FINANCIAL STATEMENTS
WITH SUPPLEMENTARY INFORMATION

FOR THE YEARS ENDED APRIL 30, 2020 AND 2019

AND

INDEPENDENT AUDITOR'S REPORT



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INDEPENDENT AUDITOR'S REPORT

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

Report on the Financial Statements

We have audited the accompanying financial statements of the City of Kansas City, Missouri The Employees' Retirement System (Plan), which comprise the statements of fiduciary net position as of April 30, 2020 and 2019, the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, which comprise the Plan's basic financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our 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 audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan as of April 30, 2020 and 2019, and the changes in its fiduciary net position for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

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, 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

October 1, 2020 Wichita, Kansas

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Employees' Retirement System of the City of Kansas City, Missouri (ERS or Plan) is a single-employer defined benefit plan covering general municipal employees and elected officials of the City of Kansas City, Missouri (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, 2020 and 2019, with selected comparative information for the fiscal year ended April 30, 2018, and should be read along with the financial statements and notes to the financial statements.

Overview of the Financial Statements and Accompanying Information

- The financial statements presented by ERS consist of the: (1) statements of fiduciary net position, which reflect resources available for the payment of benefits as of year-end, and (2) statements of changes in fiduciary net position, which reflect 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.
- Required supplementary information presents schedules related to employer contributions and the funding of the Plan.

2020 and 2019 Comparative Summary of Fiduciary Net Position

	April 30, 2020	April 30, 2019	Amount Change	Percentage Change
Receivables	\$ 7,156,153	\$ 4,283,448	\$ 2,872,705	67.07%
Investments at fair value	1,097,030,850	1,168,503,016	(71,472,166)	-6.12%
Securities lending collateral	56,099,306	60,724,175	(4,624,869)	-7.62%
Total assets	1,160,286,309	1,233,510,639	(73,224,330)	-5.94%
Due to broker for purchases of investments	E 212 E20	2 570 720	2 642 700	102.80%
Administrative and investment	5,213,529	2,570,730	2,642,799	102.00%
expenses payable	1,139,988	944,149	195,839	20.74%
Securities lending collateral	56,099,306	60,724,175	(4,624,869)	-7.62%
Total liabilities	62,452,823	64,239,054	(1,786,231)	-2.78%
Net position	\$1,097,833,486	\$1,169,271,585	\$ (71,438,099)	-6.11%

MANAGEMENT'S DISCUSSION AND ANALYSIS

2020 and 2019 Comparative Summary of Changes in Fiduciary Net Position

	April 30, 2020 April 30, 2019		Amount Change	Percentage Change
Member contributions	\$ 8,552,954	\$ 8,514,325	\$ 38,629	0.45%
Employer contributions	27,256,034	26,032,072	1,223,962	4.70%
Net investment income	(25,371,609)	59,453,267	(84,824,876)	-142.67%
Total additions	10,437,379	93,999,664	(83,562,285)	-88.90%
Benefits paid to members	75,387,320	71,410,862	3,976,458	5.57%
Refunds of contributions	5,999,576	4,393,283	1,606,293	36.56%
Administrative expenses	488,582	584,912	(96,330)	-16.47%
Total deductions	81,875,478	76,389,057	5,486,421	7.18%
Net change	(71,438,099)	17,610,607	(89,048,706)	-505.65%
Net position, Beginning of Year	1,169,271,585	1,151,660,978	17,610,607	1.53%
Net position, End of Year	\$1,097,833,486	\$1,169,271,585	\$ (71,438,099)	-6.11%

2020 Financial Highlights

The Plan's net position contracted by 6.1%, as seen in the statement of Fiduciary Net Position. Global financial markets posted strong positive returns during the first three quarters despite volatility caused by headwinds from a weak global economy, trade disputes between the U.S. and China and geopolitical tensions. The Federal Reserve also cut rates for the first time since 2008. Then, in the fourth quarter, global equity markets experienced the swiftest market correction in history as the spread of COVID-19 halted economies around the world, and the longest bull market in history officially came to an end in mid-March. In response, the Federal Reserve took several emergency actions which included cutting rates twice and began a new round of quantitative easing to stabilize financial markets and support the flow of credit. Additionally, in the U.S., a \$2.2 trillion stimulus plan was announced. These measures led to a reduction in volatility and a strong comeback in the markets, with U.S. equities leading the way. The Plan's investment portfolio returned -2.5% for the year, which underperformed the return of the Policy Portfolio benchmark. All equity segments of the Plan, including U.S., Non-U.S. and global, along with the opportunistic segment of the Plan, posted negative returns. Fixed income was the best performing asset class on an absolute basis, followed by real assets.

Total additions, as shown on the statement of Changes in Fiduciary Net Position, were negative \$83.6 million, an 88.9% decline from the prior year. Although contributions grew \$1.3 million, mainly due to an increase in the actuarial required contribution rate, net investment income dropped by \$84.8 million. Benefits paid to members increased by 5.6%, due in large part to new retirements and cost-of-living adjustments, while refunds of contributions increased 36.6%, with much of the increase attributable to refund elections made by retiring employees. The 16.5% reduction in administrative expenses was mainly due to a reclassification of certain administrative expenses to investment expenses.

