 3.8% 15.8% 0.8%	4.92 3.68 3.01 5.73 4.92 3.53
116,026,593 \$ 190,919,824	60.8% 100.0%	2.92
Fair Value April 30, 2021	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
\$ 18,073,385 7,282,834	9.5% 3.8%	** 7.91
3,058,243 1,880,886 6,535,263	1.6% 1.0% 3.4%	2.45 3.55 3.31
33,750,329 999,773	17.7% 0.5%	6.39 5.55
	April 30, 2022  \$ 22,084,858	Fair Value April 30, 2022       all Fixed Income Assets         \$ 22,084,858 4,967,160       11.5% 2.6%         3,039,084 2,388,804 1.3% 7,193,367 3.8% 30,260,646 15.8% 1,461,567 0.8% 3,497,745 1.8% 116,026,593 60.8% \$ 190,919,824       1.6% 26,593 60.8% \$ 190,919,824         Fair Value April 30, 2021       Percentage of all Fixed Income Assets         \$ 18,073,385 7,282,834       9.5% 3.8% 3.8% 3.8% 3.8% 3.8% 3.8% 3.058,243 1.6% 6,535,263 3.4%

## NOTES TO THE FINANCIAL STATEMENTS

## 3. DEPOSITS AND INVESTMENTS (CONTINUED)

\*\*The Plan owns an interest in the underlying assets of the short-term investment funds and the unit values are based on the fair value of their underlying assets. The short-term investment 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, 2022 and 2021, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was -4.45 percent and 30.32 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## 4. NET PENSION LIABILITY

The components of the net pension liability of the City at April 30, 2022 and 2021 were as follows:

	2022	2021
Total pension liability	\$ 879,749,268	\$ 852,725,328
Plan fiduciary net position	(625,484,968)	(669,546,458)
City's net pension liability	\$ 254,264,300	\$ 183,178,870
Fiduciary net position as a % of total pension liability	71.10%	78.52%

## 5. ACTUARIAL METHODS AND ASSUMPTIONS

Cheiron, the Plan's actuary, determines the total pension liability. The total pension liability as of April 30, 2022 and 2021 was determined based on an actuarial valuation prepared as of May 1, 2021 and 2020, respectively, rolled forward one year, using the following actuarial assumptions:

## NOTES TO THE FINANCIAL STATEMENTS

### 5. **ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)**

Price inflation 2.50%

Salary increases, including wage inflation 3.0% to 9.5% for April 30, 2022

measurement date

3.0% to 8.0% for April 30, 2021

measurement date

Long-term investment rate of return, net of plan investment expense, including

inflation

Mortality tables:

Healthy For 2022: 2010 Public Safety Amount-Weighted

> Below-Median Mortality Table for Healthy Retirees (multiplied by 1.031 for males and 0.930 for females), projected using Scale MP-

7.00% for April 30, 2022 measurement date

7.25% for April 30, 2021 measurement date

2021 on a generational basis

For 2021: RP-2000 Combined Healthy Mortality Table set forward one year for males and females, projected using a modified Scale MP-

2015 on a generational basis

Disabled For 2022: 2010 Public Safety Amount-Weighted

Mortality Table for Disabled Retirees, projected using Scale MP-2021 on a generational basis

For 2021: RP-2000 Combined Disabled Mortality Table projected using a modified Scale MP-2015 on a generational basis

The actuarial assumptions in the May 1, 2021 valuation were based on the results of the actuarial experience study for the period from May 1, 2016 to April 30, 2021. The actuarial experience study is dated April 22, 2022. The actuarial assumptions used in the May 1, 2020 valuation were based on the results of the actuarial expense study for the period of May 1, 2011 to April 30, 2016. That actuarial experience study is dated February 9, 2017.

