74TH
ANNUAL
REPORT

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Comprehensive Annual Financial Report

KCPERS
Kansas City Police Employees' Retirement Systems

May 1, 2019 to
April 30, 2020

Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri

Comprehensive Annual Financial Report
May 1, 2019 to April 30, 2020

74th Annual Report

Prepared by:
Kansas City Police Employees' Retirement Systems
9701 Marion Park Drive, B
Kansas City, MO 64137
(816) 482-8138 or (888) 813-8138
Website: www.kcpers.org

Table of Contents

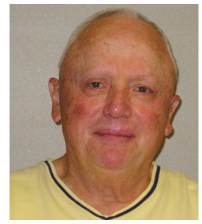
Introductory Section

Retirement Board

Police Retirement System of Kansas City, Missouri

Richard Smith, Chairman
Chief of Police
Kansas City, Missouri
Police Department

Gregory (Scott) Hummel
Vice-Chair
Civilian Administrator, Kansas City, Missouri Police Department



Robert Jones
Treasurer
(Ret.) Sergeant, Kansas City, Missouri Police Department

Thomas Mills
(Ret.) Lieutenant Colonel
Kansas City, Missouri
Police Department

Chad Pickens
Police Officer
Kansas City, Missouri
Police Department

Leslie Lewis
Appointed Member

Patrick Trysla
Appointed Member

Walter (Web) Bixby III
Appointed Member

KCPERS Staff

Sharon Blancett
Assistant Pension Systems Manager

Lisa Colclasure
Benefits Coordinator

Lori Vaca
Administrative Assistant

Jason Hoy
Accountant

James Pyle
Pension Systems Manager &
Board Secretary

KCPERS
Kansas City Police Employees' Retirement Systems

9701 Marion Park Drive, B • Kansas City, MO 64137
(816) 482-8138 • Toll Free (888) 813-8138 • Fax (816) 763-1190

September 30, 2020

Retirement Systems Board
Police Retirement System of Kansas City, Missouri
9701 Marion Park Dr, B
Kansas City, Missouri 64137

Dear Board Members:

It is my pleasure to submit the fiscal year 2020 Comprehensive Annual Financial Report (CAFR) of the Police Retirement System of Kansas City, Missouri. This report is intended to provide our members and other stakeholders with detailed information about the financial, actuarial, and investment operations of the Police Retirement System.

The Police Retirement System was created in 1946 by the Missouri General Assembly to provide retirement and disability benefits for law enforcement members of the Kansas City, Missouri Police Department and survivor benefits for their spouses and children. A nine member Board of Trustees, made up of elected and appointed members, governs the Police Retirement System.

Contents of the Annual Report and Structure

This CAFR is designed to comply with the reporting requirements of sections 86.960 and 105.661 of the Revised Statutes of Missouri (RSMo), as amended. The ultimate responsibility for the CAFR and financial statements rests with the Board of Trustees. Retirement Systems staff provide support to the board members in completing their fiduciary responsibilities. Staff has prepared the financial statements of the Retirement System and, to the best of our knowledge, presented information that is accurate in all material respects and is reported in a manner designed to fairly represent the financial position of the fund. The accounting policies followed in preparing the financial statements comply with U.S. generally accepted accounting principles. Financial information presented throughout the CAFR is consistent with information displayed in the financial statements.

The Retirement Systems' external auditor, Allen, Gibbs & Houlik, L.C. (AGH) conducted an independent audit of the financial statements in accordance with U.S. generally accepted auditing standards. This audit is described in the Independent Auditors' Report on pages 16 and 17 of the Financial Section. Management has provided the external auditors with full and unrestricted access to staff to discuss their audit and related findings. The annual audit is conducted to assure independent validation of the integrity of the Retirement Systems' financial reporting and the adequacy of internal controls.

The Financial Section also contains Management's Discussion and Analysis that serves as an introduction to and overview of the financial statements. The Police Retirement System is a component unit of the City of Kansas City, Missouri for financial reporting purposes and, as such, the financial statements in this report are also included in the City of Kansas City, Missouri's Comprehensive Annual Financial Reports.

Actuarial and Investment Information

Cavanaugh Macdonald, our consulting actuary, completed the actuarial valuation dated April 30, 2020. The funded ratio of the valuation assets to liabilities declined from the prior year to 74%. The decrease in the funded ratio is due to investment returns during the fiscal year and actuarial assumption changes implemented with this valuation. On an actuarial basis, which includes five year smoothing of assets, the investment returns totaled 4.6%. The actuarial rate of return was less than the 7.45% actuarial assumed rate of return. More information on the actuarial valuation is available in the Actuarial Section of this report starting on page 62.

The investment portfolio produced a 1.1% (net of fees) annualized dollar weighted rate of return, measured on the market value of assets, against the policy benchmark return of 3.3%. More information regarding the investment performance and the professionals who provide services to the Police Retirement System can be found on page 52 of the Investment Section, in the Schedule of Investment Results, which shows the historical investment performance of each outside investment manager.