MANAGEMENT'S DISCUSSION AND ANALYSIS

2020 Operational Highlights

No investment manager or other service provider changes occurred in the period, although a decision was made to terminate the Plan's alternative beta manager. The manager termination was effective at the end of the first calendar quarter; however proceeds from the investment will not be available until the second quarter of 2020. On-going cash needs were met primarily through rebalancing and the sale of appreciating equity and fixed income securities.

2019 and 2018 Comparative Summary of Fiduciary Net Position

	April 30, 2019	April 30, 2018	Amount Change	Percentage Change
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Receivables	\$ 4,283,448	\$ 3,775,240	\$ 508,208	13.46%
Investments at fair value	1,168,503,016	1,150,183,828	18,319,188	1.59%
Securities lending collateral	60,724,175	91,205,944	(30,481,769)	-33.42%
Total assets	1,233,510,639	1,245,165,012	(11,654,373)	-0.94%
Due to broker for purchases				
of investments	2,570,730	1,322,518	1,248,212	94.38%
Administrative and investment				
expenses payable	944,149	975,572	(31,423)	-3.22%
Securities lending collateral	60,724,175	91,205,944	(30,481,769)	-33.42%
Total liabilities	64,239,054	93,504,034	(29,264,980)	-31.30%
Net position	\$1,169,271,585	\$1,151,660,978	\$ 17,610,607	1.53%

MANAGEMENT'S DISCUSSION AND ANALYSIS

2019 and 2018 Comparative Summary of Changes in Fiduciary Net Position

	April 30, 2019	April 30, 2018	Amount Change	Percentage Change
Member contributions	\$ 8,514,325	\$ 8,622,835	\$ (108,510)	-1.26%
Employer contributions	26,032,072	24,530,445	1,501,627	6.12%
Net investment income	59,453,267	98,766,580	(39,313,313)	-39.80%
Total additions	93,999,664	131,919,860	(37,920,196)	-28.74%
Benefits paid to members	71,410,862	68,328,453	3,082,409	4.51%
Refunds of contributions	4,393,283	3,666,251	727,032	19.83%
Administrative expenses	584,912	563,030	21,882	3.89%
Total deductions	76,389,057	72,557,734	3,831,323	5.28%
Net increase	17,610,607	59,362,126	(41,751,519)	-70.33%
Net position, Beginning of Year	1,151,660,978	1,092,298,852	59,362,126	5.43%
Net position, End of Year	\$1,169,271,585	\$1,151,660,978	\$ 17,610,607	1.53%

2019 Financial Highlights

The global financial markets were volatile throughout the year due to trade tensions between the U.S. and China, Brexit issues in the United Kingdom, the Federal Reserve's actions of raising interest rates through December and then unexpectedly decreasing rates in March, and fears of a possible recession. The investment portfolio posted a positive net return of 5.4 percent, which underperformed the 5.9 percent return of the Policy Portfolio benchmark. The Non-U.S. equity, global equity and fixed income segments of the fund performed relatively well compared to benchmarks, while all other segments underperformed. U.S. equity was the best performing asset class on an absolute return basis, followed by fixed income. Non-U.S. equity was the only asset class with negative performance, with emerging markets equity posting the worst return.

Plan net position increased 1.5 percent to \$1.169 billion, fueled by \$59 million of investment income. Member contributions declined due to a decrease in the number of active employees, while employer contributions rose \$1.5 million due to an increase in the actuarial required contribution rate. Refunds of employee contributions increased \$727,000, with much of the increase attributable to distribution elections made by retiring employees, while benefits paid to members increased at an expected pace. Administrative expenses increased \$22,000, primarily due to custodial bank and legal fees.

2019 Operational Highlights

The Plan's allocations to non-core fixed income and Non-U.S. equity were increased as the result of an asset allocation study. Due to this change, an additional non-core fixed income manager and a developed international equity manager were added, and the portfolio was rebalanced. Additionally, a Request for Proposal was issued for securities monitoring and litigation services. Four firms were hired, two of which were incumbents. On-going cash needs were met primarily through rebalancing and the sale of appreciating equity securities.

MANAGEMENT'S DISCUSSION AND ANALYSIS

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.