For purposes of calculating the total pension liability, future ad hoc cost of living adjustments (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 return by the target asset allocation percentage and by adding expected inflation. Best-estimates arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of April 30, 2022 and 2021 are summarized in the following table:

## NOTES TO THE FINANCIAL STATEMENTS

## 5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

	April 30, 2022		April 30	, 2021
		Long-Term Expected		Long-Term Expected
Asset Class	Target Allocation	Real Rate of Return	Target Allocation	Real Rate of Return
Large Cap Equity	15%	7.1%	15%	7.2%
Small Cap Equity	10%	8.5%	10%	8.4%
Non-U.S. Equity	10%	8.2%	15%	8.2%
<b>Emerging Market Equity</b>	5%	9.2%	0%	0.0%
Long/Short Equity	10%	5.7%	10%	5.7%
Global Equity	5%	7.9%	10%	7.8%
Private Equity	5%	10.5%	0%	0.0%
Fixed Income	30%	2.9%	30%	2.9%
Real Estate	10%	7.4%	10%	7.4%

<u>Discount Rate</u> - The discount rate used to measure the total pension liability was 7.00 percent as of April 30, 2022, and 7.50 percent as of April 30, 2021. In the professional judgment of the Plan's actuary, the funding policy of the Plan will result in the 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, 2022 and 2021:

		2022	
	1%	Current	1%
	Decrease	<b>Discount Rate</b>	Increase
	(6.00%)	(7.00%)	(8.00%)
Total pension liability	\$ 996,115,753	\$ 879,749,268	\$ 783,727,044
Fiduciary net position	(625,484,968)	(625,484,968)	(625,484,968)
Net pension liability	\$ 370,630,785	\$ 254,264,300	\$ 158,242,076

## NOTES TO THE FINANCIAL STATEMENTS

## 5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

		2021	
	1%	Current	1%
	Decrease	<b>Discount Rate</b>	Increase
	(6.25%)	(7.25%)	(8.25%)
Total pension liability	\$ 965,326,497	\$ 852,725,328	\$ 759,892,048
Fiduciary net position	(669,546,458)	(669,546,458)	(669,546,458)
Net pension liability	\$ 295,780,039	\$ 183,178,870	\$ 90,345,590

## 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. Market risks include global events which could impact the value of investment securities, such as pandemic or international conflict. 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 is 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

## NOTES TO THE FINANCIAL STATEMENTS

## 7. FAIR VALUE MEASUREMENTS (CONTINUED)

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, 2022 and 2021:

				Α	pril 30, 2022	
		Total				
		Fair Value	 Level 1		Level 2	 Level 3
Investments by fair value level						
U.S. Treasuries	\$	4,967,160	\$ 	\$	4,967,160	\$ 
U.S. government-backed mortgages		3,039,084			2,942,466	96,618
Municipal bonds		2,388,804			1,888,339	500,465
Asset-backed securities		7,193,367			7,193,367	
Corporate bonds - domestic		30,260,646			30,260,646	
Corporate bonds - foreign		1,461,567			1,461,567	
Domestic debt obligations		3,497,745			3,497,745	
Domestic common stock		79,845,026	79,845,026			
Foreign equities		2,736,936	2,736,936			
Short-term investment funds		22,084,858	 22,084,858			 
Total investments measured						
at fair value		157,475,193	\$ 104,666,820	\$	52,211,290	\$ 597,083
Investments measured at net asset value	(NA)	V) (A)				
Partnerships	`	15,889,525				
Collective trusts - equities		225,952,201				
Collective trusts - fixed income		116,026,593				
Collective trusts - hedge funds		47,294,490				
Collective trusts - real estate		66,703,372				
Total investments measured at						
net asset value (NAV)		471,866,181				
Total investments measured						
at fair value	\$	629,341,374				

