

***CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM***

FINANCIAL STATEMENTS
WITH SUPPLEMENTARY INFORMATION

FOR THE YEARS ENDED APRIL 30, 2022 AND 2021

AND

INDEPENDENT AUDITOR'S REPORT



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**CITY OF KANSAS CITY, MISSOURI
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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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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	\$ 2,241,983	\$ 1,715,476	\$ 526,507	30.69%
Investments at fair value	629,341,374	673,811,367	(44,469,993)	-6.60%
Securities lending collateral	29,512,345	31,820,609	(2,308,264)	-7.25%
Total assets	661,095,702	707,347,452	(46,251,750)	-6.54%
Due to broker for purchases of investments	1,173,450	627,787	545,663	86.92%
Administrative and investment expenses payable	752,188	744,059	8,129	1.09%
Securities lending collateral	29,512,345	31,820,609	(2,308,264)	-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%

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

MANAGEMENT'S DISCUSSION AND ANALYSIS

2022 and 2021 Comparative Summary of Changes in Fiduciary Net Position

	April 30, 2022	April 30, 2021	Amount Change	Percentage Change
Member contributions	\$ 8,128,036	\$ 8,118,095	\$ 9,941	0.12%
City contributions	29,854,395	27,283,214	2,571,181	9.42%
Net investment income (loss)	<u>(29,874,153)</u>	<u>158,993,249</u>	<u>(188,867,402)</u>	-118.79%
Total additions	<u>8,108,278</u>	<u>194,394,558</u>	<u>(186,286,280)</u>	-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	<u>428,743</u>	<u>280,419</u>	<u>148,324</u>	52.89%
Total deductions	<u>52,605,556</u>	<u>48,389,743</u>	<u>4,215,813</u>	8.71%
Net change	(44,497,278)	146,004,815	(190,502,093)	-130.48%
Net position, Beginning of year	<u>674,154,997</u>	<u>528,150,182</u>	<u>146,004,815</u>	27.64%
Net position, End of year	<u>\$ 629,657,719</u>	<u>\$ 674,154,997</u>	<u>\$ (44,497,278)</u>	-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 countries, 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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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%
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%
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%

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

STATEMENTS OF FIDUCIARY NET POSITION

April 30, 2022 and 2021

	2022	2021
Assets		
Investments, at Fair Value		
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	2,388,804	1,880,886
Asset-backed securities	7,193,367	6,535,263
Corporate bonds - domestic	30,260,646	33,750,329
Corporate bonds - foreign	1,461,567	999,773
Domestic debt obligations	3,497,745	4,171,927
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
	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
	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
	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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended April 30, 2022 and 2021

	2022	2021
Additions		
Investment Income		
Interest income	\$ 3,794,464	\$ 3,711,474
Dividend income	2,402,928	1,939,454
Net change in fair value of investments	(32,855,852)	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	80,272	120,992
Securities lending expenses		
Borrower rebates (fees)	18,009	(6,320)
Management fees	(29,441)	(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	26,813,483	24,258,707
Health subsidy	1,409,912	1,408,307
Health supplemental	1,631,000	1,616,200
Contributions from members	8,128,036	8,118,095
Total contributions	37,982,431	35,401,309
Total additions	8,108,278	194,394,558
Deductions		
Benefits Paid		
Retirement benefits	47,409,864	45,472,551
Funeral benefits	61,000	44,000
Total benefits paid	47,470,864	45,516,551
Refunds		
Termination	301,007	227,945
Retirement	4,404,942	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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

Basis of Accounting - 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.

Investments - 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.

Tax Status - 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.

Administrative Expenses - 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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Use of Estimates - 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.

Subsequent Events - 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		Total
	Tier I Members	Tier II Members	
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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

	2021		Total
	Tier I Members	Tier II Members	
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

Contributions - 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.

Retirement Benefits - 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:

Tier I Members - 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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

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

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

An annual cost-of-living adjustment, not to exceed 2.5 percent non-compounded 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.

Death Benefits - 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.

Disability Benefits - 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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

Health Care Subsidy - 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.

Investment Policy - 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%

Securities Lending Transactions - 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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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:

Type	Fair Value	Maturities in Years				Loaned Under Securities Lending Agreements
		Less than 1	1 - 5	6 - 10	More than 10	
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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

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

Type	Fair Value	Maturities in Years				Loaned Under Securities Lending Agreements
		Less than 1	1 - 5	6 - 10	More than 10	
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	--	--	--	--
	<u>75,752,640</u>	<u>\$ 23,389,453</u>	<u>\$ 23,454,374</u>	<u>\$ 10,596,309</u>	<u>\$ 18,312,504</u>	
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
	<u>\$ 673,811,367</u>					<u>\$ 30,823,886</u>

Custodial Credit Risk - 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.

Investment Concentrations - 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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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

Credit Risk - 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

<u>Fixed Income Security Type</u>	<u>Fair Value April 30, 2022</u>	<u>Percentage of all Fixed Income Assets</u>	<u>Weighted Average Credit Quality</u>
Short-term investment funds	\$ 22,084,858	11.5%	Not rated
Municipal bonds	2,388,804	1.3%	Aa2
Asset-backed securities	7,193,367	3.8%	Aaa
Corporate bonds - domestic	30,260,646	15.8%	A3
Corporate bonds - foreign	1,461,567	0.8%	Baa1
Domestic debt obligations	3,497,745	1.8%	Aaa
Collective trusts - fixed income	116,026,593	60.8%	Not rated
	<u>\$ 182,913,580</u>	<u>95.8%</u>	