STATEMENTS OF FIDUCIARY NET POSITION

April 30, 2020 and 2019

Assets	2020	2019
Investments, at Fair Value		
Short-term investment funds	\$ 27,322,204	\$ 19,631,100
U.S. Treasuries	4,397,184	14,645,298
U.S. government-backed mortgages	37,510,489	53,683,512
Municipal bonds	2,985,527	2,972,036
Asset-backed securities	6,379,342	8,050,597
Foreign debt obligations	2,204,988	2,609,685
Corporate bonds - domestic	31,412,801	36,251,398
Corporate bonds - foreign	20,660,958	28,335,866
Domestic preferred equities	1,219,116	1,232,768
Domestic common equities	168,496,067	173,827,795
Foreign equities	4,085,703	2,200,066
Partnerships	42,522,256	42,514,100
Hedge funds	16,163,660	23,206,749
Collective trusts - equities	440,189,739	405,087,413
Collective trusts - fixed income	176,584,877	238,882,585
Collective trusts - real estate	114,895,939	115,372,048
Total investments	1,097,030,850	1,168,503,016
Securities Lending Collateral	56,099,306	60,724,175
Receivables		
Contributions	1,906,815	1,634,734
Investment income	797,543	1,163,525
Due from broker for sales of investments	4,451,795	1,485,189
Total receivables	7,156,153	4,283,448
Total assets	1,160,286,309	1,233,510,639
Liabilities		
Due to broker for purchases of investments	5,213,529	2,570,730
Administrative and investment expenses payable	1,139,988	944,149
Securities lending collateral	56,099,306	60,724,175
Total liabilities	62,452,823	64,239,054
Net Position Restricted for Pensions	\$ 1,097,833,486	\$ 1,169,271,585

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

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended April 30, 2020 and April 30, 2019

Additions	2020	2019
Investment Income Interest income Dividend income Net change in fair value of investments Less investment expense	\$ 17,684,309 5,954,536 (44,297,187) (4,856,164)	\$ 15,678,897 5,579,410 41,854,716 (3,852,913)
	(25,514,506)	59,260,110
Securities Lending Income Securities lending gross income Securities lending expenses	1,205,332	1,688,850
Borrower fees Management fees Total securities lending expenses	(1,001,402) (61,033) (1,062,435)	(1,413,141) (82,552) (1,495,693)
Net securities lending income	142,897	193,157
Total net investment (loss) income	(25,371,609)	59,453,267
Contributions Contributions from the City of Kansas City, Missouri Contributions from members	27,256,034 8,552,954	26,032,072 8,514,325
Total contributions	35,808,988	34,546,397
Total additions	10,437,379	93,999,664
Deductions		
Benefits Paid to Members	75,387,320	71,410,862
Refunds Termination Retirement	1,502,400 4,497,176	1,762,170 2,631,113
Administrative Expenses	488,582	584,912
Total deductions	81,875,478	76,389,057
Net Change in Net Position	(71,438,099)	17,610,607
Net Position Restricted for Pensions, Beginning of Year	1,169,271,585	1,151,660,978
Net Position Restricted for Pensions, End of Year	\$ 1,097,833,486	\$ 1,169,271,585

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

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity - The City of Kansas City, Missouri The Employees' Retirement System (Plan) is a contributory, single-employer, defined benefit pension plan, covering employees and elected officials of the City of Kansas City, Missouri (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.

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

<u>Valuation of Investments</u> - Government securities, asset-backed securities, and corporate bonds are valued at fair value based on prices quoted by a major dealer in such securities.

Common stock, preferred stock, foreign common stock, and indexed notes and bonds are listed at fair value based on either listed prices (closing prices as reported on the composite summary of national securities exchanges) or on over-the-counter or bid prices.

Collective trusts, partnerships, short-term investment funds, and hedge funds consist primarily of non-marketable investments in various venture capital, corporate finance funds, and private partnerships (collectively, Portfolio Funds). These funds are primarily invested in a diversified portfolio of equities, 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 Plan'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, 2020 or 2019.

Investment transactions are accounted for on a trade-date basis, and dividend income is recognized on the ex-dividend date. Interest income is recognized on an accrual basis. Realized gains and losses from investments are determined on an average-cost basis.

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

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

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

<u>Subsequent Events</u> - These financial statements considered subsequent events through October 1, 2020, 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 of The Employees' Retirement System of Kansas City, Missouri. The Board is composed of ten members, two of which are the Director of Human Resources and the Director of Finance, two active employees and members of the retirement system, one retired member of the Employees' Retirement System (ERS) and one member designated by Firefighters' IAFF Local 42. The remaining members are prominent Kansas City business or civic leaders appointed by the mayor.

<u>Eligibility</u> - All full-time, permanent employees in the classified and unclassified services shall become members of the Plan as a condition of their employment. Employees of any administrative board or board of control as organized and existing under the general laws of the State of Missouri and as defined in RSMo § 95.540, whose governing body has elected membership, shall also be members. Members of the police, firemen's, or municipal judges' (or any other pension system involving City funds) receiving or entitled to receive a future pension from those systems, are ineligible for membership.

<u>Tier I Member</u> - Those employees hired before April 20, 2014.