## NOTES TO THE FINANCIAL STATEMENTS

## 7. FAIR VALUE MEASUREMENTS (CONTINUED)

			Α	April 30, 2021	
	Total				
	 Fair Value	 Level 1		Level 2	 Level 3
Investments by fair value level					
U.S. Treasuries	\$ 7,282,834	\$ 	\$	7,282,834	\$ 
U.S. government-backed mortgages	3,058,243			3,058,243	
Municipal bonds	1,880,886			1,880,886	
Asset-backed securities	6,535,263			6,535,263	
Corporate bonds - domestic	33,750,329			33,750,329	
Corporate bonds - foreign	999,773			999,773	
Domestic debt obligations	4,171,927			3,822,938	348,989
Domestic common stock	107,957,321	107,957,321			
Foreign equities	2,456,801	2,456,801			
Short-term investment funds	18,073,385	18,073,385			
Total investments measured					
at fair value	 186,166,762	\$ 128,487,507	\$	57,330,266	\$ 348,989
Investments measured at net					
asset value (NAV) (A)					
Partnerships	19,277,395				
Collective trusts - equities	244,431,464				
Collective trusts - fixed income	115,286,255				
Collective trusts - hedge funds	54,243,698				
Collective trusts - real estate	54,405,793				
Total investments measured at					
net asset value (NAV)	487,644,605				
Total investments measured					
at fair value	\$ 673,811,367				

(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. Corporate and governmental debt securities and 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, 2022 and 2021. 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, 2022						
			Redemption Frequency				
	Fair Value	Unfunded Commitments	(If Currently Eligible)	Notice Period			
Partnerships (A)	\$ 15,889,525	\$	Monthly	15 Days			
Collective trusts - equities (B)	225,952,201		Daily/Monthly	3-30 Days			
Collective trusts - fixed income (C)	116,026,593		Daily	1 Business Day			
				45 days prior to			
Collective trusts - real estate (D)	39,399,307		Once per Quarter	quarter end			
Collective trusts - real estate (D)	27,304,065		Daily	1 Business Day			
Collective trusts - hedge funds (E)	47,294,490		Quarterly	90 Days			
Total investments measured at NAV	\$ 471,866,181	\$	•				

				April 3	0, 2021	
					Redemption	
					Frequency	
			Uı	nfunded	(If Currently	
	ı	Fair Value	Con	nmitments	Eligible)	Notice Period
Partnerships (A)	\$	19,277,395	\$		Monthly	15 Days
Collective trusts - equities (B)		244,431,464			Daily/Monthly	3-30 Days
Collective trusts - fixed income (C)		115,286,255			Daily	1 Business Day
						45 days prior to
Collective trusts - real estate (D)		31,363,717			Once per Quarter	quarter end
Collective trusts - real estate (D)		23,042,076			Daily	1 Business Day
Collective trusts - hedge funds (E)		54,243,698			Quarterly	90 Days
Total investments measured at NAV	\$	487,644,605	\$			

. ....

- (A) This category is a limited partnership. Investments are open-ended Global Core/Core Plus infrastructure investments.
- (B) This category includes collective trust funds. Each invests in equity securities both on the national and international markets listed on public market exchanges.
- (C) 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.