Fiscal Year 2020 Projects

During the latter part of the fiscal year both the Retirement Board and staff were focused on maintaining services to our member through the early stages of the COVID-19 pandemic. The board continues, to hold meetings virtually. Staff implemented provisions of the business continuity plan and rotated working remotely. The Retirement Board worked with our investment consultants from RVK and actuaries from Cavanaugh Macdonald to complete the 5-year asset liability study. Cavanagh Macdonald also assisted in developing a cost of living adjustment matrix for use in determining ad hoc COLA amounts and any impact on plan liabilities.

Staff projects for the year included developing the curriculum and presenting pre-retirement seminars for members of the Police plan. Staff spent the latter part of the fiscal year adjusting our work processes to accommodate the restrictions imposed by COVID-19. Our members adapted well to working with us via phone, email, or virtually. Our custody bank and investment managers quickly moved to working remotely. From the perspective of our members, all of those transitions were seamless as benefit payments and daily work processes continued uninterrupted.

Legislative Changes

There were no legislative changes to the Revised Statutes of Missouri that govern the Police Retirement System during the year.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Police Retirement System of Kansas City, Missouri for its comprehensive annual financial report for the fiscal year ended April 30, 2019. This was the eighteenth consecutive year that the Retirement System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Acknowledgements

The fiscal year 2020 annual report is the result of work by both Retirement Systems staff and outside advisors and the leadership provided to us by the Retirement Systems Board. It is intended to provide complete and reliable information, comply with the legislative and industry reporting requirements, and most importantly help our members learn more about the financial status of their retirement system.

The KCPERS staff wants to thank each of our board members, our retirement system members, our outside advisors and the Kansas City Police Department for all your contributions towards the successful operation of the Police Retirement System.

Respectfully submitted,

James J. Pyle
Pension Systems Manager

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Police Retirement System of Kansas City, Missouri

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

April 30, 2019

Christopher P. Morrill

Executive Director/CEO

KCPERS

Kansas City Police Employees' Retirement Systems

9701 Marion Park Drive, B • Kansas City, MO 64137

(816) 482-8138 • Toll Free (888) 813-8138 • Fax (816) 763-1190

October 1, 2020

Dear Members,

On behalf of the Retirement Systems Board I am pleased to provide you with the Police Retirement System of Kansas City, Missouri Comprehensive Annual Financial Report for the fiscal year ending April 30, 2020. This annual report to our members provides financial information about your retirement system and an update on changes that occurred during the past year.

The Coronavirus presented new challenges to the Retirement System staff who implemented our business continuity plan and worked both in the office and remotely to provide uninterrupted services to our active and retired members. During the fiscal year we added 96 new active members, processed 47 service and 12 disability retirements, processed 17 resignations, and assisted with death benefits for 26 beneficiaries. The Police plan grew by 53 members to 2,739 total members, with active membership increasing by 18 to 1297, inactive vested members remaining the same at 38, and retirees and surviving spouses increasing by 35 to 1404.

The Retirement Board's Investment Committee and staff continued to work with our investment consultants to monitor the performance and investment processes of our 13 investment managers. Investment returns for the fiscal year were 1.1% net of fees, 2.2% below our target allocation benchmark of 3.3%. The Retirement Board worked with our actuary and investment consultants to complete an Asset Liability Study. The Board uses the A/L Study to help guide the asset allocation process, and it led us to adopt new actuarial assumptions including starting the process to lower the actuarial assumed rate of return from 7.5% to 7.25%.

On a sad note, we said goodbye to our friend and longtime board member Bailus Tate, who passed away in July. Bailus was a thoughtful leader who brought a wealth of knowledge about retirement systems and the Police Department to the Board. We will miss his guidance and endless commitment to the active and retired members of the KCPD.

In closing, I want to thank our members for your support as we work to provide you with an affordable and sustainable retirement benefit. I also want to thank our Retirement Systems staff for their hard work, especially in these unusual times, in taking care of our members and implementing the plans and policies of the Retirement Board.

Sincerely,

Richard C. Smith

Retirement Board Chairman

Outside Professional Services

ACTUARY

Cavanaugh Macdonald Consulting, LLC
Patrice Beckham
Bellevue, Nebraska

AUDITORS

AGH, L.C.
Michael Lowry
Wichita, Kansas

INVESTMENT MANAGEMENT CONSULTANTS

RVK, Inc
Ryan Sullivan, Marcia Beard
Portland, Oregon

Mariner Institutional Consulting, LLC
Robert Woodard
Lawrence, Kansas

LEGAL COUNSEL

Swanson Bernard
Jonathan Dilly
Kansas City, Missouri

MASTER TRUSTEE/CUSTODIAN

The Northern Trust Company
Claudiu Besoaga
Chicago, Illinois

INVESTMENT ADVISORS

Financial Counselors, Inc.
Peter Greig, Gary Cloud
Kansas City, Missouri

LSV Asset Management
Keith Bruch
Chicago, Illinois

Prudential Real Estate Investors
Darin Bright, Kevin Smith
Madison, New Jersey

Abbott Capital Management, LLC
Meredith Rerisi
New York, New York

JPMorgan Investment Management, Inc.
Meena Gandhi
New York, New York

Northern Trust Global Investments
William Nickey
Chicago, Illinois

White Oak Global Advisors
Alexandra Gormly
San Francisco, California

Artisan Partners
Steven Butler
Oaks, Pennsylvania

Wellington Management Company
James Digiuseppe
Boston, Massachusetts

Grosvenor Capital Management
Mark Roman
Chicago, Illinois

GMO, LLC
Brian Huggon
Boston, Massachusetts

PIMCO Investment Management
Brant Gresham
Newport Beach, California

Morgan Stanley Prime Property Fund
Scott Brown
New York, New York

*Please see pages 58 and 60 for information related to brokerage commissions and fees and commissions paid to investment managers.