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

At April 30, 2020 and 2019, the Plan's membership consisted of the following:

	2020			
	Tier I	Tier II	Total	
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but				
not yet receiving them	2,798		2,798	
Current employees				
Vested	1,884		1,884	
Nonvested		1,262	1,262	
Inactive	62	399	461	
Total	4,744	1,661	6,405	

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

	2019			
	Tier I	Tier II	Total	
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but				
not yet receiving them	2,718		2,718	
Current employees				
Vested	2,060		2,060	
Nonvested		1,103	1,103	
Inactive	58	276	334	
Total	4,836	1,379	6,215	

<u>Contributions</u> - Funding is provided by contributions from Plan members and the City, and earnings on investments. Members contribute 5 percent of their base salary. The City's contribution is set by the City Council in conjunction with its approval of the annual budget, based on the actuarially determined contribution rate set by the Plan's consulting actuary. For the years ended April 30, 2020 and 2019, the City contributed at rates of 15.89 percent and 15.16 percent, respectively, of annual covered payroll.

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

<u>Tier I Members</u> - 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 2.22 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 cost-of-living adjustment of 3 percent, non-compounded, is provided annually.

NOTES TO THE FINANCIAL STATEMENTS

2. PLAN DESCRIPTION (CONTINUED)

<u>Tier II Members</u> - 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 the employee has at least 10 years of creditable service, the minimum benefit is \$400 per month.

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 automatic cost-of-living adjustment, not to exceed 2.5 percent, non-compounded, is provided annually 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.

<u>Health Insurance Subsidy</u> - All retirees are eligible to receive a \$200 monthly health insurance subsidy. If a member dies as a direct result of an accident sustained in the performance of their assigned duties, their surviving spouse is eligible to receive the health insurance subsidy.

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's 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.

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.

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

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

Asset Type and Class	Range	Target
Global Equity		
U.S. Equity	11.25% - 21.25%	16.25%
Emerging Manager of Managers	2% - 7%	4.0%
Non-U.S. Equity	10.25% - 20.25%	15.25%
Emerging Markets Equity	3% - 6%	4.5%
Global Equity	2% - 8%	5.0%
Global Fixed Income		
Core Fixed Income	15% - 25%	20.0%
Non-Core Fixed Income	7% - 17%	12.0%
Real Assets		
Real Estate	2.5% - 12.5%	7.5%
Infrastructure	1% - 4%	2.5%
Opportunistic	7% - 17%	12.0%
Cash	0% - 5%	1.0%

<u>Securities Lending Transactions</u> - City ordinances and the Plan's Board policies permit the Plan to use investments of the Plan to enter into securities lending transactions, which are loans of securities to broker-dealers and other entities for collateral with a simultaneous agreement to return the collateral for the same securities in the future.

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, 2020 and 2019, 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.

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

	_	2020	_	2019
Fair value of securities loaned	\$	50,051,627	<u>;</u>	\$ 59,218,527
Fair value of cash collateral received from borrowers	\$	56,099,306		\$ 60,724,175

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, 2020, the Plan had the following investments and maturities:

			Maturities in	n Years		Loaned Under Securities
Туре	Fair Value	Less than 1	1 - 5	6 - 10	More than 10	Lending Agreements
U.S. Treasuries	\$ 4,397,184	\$	\$ 4,397,184	\$	\$	\$ 2,390,668
U.S. government-backed mortgages	37,510,489		53,752	484,306	36,972,431	
Municipal bonds	2,985,527				2,985,527	
Asset-backed securities	6,379,342			118,050	6,261,292	
Foreign debt obligations	2,204,988			875,663	1,329,325	137,906
Corporate bonds - domestic	31,412,801	328,314	10,356,750	3,925,220	16,802,517	2,142,024
Corporate bonds - foreign	20,660,958		9,125,008	4,412,268	7,123,682	1,337,557
Short-term investment funds	27,322,204	27,322,204			<u></u>	
	132,873,493	\$ 27,650,518	\$ 23,932,694	\$ 9,815,507	\$ 71,474,774	
Domestic preferred equities	1,219,116					88,903
Domestic common equities	168,496,067					40,698,191
Foreign equities	4,085,703					1,860,956
Partnerships	42,522,256					
Hedge funds	16,163,660					
Collective trusts - equities	440,189,739					
Collective trusts - fixed income	176,584,877					
Collective trusts - real estate	114,895,939					1,395,422
	\$ 1,097,030,850					\$ 50,051,627

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

At April 30, 2019, the Plan had the following investments and maturities:

	Maturities in Years					Loaned Under Securities
		Less			More	Lending
Туре	Fair Value	than 1	1 - 5	6 - 10	than 10	Agreements
U.S. Treasuries	\$ 14,645,298	\$	\$ 5,776,485	\$ 8,868,813	\$	\$ 9,545,724
U.S. government-backed mortgages	53,683,512		69,204	396,249	53,218,059	
Municipal bonds	2,972,036				2,972,036	226,991
Asset-backed securities	8,050,597		273,056	169,845	7,607,696	
Foreign debt obligations	2,609,685		223,852	848,943	1,536,890	
Corporate bonds - domestic	36,251,398	2,133,914	16,469,203	5,839,224	11,809,057	7,224,712
Corporate bonds - foreign	28,335,866	978,900	9,434,755	10,672,583	7,249,628	
Short-term investment funds	19,631,100	19,631,100				
	166,179,492	\$ 22,743,914	\$ 32,246,555	\$ 26,795,657	\$ 84,393,366	
Domestic preferred equities	1,232,768					
Domestic common equities	173,827,795					42,221,100
Foreign equities	2,200,066					
Partnerships	42,514,100					
Hedge funds	23,206,749					
Collective trusts - equities	405,087,413					
Collective trusts - fixed income	238,882,585					
Collective trusts - real estate	115,372,048					
	\$ 1,168,503,016					\$ 59,218,527