## NOTES TO THE FINANCIAL STATEMENTS

## 7. FAIR VALUE MEASUREMENTS (CONTINUED)

- (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

Total pension liability	2022	2021	2020	2019	2018	2017	2016	2015
Service cost	\$ 16,323,772	\$ 16,249,751	\$ 15,915,926	\$ 15,499,462	\$ 15,135,242	\$ 12,886,414	\$ 13,124,510	\$ 13,137,551
Interest on total pension liability	60,793,678	59,196,090	57,027,647	54,607,607	52,444,755	46,425,259	44,922,139	43,442,934
Difference between expected and actual experience	(6,786,814)	733,452	3,952,169	78,742	6,556,970	(1,411,774)	(1,569,538)	
Effect of assumption changes or inputs	4,996,017					73,346,941		
Benefit payments, including member refunds	(48,302,713)	(45, 147, 209)	(43,091,346)	(39,168,957)	(37,245,710)	(36,922,344)	(35,808,161)	(34,761,116)
Net change in total pension liability	27,023,940	31,032,084	33,804,396	31,016,854	36,891,257	94,324,496	20,668,950	21,819,369
Total pension liability - beginning	852,725,328	821,693,244	787,888,848	756,871,994	719,980,737	625,656,241	604,987,291	583,167,922
Total pension liability - ending	879,749,268	852,725,328	821,693,244	787,888,848	756,871,994	719,980,737	625,656,241	604,987,291
Plan fiduciary net position								
Net investment income (loss)	(29,566,597)	158,576,766	(13,158,656)	24,331,965	47,009,524	58,651,918	(7,690,067)	32,672,401
Contributions - employer	26,813,483	24,258,707	21,728,336	20,015,327	17,435,993	16,754,798	16,631,844	16,258,533
Contributions - member	7,423,080	7,413,942	7,381,126	7,109,128	6,882,375	6,534,349	6,173,154	6,258,482
Benefits paid	(43,596,764)	(42,554,436)	(41,176,488)	(38,305,725)	(36,713,962)	(35,905,329)	(33,876,851)	(32,536,750)
Refunds of contributions	(4,705,949)	(2,592,773)	(1,914,858)	(863,232)	(531,748)	(1,017,015)	(1,931,310)	(1,956,321)
Administrative expenses	(428,743)	(280,419)	(400,399)	(415,090)	(386,608)	(345,060)	(300,479)	(264,100)
Net change in fiduciary net position	(44,061,490)	144,821,787	(27,540,939)	11,872,373	33,695,574	44,673,661	(20,993,709)	20,432,245
Plan fiduciary net position - beginning	669,546,458	524,724,671	552,265,610	540,393,237	506,697,663	462,024,002	483,017,711	462,585,466
								Ī
Plan fiduciary net position - ending	625,484,968	669,546,458	524,724,671	552,265,610	540,393,237	506,697,663	462,024,002	483,017,711
Net pension liability, ending	\$254,264,300	\$ 183,178,870	\$ 296,968,573	\$ 235,623,238	\$ 216,478,757	\$213,283,074	\$ 163,632,239	\$ 121,969,580
	74	1000	7000 00	)000 OF	74 400/	/000 02	70 000	70.040
Fiduciary net position as a percentage of total pension liability	71.10%	/8.52%	63.86%	%60.07	/1.40%	70.38%	/3.85%	79.84%
Covered-employee payroll	\$ 70,004,912	\$ 69,674,827	\$ 68,246,790	\$ 66,264,508	\$ 64,492,241	\$ 57,625,619	\$ 59,294,555	\$ 59,410,476
Net pension liability as a percentage of covered-employee payroll	363.21%	262.91%	435.14%	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. As discussed in Note 2, the activity related to the health care subsidy is excluded from the above information.

## SCHEDULE OF CITY CONTRIBUTIONS

## Last Ten Fiscal Years

-	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuanally determined employer contribution	\$ 26,803,906	\$ 23,981,922	\$ 21,562,471	\$ 19,747,524	\$ 17,316,499	\$ 16,726,994	\$ 16,581,464	\$ 16,162,139	\$ 16,182,139	\$ 15,400,040
Actual City contributions	26,813,483	24,258,707	21,728,336	20,015,327	17,435,993	16,754,798	16,631,844	16,258,533	11,795,883	13,120,169
Annual contribution deficiency (excess)	\$ (9,577)	\$ (276,785)	\$ (165,865)	\$ (9,577) \$ (276,785) \$ (165,865) \$ (267,803) \$ (119,494) \$ (27,804) \$ (50,380) \$ (96,394) \$ 4,386,256 \$ 2,279,871	\$ (119,494)	\$ (27,804)	\$ (50,380)	\$ (96,394)	\$ 4,386,256	\$ 2,279,871
Covered payroll	\$ 70,004,912	\$ 69,674,827	\$ 68,246,790	\$ 66,264,508	\$ 64,492,241	\$ 57,625,619	\$ 59,294,555	\$ 59,410,476	\$ 58,356,072	\$ 60,062,558
Actual contributions as a percentage of covered payroll	38.30%	34.82%	31.84%	30.21%	27.04%	29.08%	28.05%	27.37%	20.21%	21.84%

# SCHEDULE OF INVESTMENT RETURNS

## Last Ten Fiscal Years

Fiscal Year Ending April 30	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return,	-4.45%	30.32%	-2.35%	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:

## 5/01/2021 Valuation

• No changes to benefit or funding terms.

