

City of Kansas City, Missouri
The Employees' Retirement System

Independent Auditor's Report and Financial Statements

April 30, 2018 and 2017

City of Kansas City, Missouri
The Employees' Retirement System
April 30, 2018 and 2017

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Independent Auditor's Report

Retirement Board
City of Kansas City, Missouri
The Employees' Retirement System
Kansas City, Missouri

We have audited the accompanying basic financial statements of the City of Kansas City, Missouri The Employees' Retirement System (the Plan), which comprise the statements of fiduciary net position as of April 30, 2018 and 2017, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the basic financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the City of Kansas City, Missouri The Employees' Retirement System as of April 30, 2018 and 2017, 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.

Required Supplementary Information

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

BKD, LLP

Kansas City, Missouri
October 3, 2018

City of Kansas City, Missouri
The Employees' Retirement System
Management's Discussion and Analysis
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The City of Kansas City, Missouri The Employees' Retirement System (ERS or the Plan) is a single-employer defined benefit plan covering general municipal employees and elected officials of the City of Kansas City, Missouri (the City). ERS was established by City ordinance in 1962 and is administered by a ten-person board of trustees (the Board) to provide retirement, death and survivor benefits to members and beneficiaries. This discussion and analysis of the financial performance of ERS provides an overview of financial activities for the fiscal years ended April 30, 2018 and 2017, with selected comparative information for the fiscal year ended April 30, 2016, and should be read along with the financial statements and notes to the financial statements.

The financial statements presented by ERS consist of the: (1) statements of fiduciary net position which reflects resources available for the payment of benefits as of year-end and (2) statements of changes in fiduciary net position which reflects 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 include information not necessarily discernible in the statements themselves. Following the notes are required supplemental information and other schedules that may be helpful in evaluating the financial condition of the Plan.

2018 and 2017 Summary Comparative Information of Fiduciary Net Position

	April 30, 2018	April 30, 2017	Amount Change	Percentage Change
Receivables	\$ 3,775,240	\$ 5,292,171	\$ (1,516,931)	-28.66%
Investments at fair value	1,150,183,828	1,091,442,174	58,741,654	5.38%
Securities lending collateral	91,205,944	71,134,948	20,070,996	28.22%
Total assets	<u>1,245,165,012</u>	<u>1,167,869,293</u>	<u>77,295,719</u>	6.62%
Due to broker for purchases of investments	1,322,518	3,016,930	(1,694,412)	-56.16%
Administrative and investment expenses payable	975,572	1,418,563	(442,991)	-31.23%
Securities lending collateral	91,205,944	71,134,948	20,070,996	28.22%
Total liabilities	<u>93,504,034</u>	<u>75,570,441</u>	<u>17,933,593</u>	23.73%
Net Position Restricted for Pensions	<u>\$ 1,151,660,978</u>	<u>\$1,092,298,852</u>	<u>\$ 59,362,126</u>	5.43%

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

	April 30, 2018	April 30, 2017	Amount Change	Percentage Change
Member contributions	\$ 8,622,835	\$ 7,966,105	\$ 656,730	8.24%
Employer contributions	24,530,445	23,701,217	829,228	3.50%
Net investment income	98,766,580	105,285,874	(6,519,294)	-6.19%
Total additions	<u>131,919,860</u>	<u>136,953,196</u>	<u>(5,033,336)</u>	-3.68%
Benefits paid to members	68,328,453	64,197,401	4,131,052	6.43%
Refunds of contributions	3,666,251	3,680,331	(14,080)	-0.38%
Administrative expenses	563,030	386,784	176,246	45.57%
Total deductions	<u>72,557,734</u>	<u>68,264,516</u>	<u>4,293,218</u>	6.29%
Net Increase in Net Position	59,362,126	68,688,680	(9,326,554)	-13.58%
Net Position, Restricted for Pensions, Beginning of Year	<u>1,092,298,852</u>	<u>1,023,610,172</u>	<u>68,688,680</u>	6.71%
Net Position, Restricted for Pensions, End of Year	<u>\$ 1,151,660,978</u>	<u>\$ 1,092,298,852</u>	<u>\$ 59,362,126</u>	5.43%

2018 Financial Highlights

Global financial markets soared during the first three quarters of the year due to U.S. fiscal policy stimulus and expectations of continued global growth. Then in the fourth quarter, volatility was reintroduced in the markets due to expectations of inflation, a repricing of the yield curve and headlines related to global trade negotiations, which somewhat muted the overall positive equity returns and caused slightly negative returns in fixed income. Albeit, the investment portfolio had a strong net return of 9.28 percent which compared favorably to the 8.75 percent rise in the Policy Portfolio benchmark. All segments of the fund performed relatively well, with the exceptions being the emerging market and opportunistic allocations. Non-U.S. equities were the best performing asset class, followed by global equities.

Plan net position climbed by 5.43 percent to \$1.152 billion, fueled by \$99 million of investment income. Contributions and benefits paid to members increased at an expected pace, while refunds of contributions decreased slightly. Administrative expenses rose significantly, primarily due to staffing costs and legal fees.

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2018 Operational Highlights

The only significant change to the investment portfolio was the restructuring of the fixed income allocation. The global fixed income and passive allocations were removed while a core-plus fixed income allocation was added. Ongoing cash needs were met primarily through the sale of appreciating equity securities.