<u>Custodial Credit Risk</u> - Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Consistent with the Plan's securities lending policy, \$53,815,942 and \$59,218,527 was held by the counterparty that was acting as the Plan's agent in securities lending transactions at April 30, 2020 and 2019, respectively.

<u>Investment Concentrations</u> - The following presents investments that represent 5 percent or more of the fiduciary net position of the Plan as of April 30, 2020:

Investment	
Prudential Core Plus Bond Fund	\$ 109,985,308
Mellon EB DV Global Exp Alpha I Fund	71,487,893
FIAM Tactical Bond Pool	66,599,569
Lazard Wilmington International Equity Portfolio	65,559,440
Pioneer Multi Sector Fixed Income Portfolio	65,152,312
Blackrock Alpha Advantage International Fund	64,753,058

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, 2019:

Investment	
Prudential Core Plus Bond Fund	\$ 153,382,586
FIAM Tactical Bond Pool	85,500,000
Lazard Wilmington International Equity Portfolio	80,453,915
Blackrock Alpha Advantage International Fund	75,437,659
Mellon EB DV Global Exp Alpha I Fund	73,387,327

<u>Credit Risk</u> - Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the Plan. 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, 2020 and 2019, the Plan's fixed income assets that are not explicitly government guaranteed represented 86.5 percent and 83.1 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, 2020 and 2019:

			S&P
		Percentage	Weighted
		of all Fixed	Average
	Fair Value	Income	Credit
Fixed Income Security Type	April 30, 2020	Assets	Quality
Municipal bonds	\$ 2,985,527	1.0%	A+
Asset-backed securities	6,379,342	2.1%	AA-
Foreign debt obligations	2,204,988	0.7%	BB
Corporate bonds - domestic	31,412,801	10.1%	A+
Corporate bonds - foreign	20,660,958	6.7%	BB-
Short-term investment funds	27,322,204	8.8%	Not rated
Collective trusts - fixed income	176,584,877	57.1%	Not rated
	\$ 267,550,697	86.5%	

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

			S&P
		Percentage	Weighted
		of all Fixed	Average
	Fair Value	Income	Credit
Fixed Income Security Type	April 30, 2019	Assets	Quality
Municipal bonds	\$ 2,972,036	0.7%	A+
Asset-backed securities	8,050,597	2.0%	AA+
Foreign debt obligations	2,609,685	0.6%	BBB
Corporate bonds - domestic	36,251,398	9.0%	BBB
Corporate bonds - foreign	28,335,866	7.0%	BBB
Short-term investment funds	19,631,100	4.8%	Not rated
Collective trusts - fixed income	238,882,585	59.0%	Not rated
	\$ 336,733,267	83.1%	

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

<u>Interest Rate Risk</u> - Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. 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

		Percentage	
		of all	Weighted
	Fair Value	Fixed Income	Average Effective
Fixed Income Security Type	April 30, 2020	Assets	Duration (Years)
U.S. Treasuries	\$ 4,397,184	1.4%	1.76
U.S. government-backed mortgages	37,510,489	12.1%	1.34
Municipal bonds	2,985,527	1.0%	10.59
Asset-backed securities	6,379,342	2.1%	1.13
Foreign debt obligations	2,204,988	0.7%	8.02
Corporate bonds - domestic	31,412,801	10.1%	9.28
Corporate bonds - foreign	20,660,958	6.7%	5.33
Short-term investment funds**	27,322,204	8.8%	**
Collective trusts - fixed income	176,584,877	57.1%	5.73
	\$ 309,458,370	100.0%	

NOTES TO THE FINANCIAL STATEMENTS

3. DEPOSITS AND INVESTMENTS (CONTINUED)

		Percentage	
		of all	Weighted
	Fair Value	Fixed Income	Average Effective
Fixed Income Security Type	April 30, 2019	Assets	Duration (Years)
U.S. Treasuries	\$ 14,645,298	3.6%	5.19
U.S. government-backed mortgages	53,683,512	13.3%	2.38
Municipal bonds	2,972,036	0.7%	9.42
Asset-backed securities	8,050,597	2.0%	6.32
Foreign debt obligations	2,609,685	0.6%	5.79
Corporate bonds - domestic	36,251,398	9.0%	6.68
Corporate bonds - foreign	28,335,866	7.0%	5.79
Short-term investment funds**	19,631,100	4.8%	**
Collective trusts - fixed income	238,882,585	59.0%	5.93
	\$ 405,062,077	100.0%	