## 5/01/2020 Valuation

No changes to benefit or funding terms.

### 5/01/2019 Valuation

No changes to benefit or funding terms.

## 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.

## 5/01/2013 Valuation

No changes to benefit or funding terms.

## 5/01/2012 Valuation

• No changes to benefit or funding terms.

## NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

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

## 5/01/2021 Valuation

 Numerous assumptions have been revised based on the results of the experience study conducted for the period May 1, 2016 to April 30, 2021. These assumptions were incorporated into the GASB 67 disclosures and net pension liability for the Plan's 2022 fiscal year-end. Changes included changes to salary increases including wage growth, mortality tables, discount rate, and expected rate of return.

## 5/01/2020 Valuation

• No changes in actuarial assumptions or methods.

## 5/01/2019 Valuation

• No changes in actuarial assumptions or methods.

### 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.

## 5/01/2013 Valuation

No changes in actuarial assumptions or methods.

## 5/01/2012 Valuation

An actuarial experience study was conducted and resulted in changes to a number of actuarial
assumptions, including inflation, real wage growth, termination rates, retirement rates,
disability rates, duty-related disability percentage, spouse age difference, marriage
assumptions, healthy mortality, and disabled mortality.

## 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, 2020 actuarial valuation:

Valuation Date May 1, 2020

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 Healthy Mortality Table set forward one

year for males and females, projected using a modified Scale MP-

2015 on a generational basis

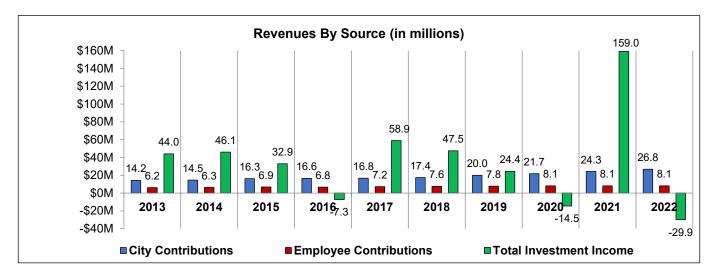
Disabled: RP-2000 Combined Disabled Mortality Table projected

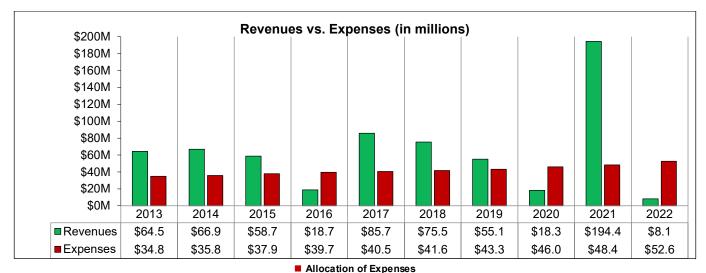
using a modified Scale MP-2015 on a generational basis.

## CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM HISTORICAL REVIEW April 30, 2022

2013	088 \$14,244,943 355 6,206,339		7	(2,116,513) 767 44.021.105			33,1	39,000		1,421,776	34, 699, 109	135,984	715 34,835,093	195 29,637,294	532 404,505,238 027 \$434,142,532	19.60% 9.55%
2014	\$14,526,088 6,283,355		4	(2,606,116)			34,1	32,000			35,565,364	221,351	35,786,715	31,073,495	, 434,142,532 5 \$465,216,027	19.60% 9.55%
2015	\$18,998,552 6,851,791	25,850,343	35,698,532	(2,848,171	58,700,704		35,680,785	19,000	21,215	1,935,106	37,656,106	264,100	37,920,206	20,780,498	465,216,027 \$485,996,525	27.73% 10.55%
2016	\$19,270,269 6,769,093	26,039,362	(4,313,126)	(3,016,135)	18,710,101		37,420,441	28,000	136,626	1,794,684	39,379,751	300,479	39,680,230	(20,970,129)	485,996,525 \$465,026,396	27.91% 10.55%
2017	\$19,650,554 7,150,987	26,801,541	61,300,906	(2,363,443)	85,739,004		39,134,674	34,000	41,992	975,023	40,185,689	345,060	40,530,749	45,208,255	465,026,396 \$510,234,651	28.21% 10.55%
2018	\$20,392,560 7,562,958	27,955,518	50,013,651	(2,501,269) 47.512.382	75,467,900		40,648,098	80,000	110,342	421,406	41,259,846	386,608	41,646,454	33,821,446	510,234,651 \$544,056,097	30.05% 10.55%
2019	\$22,954,283 7,785,106	30,739,389	26,975,210	(2,587,597)	55,127,002		41,992,175	43,000	110,691	752,541	42,898,407	415,090	43,313,497	11,813,505	544,056,097 \$555,869,602	30.62% 10.55%
2020	\$24,724,212 8,082,064	32,806,276	(12,006,481)	(2,504,430)	18,295,365		43,649,528	50,000	237,103	1,677,755	45,614,386	400,399	46,014,785	(27,719,420)	555,869,602 \$528,150,182	32.54% 10.55%
2021	\$27,283,214 8,118,095	35,401,309	161,835,045	(2,841,796)	194,394,558		45,472,551	44,000	227,945	2,364,828	48,109,324	280,419	48,389,743	146,004,815	528,150,182 \$674,154,997	35.14% 10.55%
2022	\$29,854,395 8,128,036	37,982,431	(26,589,620)	(3,284,533)	8,108,278		47,409,864	61,000	301,007	4,404,942	52,176,813	428,743	52,605,556	(44,497,278)	674,154,997 \$629,657,719	38.47% 10.55%
Additions	Contributions Employer Contributions Member Contributions	Total Contributions	Investment Income Realized Gain (Loss)	Less Investment Expense Total Net Investment Income	Total Additions	<b>Deductions</b> Benefit Payments	Annuities	Funeral So Refunds	Termination	Retirement	Total Benefit Payments	Administrative Expenses	Total Deductions	Net Increase (Decrease) in Net Position	Net Position - Beginning of Year Net Position - End of Year	Contributions - % of Payroll Employer Member

## CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM FINANCIAL REVIEW April 30, 2022

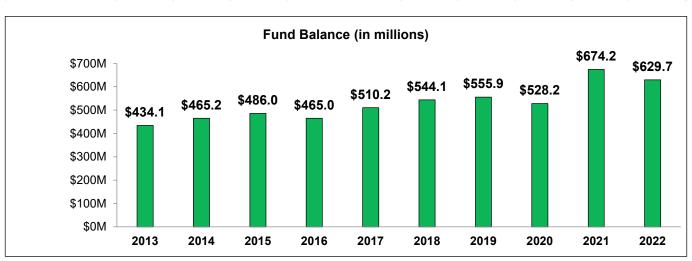




Expenses by type 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 \$400,399 \$428,743 Admnistrative Expenses \$135,984 \$221,351 \$264,100 \$300,479 \$345,060 \$386,608 \$415,090 \$280,419 Refund of Employee \$1,466,343 \$1,423,715 \$1,956,321 \$1,931,310 \$1,017,015 \$531,748 \$863,232 \$1,914,858 \$2,592,773 \$4,705,949 Contributions Retirement Benefits \$33,232,766 \$34,141,649 \$35,699,785 \$37,448,441 \$39,168,674 \$40,728,098 \$42,035,175 \$43,699,528 \$45,516,551 \$47,470,864

Total

\$34,835,093 \$35,786,715 \$37,920,206 \$39,680,230 \$40,530,749 \$41,646,454 \$43,313,497 \$46,014,785 \$48,389,743 \$52,605,556