2017 and 2016 Summary Comparative Information of Fiduciary Net Position

	April 30, 2017	April 30, 2016	Amount Change	Percentage Change
Receivables	\$ 5,292,171	\$ 3,523,440	\$ 1,768,731	50.20%
Investments at fair value	1,091,442,174	1,022,341,101	69,101,073	6.76%
Securities lending collateral	71,134,948	77,356,283	(6,221,335)	-8.04%
Total assets	<u>1,167,869,293</u>	<u>1,103,220,824</u>	<u>64,648,469</u>	5.86%
Due to broker for purchases of investments	3,016,930	1,758,965	1,257,965	71.52%
Administrative and investment expenses payable	1,418,563	495,404	923,159	186.34%
Securities lending collateral	71,134,948	77,356,283	(6,221,335)	-8.04%
Total liabilities	<u>75,570,441</u>	<u>79,610,652</u>	<u>(4,040,211)</u>	-5.07%
Net Position Restricted for Pensions	<u>\$ 1,092,298,852</u>	<u>\$1,023,610,172</u>	<u>\$ 68,688,680</u>	6.71%

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2017 and 2016 Summary Comparative Information of Changes in Fiduciary Net Position

	April 30, 2017	April 30, 2016	Amount Change	Percentage Change
Member contributions	\$ 7,966,105	\$ 8,235,363	\$ (269,258)	-3.27%
Employer contributions	23,701,217	24,577,647	(876,430)	-3.57%
Net investment income (loss)	105,285,874	(26,366,931)	131,652,805	-499.31%
Total additions	<u>136,953,196</u>	<u>6,446,079</u>	<u>130,507,117</u>	2024.60%
Benefits paid to members	64,197,401	63,007,354	1,190,047	1.89%
Refunds of contributions	3,680,331	4,596,259	(915,928)	-19.93%
Administrative expenses	386,784	365,571	21,213	5.80%
Total deductions	<u>68,264,516</u>	<u>67,969,184</u>	<u>295,332</u>	0.43%
Net Increase (Decrease) in Net Position	68,688,680	(61,523,105)	130,211,785	-211.65%
Net Position, Restricted for Pensions, Beginning of Year	<u>1,023,610,172</u>	<u>1,085,133,277</u>	<u>(61,523,105)</u>	-5.67%
Net Position, Restricted for Pensions, End of Year	<u>\$ 1,092,298,852</u>	<u>\$ 1,023,610,172</u>	<u>\$ 68,688,680</u>	6.71%

2017 Financial Highlights

Although fixed income market returns were negligible during the period, prices surged in most equity markets. This paved the way to an investment return, net of expenses, of 10.5 percent on the investment portfolio, which compared quite favorably to the 9.8 percent rise in the Policy Portfolio benchmark. All segments of the Fund performed relatively well. Emerging market equities were the best performing segment, followed by U.S. equities.

The 6.7 percent increase in net position was fueled by \$105 million of investment income. Member and employer contributions declined during the year, while benefits paid to members increased at a normal rate. Refunds of contributions decreased, as fewer members withdrew their contributions, while administrative expenses increased slightly due to staffing costs.

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2017 Operational Highlights

The only significant change to the investment structure was the funding of an outstanding capital commitment to the Fund's core-plus real estate manager. Ongoing cash needs were met primarily through the sale of appreciating equity securities.

Requests for Information

This financial report is designed to provide members of the City of Kansas City, Missouri The Employees' Retirement System, citizens, investors and creditors of the City of Kansas City, Missouri with a general overview of the Employees' Retirement 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 City of Kansas City, Missouri The Employees' Retirement 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 Plan.

City of Kansas City, Missouri
The Employees' Retirement System
Statements of Fiduciary Net Position
April 30, 2018 and 2017

Assets

	<u>2018</u>	<u>2017</u>
Investments, At Fair Value		
Short-term investment funds	\$ 22,785,127	\$ 15,435,839
U.S. Treasuries	25,817,600	20,580,159
U.S. government-backed mortgages	46,605,106	35,342,005
Municipal bonds	3,568,615	3,593,054
Asset-backed securities	5,376,639	1,295,173
Commercial mortgage-backed securities	-	77,603
Foreign debt obligations	2,279,269	2,147,483
Corporate bonds - domestic	29,960,341	28,789,078
Corporate bonds - foreign	20,261,196	16,286,729
Domestic preferred equities	1,220,017	932,570
Domestic common equities	196,131,355	184,349,327
Foreign equities	1,855,055	1,283,932
Partnerships	42,449,275	41,916,386
Hedge funds	27,082,692	27,165,006
Collective trusts - equities	524,171,575	486,984,283
Collective trusts - fixed income	131,000,000	158,967,750
Collective trusts - real estate	69,619,966	66,295,797
	<u>1,150,183,828</u>	<u>1,091,442,174</u>
Securities Lending Collateral	<u>91,205,944</u>	<u>71,134,948</u>
Receivables		
Contributions	1,453,333	1,258,303
Investment income	1,979,378	944,554
Due from broker for sales of investments	342,529	3,089,314
	<u>3,775,240</u>	<u>5,292,171</u>
Total assets	<u>1,245,165,012</u>	<u>1,167,869,293</u>
Liabilities		
Due to broker for purchases of investments	1,322,518	3,016,930
Administrative and investment expenses payable	975,572	1,418,563
Securities lending collateral	91,205,944	71,134,948
	<u>93,504,034</u>	<u>75,570,441</u>
Net Position Restricted for Pensions	<u>\$ 1,151,660,978</u>	<u>\$ 1,092,298,852</u>

City of Kansas City, Missouri
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Statements of Changes in Fiduciary Net Position
Years Ended April 30, 2018 and 2017