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

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

<u>Annual Money-Weighted Rate of Return</u> - For the years ended April 30, 2020 and 2019, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was -2.16 percent and 5.32 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, 2020 and 2019 were as follows:

2020	2019
\$ 1,421,396,198	\$ 1,396,170,598
(1,097,833,486)	(1,169,271,585)
\$ 323,562,712	\$ 226,899,013
77.24%	83.75%
	\$ 1,421,396,198 (1,097,833,486) \$ 323,562,712

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS

An actuary from Cheiron determines the total pension liability. The total pension liability as of April 30, 2020 and 2019 was determined based on actuarial valuations prepared as of May 1, 2019 and 2018, respectively, rolled forward one year, using the following actuarial assumptions:

Price inflation 3.00%

Salary increases, including wage 3.75% to 5.00%

inflation

Long-term investment rate of return, 7.50%

net of plan investment expense,

including inflation

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 Healthy 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, 2019 and 2018 valuations were 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.

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 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, 2020 and 2019 are summarized below:

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

		Long-Term
		Expected
		Real Rate of
		Return
Asset Class	Target Allocation	April 30, 2020
U.S. Equity	16.25%	5.3%
Emerging Manager of Managers	4.0%	5.3%
Non-U.S. Equity	15.25%	7.7%
Emerging Markets Equity	4.5%	9.3%
Global Equity	5.0%	6.4%
Core Fixed Income	20.0%	0.5%
Non-Core Fixed Income	12.0%	3.3%
Real Estate	7.5%	3.8%
Infrastructure	2.5%	5.8%
Opportunistic	12.0%	5.0%
Cash	1.0%	-0.5%
		Long-Term
		Expected
		Real Rate of
		Return
Asset Class	Target Allocation	April 30, 2019
U.S. Equity	16.25%	3.8%
Emerging Manager of Managers	4.0%	3.8%
Non-U.S. Equity	45.050/	5.0%
Non-o.s. Equity	15.25%	5.0%
Emerging Markets Equity	15.25% 4.5%	7.3%
Emerging Markets Equity	4.5%	7.3%
Emerging Markets Equity Global Equity	4.5% 5.0%	7.3% 4.7%
Emerging Markets Equity Global Equity Core Fixed Income	4.5% 5.0% 20.0%	7.3% 4.7% 0.5%
Emerging Markets Equity Global Equity Core Fixed Income Non-Core Fixed Income	4.5% 5.0% 20.0% 12.0%	7.3% 4.7% 0.5% 2.5%
Emerging Markets Equity Global Equity Core Fixed Income Non-Core Fixed Income Real Estate	4.5% 5.0% 20.0% 12.0% 7.5%	7.3% 4.7% 0.5% 2.5% 3.3%
Emerging Markets Equity Global Equity Core Fixed Income Non-Core Fixed Income Real Estate Infrastructure	4.5% 5.0% 20.0% 12.0% 7.5% 2.5%	7.3% 4.7% 0.5% 2.5% 3.3% 3.0%

<u>Discount Rate</u> - 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 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.

NOTES TO THE FINANCIAL STATEMENTS

5. ACTUARIAL METHODS AND ASSUMPTIONS (CONTINUED)

<u>Sensitivity Analysis</u> - 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, 2020 and 2019:

	2020					
	1%	Current	1%			
	Decrease	Discount Rate	Increase			
	(6.5%)	(7.5%)	(8.5%)			
Total pension liability	\$ 1,586,570,408	\$ 1,421,396,198	\$ 1,282,483,818			
Fiduciary net position	(1,097,833,486)	_(1,097,833,486)	(1,097,833,486)			
Net pension liability	\$ 488,736,922	\$ 323,562,712	\$ 184,650,332			
		2019				
	1%	Current	1%			
	Decrease	Discount Rate	Increase			
	(6.5%)	(7.5%)	(8.5%)			
Total pension liability	\$ 1,561,849,484	\$ 1,396,170,598	\$ 1,257,200,457			
Fiduciary net position	(1,169,271,585)	(1,169,271,585)	(1,169,271,585)			
Net pension liability	\$ 392,577,899	\$ 226,899,013	\$ 87,928,872			

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 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:

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

- **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

<u>Recurring Measurements</u> - 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, 2020 and 2019:

	April 30, 2020							
		Total						
		Fair Value	Lev	el 1		Level 2		Level 3
Investments by fair value level								
Short-term investment funds	\$	27,322,204	\$ 27,3	322,204	\$		\$	
U.S. Treasuries		4,397,184				4,397,184		
U.S. government-backed mortgages		37,510,489				30,461,007		7,049,482
Municipal bonds		2,985,527				2,985,527		
Asset-backed securities		6,379,342				6,379,342		
Foreign debt obligations		2,204,988				2,204,988		
Corporate bonds - domestic		31,412,801				31,412,801		
Corporate bonds - foreign		20,660,958				20,660,958		
Domestic preferred equities		1,219,116	1,2	219,116				
Domestic common equities		168,496,067	168,4	196,067				
Foreign equities		4,085,703	4,0	85,703				
Collective trusts - equities		49,799,708				49,799,708		
Total investments		356.474.087	\$ 201.1	23.090	\$	148.301.515	9	7.049.482