# **MEMBERSHIP SECTION**

## CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM MEMBERSHIP ACTIVITY April 30, 2022

## **VOLUNTARY RETIREMENTS**

NAME	RETIREMENT DATE	NAME	RETIREMENT DATE
DeWALT, KENNETH W.	05/17/2021	NOGA, JOHN S.	10/02/2021
GREEN, ROBERT D.	01/21/2022	POARCH, JOSEPH E.	01/18/2022

## **VOLUNTARY RETIREMENTS DUE TO DISABILITY**

NAME	RETIREMENT DATE	NAME	RETIREMENT DATE
ADAMS, CRAIG M.	09/25/2021	MCCOLM, LARRY K.	01/29/2022
ASHLEY, MARK A.	01/15/2022	MEYER, JOHN S.	01/07/2022
CADO, MARK A.	01/15/2022	NELSON, THOR	01/01/2022
CASCONE, DOMINIC A.	07/19/2021	RANGEL, XAVIER A.	05/22/2021
CASHEN, MICHAEL J.	01/13/2022	RUDOLPH, TODD E.	05/21/2021
CHAPMAN, KURT A.	09/10/2021	STARR, SR., LOREN G.	10/07/2021
EDDINGS, JOSEPH B.	10/30/2021	STEHWIEN, WILLIAM G.	09/27/2021
FITZGERALD, JOHN P.	12/17/2021	STERNS, PATRICIA A.	01/30/2022
FOSTER, WAYNE A.	12/26/2021	VELA, MATTHEW P.	05/11/2021
HARMON, BYRON J.	03/26/2022	VOCHATZER, DAVID P.	07/17/2021
HARRIS, RYAN J.	11/11/2021	WALDRON, MICHAEL W.	08/28/2021
KNUDSEN, PETER C.	01/22/2022	WALLACE, CHRISTOPHER A.	10/25/2021
LEWIS, JAMES G.	02/01/2022	WARFIELD, KENNETH N.	10/09/2021
MALLOY, CHRISTIAN P.	01/08/2022	WILLIAMS, TRAVIS S.	05/06/2021
MAUER, MATTHEW J.	01/22/2022	YOUNG, LAWRENCE G.	01/07/2022

## **DUTY DISABILITY RETIREMENTS**

NAME	RETIREMENT DATE	NAME	RETIREMENT DATE
DIMARTINO, CHARLES A.	01/01/2022	ROBINSON, TIMOTHY P.	11/03/2020
GILLESPIE, COREY E.	09/01/2021	ROCHA, ROBERT R.	03/01/2022
KNUDSEN, MICHAEL R.	11/01/2021	WERNER, DANIEL J.	05/01/2022
MCBRIDE, RYAN A.	07/01/2021		