Additions

	<u>2018</u>	<u>2017</u>
Investment Income		
Interest income	\$ 11,095,910	\$ 9,800,347
Dividend income	6,959,514	6,424,213
Net increase in fair value of investments	84,644,419	92,516,905
Less investment expense	<u>(4,154,106)</u>	<u>(3,770,622)</u>
Net investment income	<u>98,545,737</u>	<u>104,970,843</u>
Securities Lending Income		
Securities lending gross income	<u>1,306,402</u>	<u>749,488</u>
Securities lending expenses		
Borrower fees	(991,169)	(299,729)
Management fees	<u>(94,390)</u>	<u>(134,728)</u>
Total securities lending expenses	<u>(1,085,559)</u>	<u>(434,457)</u>
Net securities lending income	<u>220,843</u>	<u>315,031</u>
Total net investment income	<u>98,766,580</u>	<u>105,285,874</u>
Contributions		
Contributions from the City of Kansas City, Missouri	24,530,445	23,701,217
Contributions from members	<u>8,622,835</u>	<u>7,966,105</u>
Total contributions	<u>33,153,280</u>	<u>31,667,322</u>
Total additions	<u>131,919,860</u>	<u>136,953,196</u>

Deductions

Benefits Paid to Members	68,328,453	64,197,401
Refunds		
Termination	1,428,989	1,441,455
Retirement	2,237,262	2,238,876
Administrative Expenses	<u>563,030</u>	<u>386,784</u>
Total deductions	<u>72,557,734</u>	<u>68,264,516</u>
Net Increase in Net Position	59,362,126	68,688,680
Net Position Restricted for Pensions, Beginning of Year	<u>1,092,298,852</u>	<u>1,023,610,172</u>
Net Position Restricted for Pensions, End of Year	<u>\$ 1,151,660,978</u>	<u>\$ 1,092,298,852</u>

City of Kansas City, Missouri
The Employees' Retirement System
Notes to Financial Statements
April 30, 2018 and 2017

Note 1: Summary of Significant Accounting Policies

Reporting Entity

The City of Kansas City, Missouri The Employees' Retirement System (the Plan) is a contributory, single-employer, defined benefit pension plan, covering employees and elected officials of the City of Kansas City, Missouri (the City). Members of the Police and Fire Departments' pension systems are excluded. The Plan is considered part of the City's financial reporting entity and is included in the City's comprehensive annual financial report as a pension trust fund. Employees should refer to the plan agreement for more complete information.

Adoption of New Accounting Standard

In 2018, the Plan adopted the provisions of GASB Statement No. 82, *Pension Issues – Amendment of GASB Statements No. 67, 68 and 73*. This statement addresses certain issues that have been raised with respect to Statement No. 67, Statement No. 68 and Statement No. 73. Specifically, GASB 82 addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. Adoption did not have a significant impact on amounts reported or disclosed.

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 due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when paid in accordance with the terms of the Plan.

Investments

Investments are valued at fair value as follows:

Government securities, asset-backed securities, commercial mortgage-backed securities and corporate bonds – Prices quoted by a major dealer in such securities.

Common stock, preferred stock, foreign common stock and indexed notes and bonds: (A) Listed – closing prices as reported on the composite summary of national securities exchanges (B) Over-the-counter – bid prices.

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Collective trusts, partnerships and hedge funds consist primarily of non-marketable investments in various venture capital, corporate finance funds and private partnerships (collectively referred to as "Portfolio Funds"). These funds are primarily invested in a diversified portfolio of equities, real estate, U.S. fixed income instruments 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 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.

The Plan is obligated to pay certain capital commitments to the partnerships. There were no outstanding commitments as of April 30, 2018 or 2017.

Investment transactions are accounted for on a trade-date basis (the date the order to buy or sell is executed), and the 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.

Administrative Expenses

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

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.

Note 2: Plan Description

The Plan is established by City ordinances enacted by the City Council. The Plan is administered by the Board of Trustees of The Employees' Retirement System of Kansas City, Missouri (the "Board"). The Board is composed of ten members, two of which are the Director of Human Resources and the Director of Finance, two shall be active employees and members of the retirement system, one retired member of the System and one member designated by Firefighters' IAFF Local 42. The remaining members are prominent Kansas City business or civic leaders appointed by the mayor.

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Notes to Financial Statements
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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 benefits as well as pre-retirement death benefits as noted below:

Tier I Members

The Plan provides retirement benefits, for those employees hired before April 20, 2014 (Tier I Members). Employees become vested for retirement benefits after five years of service. Members who retire with total age and creditable service equal to 80, or the later of age 60 and 10 years of creditable service, are entitled to an annual pension based on a percentage of final average compensation multiplied by years and months of creditable service. If married at the time of retirement, the percentages is 2.0 percent for general employees and 2.2 percent for elected officials, and if unmarried at the date of retirement, the percentage is 2.2 percent up to a maximum of 70 percent of final average compensation as defined in the Plan. If the employee has at least 10 years of creditable service, the minimum benefit is \$400 per month.

If members terminate prior to retirement and before rendering five 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. Members terminating prior to retirement with five or more years of service may elect to receive a refund of their member contributions with interest as a lump-sum distribution, or they may elect to receive a deferred pension. An automatic annual cost-of-living adjustment of 3 percent, non-compounded, is provided annually.

Tier II Members

The Plan provides retirement benefits, for those employees hired on or after April 20, 2014 (Tier II Members). Employees become vested for retirement benefits after ten years of service. Members who retire with total age and creditable service equal to 85, or the later of age 62 and 10 years of creditable service are entitled to an annual pension of 1.75 percent of final average compensation multiplied by the number of years of creditable service, subject to a maximum limit of 70 percent of final average compensation as defined in the Plan.