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

Partnerships	42,522,256
Hedge funds	16,163,660
Collective trusts - equities	390,390,031
Collective trusts - fixed income	176,584,877
Collective trusts - real estate	114,895,939
Total investments measured at the NAV	740,556,763
Total investments	\$ 1,097,030,850

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

		April 30, 2019							
		Fair Value	Level 1	Level 2		Level 3			
Investments by fair value level									
Short-term investment funds	\$	19,631,100	\$ 19,631,100	\$	\$				
U.S. Treasuries		14,645,298		14,645,298					
U.S. government-backed mortgages		53,683,512		49,523,356		4,160,156			
Municipal bonds		2,972,036		2,972,036					
Asset-backed securities		8,050,597		8,050,597					
Foreign debt obligations		2,609,685		2,609,685					
Corporate bonds - domestic		36,251,398		36,251,398					
Corporate bonds - foreign		28,335,866		28,335,866					
Domestic preferred equities		1,232,768	1,232,768						
Domestic common equities		173,827,795	173,827,795						
Foreign equities		2,200,066	2,200,066						
Collective trusts - equities		38,082,013		38,082,013					
Total investments		381,522,134	\$ 196,891,729	\$ 180,470,249	\$	4,160,156			

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

Partnerships	42,514,100
Hedge funds	23,206,749
Collective trusts - equities	367,005,400
Collective trusts - fixed income	238,882,585
Collective trusts - real estate	115,372,048
Total investments measured at the NAV	786,980,882
Total investments	\$ 1,168,503,016

(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 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.

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

The fair value estimates presented herein are based on pertinent information available to management as of April 30, 2020. 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.

	April 30, 2020							
		Redemption						
		Unfunded	Frequency (If Currently					
	Fair Value	Commitments	Eligible)	Notice Period				
Partnerships (A) Hedge funds (B)	\$ 42,522,256 16,163,660	\$ 	Semi-Annual Bi-Monthly	2 Months 75 Days				
Collective trusts - equities (C)	390,390,031		Daily/Monthly	1-7 Days				
Collective trusts - fixed income (D)	176,584,877		Daily	1 Day				
Collective trusts - real estate (E)	114,895,939		Quarterly	45 Days				
Total investments measured at NAV	\$ 740,556,763	\$						
		April 3	30, 2019					
		Redemption						
		Unfunded	Frequency (If Currently					
	Fair Value	Commitments	Eligible)	Notice Period				
Partnerships (A) Hedge funds (B)	\$ 42,514,100 23,206,749	\$ 	Semi-Annual Bi-Monthly	2 Months 75 Days				
Collective trusts - equities (C)	367,005,400		Daily/Monthly	1-7 Days				
Collective trusts - fixed income (D)	238,882,585		Daily	1 Day				
Collective trusts - real estate (E)	115,372,048		Quarterly	45 Days				

NOTES TO THE FINANCIAL STATEMENTS

7. FAIR VALUE MEASUREMENTS (CONTINUED)

- (A) This category is a limited partnership. Investments are open-ended Global Core/Core Plus infrastructure investments.
- (B) 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, longterm exposure to the underlying strategies. The result is a high risk-adjusted expected return stream with low correlation to traditional asset classes.
- (C) This category includes collective trust funds. Each invests in equity securities both on the national and international markets listed on public market exchanges.
- (D) This category is a fixed income fund. The fund includes U.S. and Non-U.S. government, securitized and corporate bonds, and currencies across the entire quality spectrum.
- (E) This category is a common collective trust redeemable quarterly with a 45 day notice period. Investments are open-ended U.S. Commercial real estate.

8. RELATED PARTY TRANSACTIONS

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

9. SUBSEQUENT EVENTS

On January 30, 2020, the World Health Organization declared the coronavirus outbreak a "Public Health Emergency of International Concern" and on March 11, 2020, declared it to be a pandemic. The pandemic in the United States and throughout the world resulted in substantial volatility in financial markets. This had a significant adverse impact on investment portfolios. Global equity markets experienced the swiftest market correction in history as the spread of COVID-19 halted economies around the world, and the longest bull market in history officially came to an end in mid-March. In response, the Federal Reserve took several emergency actions which included cutting rates twice and beginning a new round of quantitative easing to stabilize financial markets and support the flow of credit. Additionally, in the U.S., a \$2.2 trillion stimulus plan was announced. These measures led to a reduction in volatility and a strong comeback in the markets, with U.S. equities leading the way. As a result of the pandemic and these stimulus measures, the Plan's investments may continue to experience volatility in fair value.



SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last Ten Fiscal Years

	2020	2019	2018	2017	2016	2015
Service cost Interest on total pension liability Differences between expected and actual experience Change of assumptions Benefit payments, including member refunds	\$ 19,922,994 102,057,580 (15,368,078) (81,386,896)	\$ 20,312,736 100,099,386 (5,950,247) (75,804,145)	\$ 20,085,682 97,267,046 (2,291,715) (71,994,704)	\$ 20,048,780 94,116,208 (431,574) (67,877,732)	\$ 19,485,402 87,902,877 (6,077,385) 43,062,525 (67,603,613)	\$ 19,694,295 85,393,038 (63,149,987)
Net change in total pension liability	25,225,600	38,657,730	43,066,309	45,855,682	76,769,806	41,937,346
Total pension liability - beginning	1,396,170,598	1,357,512,868	1,314,446,559	1,268,590,877	1,191,821,071	1,149,883,725
Total pension liability - ending	1,421,396,198	1,396,170,598	1,357,512,868	1,314,446,559	1,268,590,877	1,191,821,071
Fiduciary net position Net investment income (loss) City contributions Member contributions Benefits paid Refunds of contributions Administrative expenses	(25,371,609) 27,256,034 8,552,954 (75,387,320) (5,999,576) (488,582)	59,453,267 26,032,072 8,514,325 (71,410,862) (4,393,283) (584,912)	98,766,580 24,530,445 8,622,835 (68,328,453) (3,666,251) (563,030)	105,285,874 23,701,217 7,966,105 (64,197,401) (3,680,331) (386,784)	(26,366,931) 24,577,647 8,235,363 (63,007,354) (4,596,259) (365,571)	84,827,952 27,569,434 8,610,268 (58,650,593) (4,499,394) (379,424)
Net change in fiduciary net position Fiduciary net position - beginning Fiduciary net position - ending	(71,438,099) 1,169,271,585 1,097,833,486	17,610,607 1,151,660,978 1,169,271,585	59,362,126 1,092,298,852 1,151,660,978	68,688,680 1,023,610,172 1,092,298,852	(61,523,105) 1,085,133,277 1,023,610,172	57,478,243 1,027,655,034 1,085,133,277
Net pension liability, ending	\$ 323,562,712	\$ 226,899,013	\$ 205,851,890	\$ 222,147,707	\$ 244,980,705	\$ 106,687,794
Fiduciary net position as a percentage of total pension liability	77.24%	83.75%	84.84%	83.10%	80.69%	91.05%
Covered payroll Net pension liability as a percentage of covered payroll	\$ 71,476,103 188.69%	\$ 171,688,301 132.16%	\$ 167,811,028 122.67%	\$ 164,248,048 135.25%	\$ 166,853,097 146.82%	\$ 167,629,048 63.65%

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

SCHEDULE OF CITY CONTRIBUTIONS

Last Ten Fiscal Years

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Actuarially determined employer contribution	\$ 26,920,726	\$ 25,842,898	\$ 24,390,835	\$ 23,042,413	\$ 24,540,893	\$ 27,568,194	\$ 27,568,194	\$ 27,682,872	\$ 26,326,555	\$ 27,772,227
Actual City contributions	27,256,034	26,032,072	24,530,445	23,701,217	24,577,647	27,569,434	25,987,662	23,744,372	20,543,487	18,822,709
Annual contribution deficiency (excess)	\$ (335,308)	\$ (189,174)	\$ (139,610)	\$ (658,804)	\$ (36,754)	\$ (1,240)	\$ 1,580,532	\$ 3,938,500	\$ 5,783,068	\$ 8,949,518
Covered payroll	\$ 171,476,103	\$ 171,688,301	\$ 167,811,028	\$ 164,248,048	\$ 166,853,097	\$ 167,629,048	\$ 167,629,049	\$ 166,877,689	\$ 161,134,295	\$ 163,113,722
Actual contributions as a percentage of covered payroll	15.89%	15.16%	14.62%	14.43%	14.73%	16.45%	15.50%	14.23%	12.75%	11.54%

SCHEDULE OF INVESTMENT RETURNS

Last Ten Fiscal Years

Fiscal Year Ending April 30	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net							
of investment expense	-2.16%	5.32%	9.28%	10.46%	-2.50%	8.36%	11.50%

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

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

<u>Changes of benefit and funding terms</u> - The following changes to the Plan provisions were reflected in the valuations as listed below:

5/01/2019 Valuation

· No changes in benefit or funding terms.

5/01/2018 Valuation

No changes in benefit or funding terms.

5/01/2017 Valuation

No changes in 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, 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.

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

<u>Changes in actuarial assumptions and methods</u> - The following changes were reflected in the valuations as listed below:

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

No changes in actuarial assumptions or methods.

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.

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, 2018 actuarial valuation:

Valuation Date May 1, 2018

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

Amortization method 20-year layered amortization as a level percent of pay. Changes

to the 5/1/2009 unfunded actuarial liability were 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 Mortality Table (multiplied by 1.300 for males and 1.500 for females) projected using a modified Scale MP-2015 on a

generational basis.