<u>Fixed Income Security Type</u>	<u>Fair Value April 30, 2021</u>	<u>Percentage of all Fixed Income Assets</u>	<u>Weighted Average Credit Quality</u>
Short-term investment funds	\$ 18,073,385	9.5%	Not rated
Municipal bonds	1,880,886	1.0%	Aa2
Asset-backed securities	6,535,263	3.4%	Aaa
Corporate bonds - domestic	33,750,329	17.7%	A3
Corporate bonds - foreign	999,773	0.5%	Baa1
Domestic debt obligations	4,171,927	2.2%	Aaa
Collective trusts - fixed income	115,286,255	60.3%	Not rated
	<u>\$ 180,697,818</u>	<u>94.6%</u>	

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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

<u>Fixed Income Security Type</u>	<u>Fair Value April 30, 2022</u>	<u>Percentage of all Fixed Income Assets</u>	<u>Weighted Average Effective Duration (Years)</u>
Short-term investment funds**	\$ 22,084,858	11.5%	**
U.S. Treasuries	4,967,160	2.6%	11.32
U.S. government-backed mortgages	3,039,084	1.6%	4.92
Municipal bonds	2,388,804	1.3%	3.68
Asset-backed securities	7,193,367	3.8%	3.01
Corporate bonds - domestic	30,260,646	15.8%	5.73
Corporate bonds - foreign	1,461,567	0.8%	4.92
Domestic debt obligations	3,497,745	1.8%	3.53
Collective trusts - fixed income	116,026,593	60.8%	2.92
	<u>\$ 190,919,824</u>	<u>100.0%</u>	

<u>Fixed Income Security Type</u>	<u>Fair Value April 30, 2021</u>	<u>Percentage of all Fixed Income Assets</u>	<u>Weighted Average Effective Duration (Years)</u>
Short-term investment funds**	\$ 18,073,385	9.5%	**
U.S. Treasuries	7,282,834	3.8%	7.91
U.S. government-backed mortgages	3,058,243	1.6%	2.45
Municipal bonds	1,880,886	1.0%	3.55
Asset-backed securities	6,535,263	3.4%	3.31
Corporate bonds - domestic	33,750,329	17.7%	6.39
Corporate bonds - foreign	999,773	0.5%	5.55
Domestic debt obligations	4,171,927	2.2%	3.37
Collective trusts - fixed income	115,286,255	60.3%	2.59
	<u>\$ 191,038,895</u>	<u>100.0%</u>	

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

Foreign Currency Risk - 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.

Annual Money-Weighted Rate of Return - 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	<u>\$ 254,264,300</u>	<u>\$ 183,178,870</u>
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:

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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	7.00% for April 30, 2022 measurement date 7.25% for April 30, 2021 measurement date
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-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:

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

Asset Class	April 30, 2022		April 30, 2021	
	Target Allocation	Long-Term Expected Real Rate of Return	Target Allocation	Long-Term Expected 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%
Emerging Market Equity	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%

Discount Rate - 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.

Sensitivity Analysis - 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% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

	2021		
	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (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	<u>\$ 295,780,039</u>	<u>\$ 183,178,870</u>	<u>\$ 90,345,590</u>

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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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:

	Total Fair Value	April 30, 2022		
		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	<u>157,475,193</u>	<u>\$ 104,666,820</u>	<u>\$ 52,211,290</u>	<u>\$ 597,083</u>
Investments measured at net asset value (NAV) (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	<u>66,703,372</u>			
Total investments measured at net asset value (NAV)	<u>471,866,181</u>			
Total investments measured at fair value	<u>\$ 629,341,374</u>			

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

	Total Fair Value	April 30, 2021		
		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	<u>186,166,762</u>	<u>\$ 128,487,507</u>	<u>\$ 57,330,266</u>	<u>\$ 348,989</u>
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)	<u>487,644,605</u>			
Total investments measured at fair value	<u>\$ 673,811,367</u>			

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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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				
	Fair Value	Unfunded Commitments	Redemption Frequency (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	<u>\$ 471,866,181</u>	<u>\$ --</u>		

April 30, 2021				
	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently 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	<u>\$ 487,644,605</u>	<u>\$ --</u>		

(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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

REQUIRED SUPPLEMENTARY INFORMATION

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last Ten Fiscal Years

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total pension liability								
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	<u>(48,302,713)</u>	<u>(45,147,209)</u>	<u>(43,091,346)</u>	<u>(39,168,957)</u>	<u>(37,245,710)</u>	<u>(36,922,344)</u>	<u>(35,808,161)</u>	<u>(34,761,116)</u>
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	<u>(428,743)</u>	<u>(280,419)</u>	<u>(400,399)</u>	<u>(415,090)</u>	<u>(386,608)</u>	<u>(345,060)</u>	<u>(300,479)</u>	<u>(264,100)</u>
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
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	<u>\$ 254,264,300</u>	<u>\$ 183,178,870</u>	<u>\$ 296,968,573</u>	<u>\$ 235,623,238</u>	<u>\$ 216,478,757</u>	<u>\$ 213,283,074</u>	<u>\$ 163,632,239</u>	<u>\$ 121,969,580</u>
Fiduciary net position as a percentage of total pension liability	71.10%	78.52%	63.86%	70.09%	71.40%	70.38%	73.85%	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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

SCHEDULE OF CITY CONTRIBUTIONS

Last Ten Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially 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)	\$ (267,803)	\$ (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%

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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, net of investment expense	-4.45%	30.32%	-2.35%	4.62%	9.53%	12.89%	-1.50%	7.19%	10.85%

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

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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.

**CITY OF KANSAS CITY, MISSOURI
FIREFIGHTERS' PENSION SYSTEM**

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:

Actuarial cost method	Entry Age
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.