If employees terminate prior to retirement and before rendering ten 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.

An annual cost-of-living adjustment, not to exceed 2.5 percent, non-compounded, per year is provided to pensioners age 62 and older 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.

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Death Benefits

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

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

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

If an active member dies, the member contributions and interest are distributed to the surviving spouse or, if none, to the designated beneficiary. The surviving spouse, however, may elect to receive monthly benefit payments instead of the lump-sum distribution if the member had five or more years of creditable service.

Note 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, common and preferred stocks, partnerships, collective trusts and derivatives. 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.

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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 market values. The Board has authorized Plan staff, with the guidance from the investment consultant, to rebalance the portfolio in accordance with the strategy guidelines below:

Asset Type and Class	Range	Target
Global Equity		
U.S. Equity	6.5% - 16.5%	11.5%
Emerging Manager of Managers	2.0% - 7.0%	4.0%
Non-U.S. Equity	11% - 21%	16.0%
Emerging Markets Equity	2% - 5%	3.5%
Global Equity	2% - 8%	5.0%
Long/Short Equity	2% - 8%	5.0%
Global Fixed Income		
Core Fixed Income	20.0% - 30.0%	25.0%
Non-Core Fixed Income	2.0% - 12.0%	7.0%
Real Assets		
Real Estate	2.5% - 12.5%	7.5%
Infrastructure	1.0% - 4.0%	2.5%
Opportunistic	7.0% - 17.0%	12.0%
Cash	0% - 5.0%	1.0%

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 – loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future.

The Plan has contracted with Northern Trust as its third-party lending agent to lend domestic equity and debt securities for cash collateral of not less than 102 percent of the market value and international debt and equity securities of not less than 105 percent of the market value. At April 30, 2018 and 2017, 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.

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	2018	2017
Market value of securities loaned	<u>\$ 88,923,982</u>	<u>\$ 69,207,414</u>
Market value of cash collateral received from borrowers	<u>\$ 91,205,944</u>	<u>\$ 71,134,948</u>

All securities 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, 2018, 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	\$ 25,817,600	\$ 11,371,793	\$ 14,445,807	\$ -	\$ -	\$ 18,514,557
U.S. government-backed mortgages	46,605,106	-	86,457	796,346	45,722,303	-
Municipal bonds	3,568,615	-	676,133	-	2,892,482	-
Asset-backed securities	5,376,639	-	269,515	1,350,738	3,756,386	-
Foreign debt obligations	2,279,269	-	-	1,094,389	1,184,880	54,321
Corporate bonds - domestic	29,960,341	-	7,328,974	10,667,142	11,964,225	2,412,129
Corporate bonds - foreign	20,261,196	103,925	3,932,424	11,536,463	4,688,384	571,771
Money market funds	22,785,127	22,785,127	-	-	-	-
Collective trusts - fixed income	131,000,000	131,000,000	-	-	-	-
		<u>\$ 165,260,845</u>	<u>\$ 26,739,310</u>	<u>\$ 25,445,078</u>	<u>\$ 70,208,660</u>	
Domestic preferred equities	1,220,017					-
Domestic common equities	196,131,355					65,516,149
Foreign equities	1,855,055					1,855,055
Partnerships	42,449,275					-
Collective trusts - equities	524,171,575					-
Collective trusts - real estate	69,619,966					-
Hedge funds	27,082,692					-
	<u>\$ 1,150,183,828</u>					<u>\$ 88,923,982</u>

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At April 30, 2017, 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	\$ 20,580,159	\$ 13,916,014	\$ 6,664,145	\$ -	\$ -	\$ 12,828,770
U.S. government-backed mortgages	35,342,005	-	90,936	-	35,251,069	-
Municipal bonds	3,593,054	868,726	-	-	2,724,328	-
Asset-backed securities	1,295,173	-	-	803,769	491,404	-
Commercial mortgage-backed securities	77,603	77,603	-	-	-	-
Foreign debt obligations	2,147,483	-	-	1,149,653	997,830	617,873
Corporate bonds - domestic	28,789,078	826,166	7,822,803	8,188,272	11,951,837	1,711,444
Corporate bonds - foreign	16,286,729	-	1,776,680	10,383,851	4,126,198	2,275,319
Money market funds	15,435,839	15,435,839	-	-	-	-
Collective trusts - fixed income	158,967,750	158,967,750	-	-	-	-
		<u>\$ 190,092,098</u>	<u>\$ 16,354,564</u>	<u>\$ 20,525,545</u>	<u>\$ 55,542,666</u>	
Domestic preferred equities	932,570					-
Domestic common equities	184,349,327					50,574,420
Foreign equities	1,283,932					1,199,588
Partnerships	41,916,386					-
Collective trusts - equities	486,984,283					-
Collective trusts - real estate	66,295,797					-
Hedge funds	27,165,006					-
	<u>\$ 1,091,442,174</u>					<u>\$ 69,207,414</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, \$88,923,982 and \$69,207,414 at April 30, 2018 and 2017, respectively, was held by the counterparty that was acting as the Plan's agent in securities lending transactions.