## NON-DUTY DISABILITY RETIREMENTS

NAME	RETIREMENT DATE	NAME	RETIREMENT DATE
COOK, BRIAN A.	09/01/2021	STARR, JEREMY T.	03/01/2022

## **DEFERRED RETIREMENT**

NAME RETIREMENT DATE
CANNON, MARK P. 02/01/2022

## CITY OF KANSAS CITY, MISSOURI FIREFIGHTERS' PENSION SYSTEM MEMBERSHIP ACTIVITY April 30, 2022

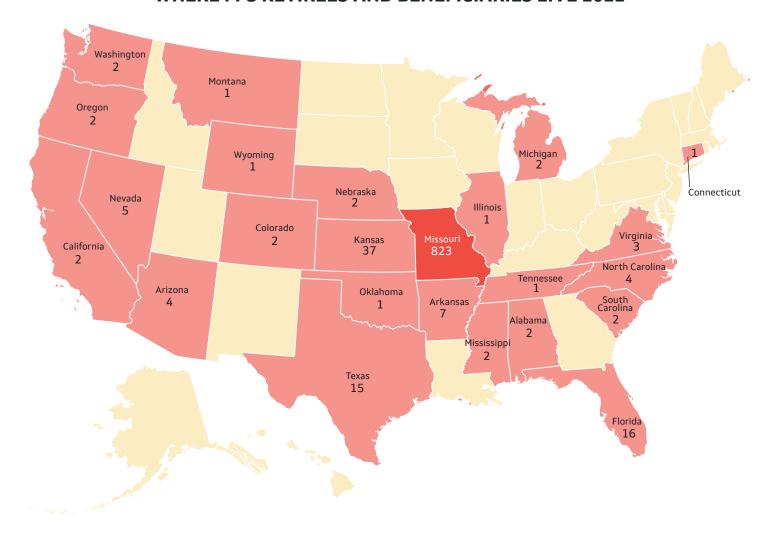
## IN MEMORIAM MEMBER DEATHS - RETIREES

NAME	DATE OF DEATH	NAME	DATE OF DEATH
ALVAREZ, JOSEPH M.	12/13/2021	MCFARLAND, KENNETH D.	08/14/2021
ANDERSON, RONNIE A.	12/21/2021	MCLAIRD, GEORGE	08/30/2021
BALDWIN, HOMER	05/27/2021	MCROY, CHARLES W.	04/30/2022
BARNES, MICHAEL	03/18/2022	MITCHELL, ARTHUR L.	02/06/2022
BURTON, DONALD D.	10/01/2021	NEALE, FREDERICK W.	10/31/2021
CLARK, ROY A.	05/23/2021	PILCHER, CHARLES W.	04/01/2022
CONNINGHTON, DANIEL	11/20/2021	ROBERTS, MICHAEL A.	01/19/2022
CONROY, TERRY M.	11/02/2021	RODE, HENRY J.	08/14/2021
DOWNING, DONALD L.	06/15/2021	ROWE, MICHAEL W.	07/27/2021
DUPAUL, RONALD E.	09/02/2021	SCHLOTZHAUER, BARRY G.	05/09/2021
EUBANKS, WILBERT M.	11/20/2021	SIEKER, RONALD E.	06/10/2021
FRIENDS, NATHANIEL	11/13/2021	SPENCER, RAYMOND V.	01/12/2022
GRAY, GENE T.	01/06/2022	TAYLOR, JESSE D.	09/14/2021
HERTZOG, TERRY N.	02/09/2022	THOMPSON, JAMES R.	08/13/2021
JAMES, RUSSELL N.	07/08/2021	WHITE, RICHARD D.	08/07/2021
KNAEBEL, DAVID J.	01/05/2022	YOUMANS, ROY A.	05/10/2021
LAKE, JOHN C.	08/27/2021	ZACHERY, JOSEPH W.	04/06/2022
MCCOLM, LARRY R.	01/19/2022		

## **SURVIVING SPOUSE ANNUITIES**

NAME	RETIREMENT DATE	NAME	RETIREMENT DATE
ALVAREZ, CHRISTINA M.	01/01/2022	MCCOLM, JEANETTE K.	02/01/2022
BALDWIN, MELVA J.	06/01/2021	MCFARLAND, JOYCE E.	09/01/2021
DAILEY, THELMA L.	05/01/2021	PILCHER, DONNA V.	05/01/2022
DOWNING, DIANNA S.	07/01/2021	ROWE, ELSIE M.	08/01/2021
GRAY, BESSIE M.	02/01/2022	SCHLOTZHAUER, FRANCES J.	06/01/2021
HUTCHISON, SHIRLEY A.	12/01/2020	TAYLOR, EVA M.	10/01/2021
JAMES, SHARON K.	08/01/2021	THOMPSON, JOANN H.	09/01/2021
KNAEBEL, VANESSA K.	02/01/2022	YOUMANS, SANDRA K.	06/01/2001
LAKE, SHARON R.	09/01/2021	ZACHERY-MARTINEZ, JOSELY A.	05/01/2022

## WHERE FPS RETIREES AND BENEFICIARIES LIVE 2022



\*88% OF RETIREES AND BENEFICIARIES RECEIVING PENSIONS LIVE IN MISSOURI.



City of Kansas City, Missouri Firefighters' Pension System

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

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