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Investment Concentrations

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

Investment	Fair Value
Investments managed by Prudential, Inc.	\$ 131,540,105
American Century Global Growth Equity Trust - Tier 2	121,782,475
Investments managed by GMO	113,849,077
Investments managed by JP Morgan	112,059,758
Investments managed by Blackrock	109,541,417
Mellon EB DV Global Exp Alpha I Fund	68,906,366
Investments managed by Northern Trust	59,169,924

The following presents investments that represent 5 percent or more of the fiduciary net position of the Plan, as of April 30, 2017:

Investment	Fair Value
Investments managed by Northern Trust	\$ 166,530,487
Investments managed by JP Morgan	110,960,794
American Century Global Growth Equity Trust - Tier 2	109,675,649
Investments managed by Blackrock	105,897,535
Investments managed by GMO	100,224,368
Mellon EB DV Global Exp Alpha I Fund	66,382,648

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the Plan. The Plan's policy is that fixed income securities must have a minimum investment quality of "B" at the time of purchase. The weighted average credit rating of the portfolio must have a minimum investment quality of "A." As of April 30, 2018 and 2017, the Plan's fixed income assets that are not explicitly government guaranteed represented 74.70 percent and 80.20 percent of the fixed income portfolio, respectively. The following tables summarize the Plan's fixed income portfolio exposure levels and credit qualities at April 30, 2018 and 2017:

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Average Credit Quality and Exposure Levels of Nongovernmental Guaranteed Securities

Fixed Income Security Type	Fair Value April 30, 2018	Percentage of all Fixed Income Assets	S&P Weighted Average Credit Quality
Municipal bonds	\$ 3,568,615	1.2%	A
Asset-backed securities	5,376,639	1.9%	AAA
Foreign debt obligations	2,279,269	0.8%	BBB
Corporate bonds - domestic	29,960,341	10.4%	BBB
Corporate bonds - foreign	20,261,196	7.0%	BBB
Money market funds	22,785,127	7.9%	Not rated
Collective trusts - fixed income	131,000,000	45.5%	Not rated
	<u>\$ 215,231,187</u>	<u>74.7%</u>	

Fixed Income Security Type	Fair Value April 30, 2017	Percentage of all Fixed Income Assets	S&P Weighted Average Credit Quality
Municipal bonds	\$ 3,593,054	1.3%	A
Asset-backed securities	1,295,173	0.5%	AAA
Commercial mortgage-backed securities	77,603	0.0%	Not Rated
Foreign debt obligations	2,147,483	0.8%	BBB
Corporate bonds - domestic	28,789,078	10.2%	BBB
Corporate bonds - foreign	16,286,729	5.8%	BBB
Money market funds	15,435,839	5.4%	Not rated
Collective trusts - fixed income	158,967,750	56.2%	Not rated
	<u>\$ 226,592,709</u>	<u>80.2%</u>	

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.

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Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed within the portfolio using the effective duration of option-adjusted methodology. The Plan's policy is to manage duration to a maximum 25 percent of underweighting/overweighting relative to the Barclays Aggregate Bond Index.

Effective Duration of Fixed Income Assets by Security Type at April 30, 2018

Fixed Income Security Type	Fair Value April 30, 2018	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
U.S. Treasuries	\$ 25,817,600	9.0%	2.5
U.S. government-backed mortgages	46,605,106	16.3%	24.1
Municipal bonds	3,568,615	1.2%	16.5
Asset-backed securities	5,376,639	1.9%	11.9
Foreign debt obligations	2,279,269	0.8%	15.8
Corporate bonds - domestic	29,960,341	10.4%	12.4
Corporate bonds - foreign	20,261,196	7.0%	11.5
Money market funds**	22,785,127	7.9%	**
Collective trusts - fixed income	131,000,000	45.5%	8.2
	<u>\$ 287,653,893</u>	<u>100.0%</u>	

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Effective Duration of Fixed Income Assets by Security Type at April 30, 2017

Fixed Income Security Type	Fair Value April 30, 2017	Percentage of all Fixed Income Assets	Weighted Average Effective Duration (Years)
U.S. Treasuries	\$ 20,580,159	7.3%	1.8
U.S. government-backed mortgages	35,342,005	12.5%	21.1
Municipal bonds	3,593,054	1.3%	16.1
Asset-backed securities	1,295,173	0.5%	11.9
Commercial mortgage-backed securities	77,603	0.0%	0.6
Foreign debt obligations	2,147,483	0.8%	14.8
Corporate bonds - domestic	28,789,078	10.2%	11.6
Corporate bonds - foreign	16,286,729	5.8%	13.9
Money market funds**	15,435,839	5.4%	**
Collective trusts - fixed income	158,967,750	56.2%	5.8
	<u>\$ 282,514,873</u>	<u>100%</u>	

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

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, 2018 and 2017, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was 9.28 percent and 10.46 percent, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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Note 4: Net Pension Liability

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

	2018	2017
Total pension liability	\$ 1,357,512,868	\$ 1,314,446,559
Plan fiduciary net position	(1,151,660,978)	(1,092,298,852)
City's net pension liability	\$ 205,851,890	\$ 222,147,707
Fiduciary net position as a % of total pension liability	84.84%	83.10%

Note 5: Actuarial Methods and Assumptions

An actuary from Cheiron determines the total pension liability. The total pension liability as of April 30, 2018 and 2017 was determined based on an actuarial valuation prepared as of May 1, 2017 and 2016, respectively, rolled forward one year, using the following actuarial assumptions:

Inflation	3.0% per annum
Projected salary increases, including inflation	3.75% to 5.0% per annum, depending on age
Long-term investment rate of return, net of plan investment expenses, including inflation	7.50%
Mortality Tables:	
Healthy	RP-2000 Combined Healthy Annuitant Mortality Table (multiplied by 1.078 for males and 1.065 for females), projected using a modified Scale MP-2015 on a generational basis.
Disabled	RP-2000 Combined Disabled Mortality Table (multiplied by 1.300 for males and 1.500 for females), projected using a modified Scale MP-2015 on a generational basis.

The actuarial assumptions used in the May 1, 2017 and 2016 valuation was based on the results of the actuarial experience study for the period May 1, 2010 through April 30, 2015. The actuarial experience study is dated February 23, 2016.

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For purposes of calculating the total pension liability, future ad hoc COLAs of 3.0 percent (simple COLA) were assumed to be granted in all future years, for Tier I employees. Tier II employees 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 age 62.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best-estimates arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of April 30, 2018 and 2017 are summarized in the following tables:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return April 30, 2018
Equities		
U.S. Equity	11.5%	3.8%
Emerging Manager of Managers	4.0%	3.8%
Non-U.S. Equity	16.0%	5.0%
Emerging Markets Equity	3.5%	7.3%
Global Equity	5.0%	4.7%
Long/Short Equity	5.0%	4.0%
Fixed Income		
Core Fixed Income	25.0%	0.5%
Non-Core Fixed Income	7.0%	2.5%
Real Assets		
Real Estate	7.5%	3.3%
Infrastructure	2.5%	3.0%
Opportunistic	12.0%	4.1%
Cash	1.0%	-0.5%

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Asset Class	Target Allocation	Long-Term Expected Real Rate of Return April 30, 2017
Large Cap Equity	16.0%	4.7%
Small Cap Equity	5.5%	5.9%
Non-U.S. Equity	7.0%	5.9%
Global Equity	19.0%	5.6%
Emerging Markets Equity	3.0%	8.5%
Opportunistic Equity	12.0%	3.8%
Fixed Income	26.5%	0.1%
Real Assets	10.0%	3.0%
Cash	1.0%	-0.8%

Discount Rate

The discount rate used to measure the total pension liability was 7.5 percent. In the professional judgment of the Plan's actuary, the funding policy of the plan will result in the pension plan's projected Fiduciary Net Position being greater than or equal to the benefit payments projected for each future period. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments.

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Sensitivity Analysis

The following sensitivity analysis presents the net pension liability of the City, calculated using the discount rate of 7.50 percent as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.50 percent) or one percentage point higher (8.50 percent) than the current rate as of April 30, 2018 and 2017:

	2018		
	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Total pension liability	\$ 1,520,065,911	\$ 1,357,512,868	\$ 1,221,260,929
Fiduciary net position	<u>(1,151,660,978)</u>	<u>(1,151,660,978)</u>	<u>(1,151,660,978)</u>
Net pension liability	<u>\$ 368,404,933</u>	<u>\$ 205,851,890</u>	<u>\$ 69,599,951</u>
	2017		
	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Total pension liability	\$ 1,473,273,916	\$ 1,314,446,559	\$ 1,181,425,199
Fiduciary net position	<u>(1,092,298,852)</u>	<u>(1,092,298,852)</u>	<u>(1,092,298,852)</u>
Net pension liability	<u>\$ 380,975,064</u>	<u>\$ 222,147,707</u>	<u>\$ 89,126,347</u>

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Note 6: Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of fiduciary net position.

Plan contributions are made and the total pension liability are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimation and assumption process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Note 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

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Recurring Measurements

The following table presents the fair value measurements of assets and liabilities recognized in the accompanying statements of fiduciary net position measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements fall at April 30, 2018 and 2017:

	Total Fair Value	April 30, 2018		
		Level 1	Level 2	Level 3
Investments by fair value level				
U.S. Treasuries	\$ 25,817,600	\$ -	\$ 25,817,600	\$ -
U.S. government-backed mortgages	46,605,106	-	44,769,376	1,835,730
Municipal bonds	3,568,615	-	3,568,615	-
Asset-backed securities	5,376,639	-	5,376,639	-
Foreign debt obligations	2,279,269	-	2,279,269	-
Corporate bonds - domestic	29,960,341	-	29,960,341	-
Corporate bonds - foreign	20,261,196	-	20,261,196	-
Short-term investment funds	22,785,127	22,785,127	-	-
Domestic preferred equities	1,220,017	1,220,017	-	-
Domestic common equities	196,131,355	196,131,355	-	-
Foreign equities	1,855,055	1,855,055	-	-
Collective trusts - equities	59,169,924	-	59,169,924	-
Total investments	415,030,244	\$ 221,991,554	\$ 191,202,960	\$ 1,835,730
Investments measured at the net asset value (NAV) (A)				
Collective trusts - equities	465,001,651			
Collective trusts - fixed income	131,000,000			
Partnerships	42,449,275			
Collective trusts - real estate	69,619,966			
Hedge funds	27,082,692			
Total investments measured at the NAV	735,153,584			
Total investments	\$ 1,150,183,828			

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	Total Fair Value	April 30, 2017		
		Level 1	Level 2	Level 3
Investments by fair value level				
U.S. Treasuries	\$ 20,580,159	\$ -	\$ 20,580,159	\$ -
U.S. government-backed mortgages	35,342,005	-	35,342,005	-
Municipal bonds	3,593,054	-	3,593,054	-
Asset-backed securities	1,295,173	-	1,295,173	-
Government issued commercial mortgage obligations	77,603	-	77,603	-
Foreign debt obligations	2,147,483	-	2,147,483	-
Corporate bonds - domestic	28,789,078	-	28,789,078	-
Corporate bonds - foreign	16,286,729	-	16,286,729	-
Short-term investment funds	15,435,839	15,435,839	-	-
Domestic preferred equities	932,570	932,570	-	-
Domestic common equities	184,349,327	184,349,327	-	-
Foreign equities	1,283,932	1,283,932	-	-
Collective trusts - equities	61,243,755	-	61,243,755	-
Collective trusts - fixed income	107,004,527	-	107,004,527	-
Total investments	478,361,234	\$ 202,001,668	\$ 276,359,566	\$ -
Investments measured at the net asset value (NAV) (A)				
Collective trusts - equities	425,740,528			
Collective trusts - fixed income	51,963,223			
Partnerships	41,916,386			
Collective trusts - real estate	66,295,797			
Hedge funds	27,165,006			
Total investments measured at the NAV	613,080,940			
Total investments	\$ 1,091,442,174			

(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.

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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 as well as 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, 2018 and 2017. Although management is not aware of any factors that would significantly affect the estimated fair value amounts, such amounts have not been comprehensively revalued for purposes of these financial statements since that date, and current estimates of fair value may differ significantly from the amounts presented herein.

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

Fair value determinations for Level 3 measurements of securities are the responsibility of the Pension Administrator's office. The Pension Administrator's office contracts with the respective money manager to engage a pricing specialist to generate fair value estimates on a monthly or quarterly basis. The Pension Administrator's office challenges the reasonableness of the assumptions used and reviews the methodology to ensure the estimated fair value complies with accounting standards generally accepted in the United States.

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

	Fair Value	Unfunded Commitments	April 30, 2018	
			Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Collective trusts - equities (A)	\$ 465,001,651	\$ -	Daily/Monthly	1-7 Days
Collective trusts - fixed income (B)	131,000,000	-	Daily	1 Day
Partnerships (C)	42,449,275	-	Semi-Annual	2 Months
Collective trusts - real estate (D)	69,619,966	-	Quarterly	45 Days
Hedge funds (E)	27,082,692	-	Bi-Monthly	75 Days
Total investments measured at the NAV	<u>\$ 735,153,584</u>			

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		April 30, 2017		
	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Collective trusts - equities (A)	\$ 425,740,528	\$ -	Daily/Monthly	1-7 Days
Collective trusts - fixed income (B)	51,963,223	-	Daily	1 Day
Partnerships (C)	41,916,386	-	Semi-Annual	2 Months
Collective trusts - real estate (D)	66,295,797	-	Quarterly	45 Days
Hedge funds (E)	<u>27,165,006</u>	-	Bi-Monthly	75 Days
Total investments measured at the NAV	<u>\$ 613,080,940</u>			

- (A) This category includes collective trust funds. Each invests in equity securities both on the national and international markets listed on public market exchanges and are traded daily.
- (B) 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.
- (C) This category is a limited partnership. Investments are open-ended Global Core/Core Plus infrastructure investments.
- (D) This category is a common collective trust redeemable quarterly with a 45 day notice period. 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 sixty “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.

Required Supplementary Information

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Required Supplementary Information

Schedule of Changes in the City's Net Pension Liability and Related Ratios
Last Ten Fiscal Years

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Total pension liability				
Service cost	\$ 20,085,682	\$ 20,048,780	\$ 19,485,402	\$ 19,694,295
Interest on total pension liability	97,267,046	94,116,208	87,902,877	85,393,038
Differences between expected and actual experience	(2,291,715)	(431,574)	(6,077,385)	-
Change of assumptions	-	-	43,062,525	-
Benefit payments, including member refunds	<u>(71,994,704)</u>	<u>(67,877,732)</u>	<u>(67,603,613)</u>	<u>(63,149,987)</u>
Net change in total pension liability	43,066,309	45,855,682	76,769,806	41,937,346
Total pension liability - beginning	<u>1,314,446,559</u>	<u>1,268,590,877</u>	<u>1,191,821,071</u>	<u>1,149,883,725</u>
Total pension liability - ending	<u>1,357,512,868</u>	<u>1,314,446,559</u>	<u>1,268,590,877</u>	<u>1,191,821,071</u>
Fiduciary net position				
Net investment income (loss)	98,766,580	105,285,874	(26,366,931)	84,827,952
City contributions	24,530,445	23,701,217	24,577,647	27,569,434
Member contributions	8,622,835	7,966,105	8,235,363	8,610,268
Benefits paid	(68,328,453)	(64,197,401)	(63,007,354)	(58,650,593)
Refunds of contributions	(3,666,251)	(3,680,331)	(4,596,259)	(4,499,394)
Administrative expenses	<u>(563,030)</u>	<u>(386,784)</u>	<u>(365,571)</u>	<u>(379,424)</u>
Net change in fiduciary net position	59,362,126	68,688,680	(61,523,105)	57,478,243
Fiduciary net position - beginning	<u>1,092,298,852</u>	<u>1,023,610,172</u>	<u>1,085,133,277</u>	<u>1,027,655,034</u>
Fiduciary net position - ending	<u>1,151,660,978</u>	<u>1,092,298,852</u>	<u>1,023,610,172</u>	<u>1,085,133,277</u>
Net pension liability, ending	<u>\$ 205,851,890</u>	<u>\$ 222,147,707</u>	<u>\$ 244,980,705</u>	<u>\$ 106,687,794</u>
Fiduciary net position as a percentage of total pension liability	84.84%	83.10%	80.69%	91.05%
Covered payroll	\$ 167,811,028	\$ 164,248,048	\$ 166,853,097	\$ 167,629,048
Net pension liability as a percentage of covered payroll	122.67%	135.25%	146.82%	63.65%

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
The Employees' Retirement System
Required Supplementary Information
Schedule of City Contributions
Last Ten Fiscal Years

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Actuarially determined employer contribution	\$ 24,390,835	\$ 23,042,413	\$ 24,540,893	\$ 27,568,194	\$ 27,568,194	\$ 27,682,872	\$ 26,326,555	\$ 27,772,227	\$ 29,589,060	\$ 19,364,846
Actual City contributions	<u>24,530,445</u>	<u>23,701,217</u>	<u>24,577,647</u>	<u>27,569,434</u>	<u>25,987,662</u>	<u>23,744,372</u>	<u>20,543,487</u>	<u>18,822,709</u>	<u>19,186,317</u>	<u>20,330,486</u>
Annual contribution deficiency (excess)	<u>\$ (139,610)</u>	<u>\$ (658,804)</u>	<u>\$ (36,754)</u>	<u>\$ (1,240)</u>	<u>\$ 1,580,532</u>	<u>\$ 3,938,500</u>	<u>\$ 5,783,068</u>	<u>\$ 8,949,518</u>	<u>\$ 10,402,743</u>	<u>\$ (965,640)</u>
Covered payroll	\$ 167,811,028	\$ 164,248,048	\$ 166,853,097	\$ 167,629,048	\$ 167,629,049	\$ 166,877,689	\$ 161,134,295	\$ 163,113,722	\$ 153,948,044	\$ 160,200,649
Actual contributions as a percentage of covered payroll	14.62%	14.43%	14.73%	16.45%	15.50%	14.23%	12.75%	11.54%	12.46%	12.69%

City of Kansas City, Missouri
The Employees' Retirement System
Required Supplementary Information
Schedule of Investment Returns
Last Ten Fiscal Years

Fiscal Year Ending April 30	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	9.28%	10.46%	-2.50%	8.36%	11.50%

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
The Employees' Retirement System
Notes to Required Supplementary Information
April 30, 2018 and 2017

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

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, Tier I member contribution rates increased by 1.00 percent and the interest credited to employee account balances decreased to 5.00 percent.
- Tier II members were added.

5/01/2013 Valuation

- The City contribution rate changed from 9.50 percent of payroll for General Employees and 19.50 percent of payroll for Judges and Elected Officials to the prior year's actuarially determined contribution rate.

5/01/2012 Valuation

- The plan was amended to provide MAST employees with service prior to April 25, 2010 and to implement a special benefit schedule for these employees.

5/01/2011 Valuation

- The Plan was amended according to Ordinance No. 110218, so that unless otherwise provided, no members of the Council, including the Mayor, who commence a term of office after April 30, 2011 shall participate in this plan for any service after April 30, 2011. However, members of the Council, including the Mayor, elected on March 27, 2007 for a term beginning May 1, 2007 and also elected on March 22, 2011 for a term beginning on May 1, 2011 are members of this plan as long as they are continuously a member of the Council, including the Mayor.

City of Kansas City, Missouri
The Employees' Retirement System
Notes to Required Supplementary Information (Continued)
April 30, 2018 and 2017

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

5/01/2016 Valuation

- No changes in actuarial assumptions or methods.

5/01/2015 Valuation

- No changes in actuarial assumptions or methods.

5/01/2014 Valuation

- All assumptions have been revised based on the results of the experience study conducted for the period May 1, 2010 to April 30, 2015. These assumptions were incorporated into the GASB 67 disclosures and net pension liability calculation for the Plan's 2016 fiscal year-end which is based on the 4/30/2014 Valuation.

5/01/2011 Valuation

- Actuarial assumptions were changed based on recommendations from the May 1, 2006 through April 30, 2010 actuarial experience study that was adopted by the Board. The changes affected withdrawal rates, retirement rates, age of spouse assumptions, salary increases and J&S election assumptions.

5/01/2009 Valuation

- The Amortization of UAL changed from a 20-year level percent of pay amortization method to a 30-year layered level percent of pay amortization method for the 5/1/2009 change to the unfunded actuarial liability.

5/01/2008 Valuation

- The Asset Smoothing Method switched from the prior method of using preliminary asset value plus 20 percent of the difference between the market value and the preliminary asset value to the new method of using 100 percent of expected returns plus 25 percent of actual returns above or below the expected return. The minimum asset corridor also changed from 90 percent to 85 percent.
- The Amortization of UAL changed from a 30-year rolling level dollar amortization method to a 20-year layered level percent of pay amortization method.
- The Investment Return Assumption changed from 7.75 percent to 7.50 percent.

City of Kansas City, Missouri
The Employees' Retirement System
Notes to Required Supplementary Information (Continued)
April 30, 2018 and 2017

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, 2016 actuarial valuation:

Valuation Date	May 1, 2016
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	4-year smoothing using Expected Value Method. 85% / 110% corridor around market value.
Amortization method	20-year layered amortization as a level percent of pay. Changes to the 5/1/2009 unfunded actuarial liability was amortized over 30 years.
Discount rate	7.50%
Amortization growth rate	3.75%
Price inflation	3.00%
Salary increases	Ranges from 5.0% to 3.75%
Cost-of-living adjustments	3.00% simple for Tier 1 Members; 2.50% simple payable at 27th anniversary of date at hire if the prior year's funding ratio is greater than or equal to 80% for Tier II Members.
Mortality	Non-Annuitants: RP-2000 Combined Healthy Non-Annuitant Mortality Table (multiplied by 0.956 for males and 0.960 for females), projected using a modified Scale MP-2015 on a generational basis. Healthy Annuitants: RP-2000 Combined Healthy Annuitant Mortality Table (multiplied by 1.078 for males and 1.065 for females), projected using a modified Scale MP-2015 on a generational basis. Disabled: RP-2000 Combined Healthy Annuitant Mortality Table (multiplied by 1.300 for males and 1.500 for females) projected using a modified Scale MP-2015 on a generational basis.