Financial Section

AGH CPAs & ADVISORS

Independent Auditor's Report

Retirement Systems Board
Police Retirement System of Kansas City, Missouri
Kansas City, Missouri

Report on the Financial Statements

We have audited the accompanying financial statements of the Police Retirement System of Kansas City, Missouri(Plan), a component unit of the City of Kansas City, Missouri (City) which comprise the statement of fiduciary net position as of April 30, 2020, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

Allen, Gibbs & Houlik, L.C. aghlc.com • aghemployersolutions.com • aghuniversity.com • 316.267.7231 • 301 N. Main, Suite 1700 • Wichita, KS 67202-4868

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Police Retirement System of Kansas City, Missouri as of April 30, 2020, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Prior Years Comparative Information

The financial statements as of and for the year ended 2016 and prior were audited by other auditors whose previous reports expressed an unmodified opinion on those statements.

Required Supplementary Information

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

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's financial statements. The supplementary information listed in the table of contents are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, such information is fairly stated, in all material respects, in relation to the financial statements as a whole.

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

September 10, 2020
Wichita, Kansas

This discussion and analysis of the Police Retirement System of Kansas City, Missouri (Police Retirement System or Plan) financial statements provides an overview of its financial activities during the year ended April 30, 2020. Please read it in conjunction with the more detailed financial statements, notes and required supplementary information which follow this section.

The Police Retirement System is the defined benefit retirement plan for law enforcement members of the Kansas City, Missouri Police Department. The Plan was established by the Missouri General Assembly in 1946 and is administered by the Retirement Board to provide retirement, disability and survivor benefits to its members.

Overview of Financial Statements and Accompanying Information

- The financial statements presented in this report are the Statement of Fiduciary Net Position as of April 30, 2020, and the Statement of Changes in Fiduciary Net Position for the year ended April 30, 2020. These statements reflect resources available for the payment of benefits as of the year-end, and the sources and use of those funds during the year.

- The notes to the financial statements are an integral part of the financial statements and provide facts and detailed information to assist the reader in understanding the statements. Information in the notes are intended to provide financial statement users with a description of the Plan, a summary of significant accounting policies, the method used to value investments and a summary of Plan investments, and the methods and assumptions used to develop the actuarial valuation.

- Required Supplementary Information consists of schedules and related notes concerning significant actuarial information and assumptions. Beginning on page 42, these schedules and notes emphasize the long-term nature of the Plan and show the progress of the Plan in accumulating sufficient assets to pay future benefits.

- The Schedule of Changes in Net Pension Liability and Related Ratios presents detailed information about the pension liabilities for which the Plan's assets are held and managed. The schedule is intended to assist financial statement users in understanding the magnitude of the pension liability and the degree to which net position restricted for pensions is sufficient to cover the liability for the Plan.

- The Schedule of Employer Contributions shows the amount of actuarially determined required contributions relative to the actual contributions made during the year. This schedule also presents covered payroll and contributions as a percentage of covered payroll to provide an economic context for the amount of contributions reported for the Plan.

- The Schedule of Investment Returns shows the money-weighted rate of return on investments, net of investment expense. The money-weighted rate of return is a method for calculating investment performance on Plan investments that adjusts for the changing amounts actually invested.

- The Supplementary Information includes the Schedule of Expenses and the Schedule of Additions by Source and Deductions by Type. The Schedule of Expenses includes the detail of the administrative and investment costs to operate the Plan. The Schedule of Additions by Source and Deductions by Type is a historical summary which shows how contributions and investments impact the additions to the Plan and how benefit payments and administrative expenses impact the deductions from the Plan.

Fiduciary Net Position

The following is a summary comparative statement of Fiduciary Net Position:

	April 30, 2020	April 30, 2019	Amount Change
Cash	$453,835	$352,029	$101,806
Receivables	2,928,655	3,947,517	(1,018,862)
Investments	875,033,735	889,270,665	(14,236,930)
Securities lending collateral	65,103,616	62,998,926	2,104,690
Other assets	17,671	6,806	10,865
Total assets	**943,537,512**	**956,575,943**	**(13,038,431)**
Accounts and refunds payable	3,246,124	1,262,861	1,983,263
Due to broker for purchases of investments	735,488	513,012	222,476
Pending foreign exchange sales	113,976	575,410	(461,434)
Securities lending collateral	65,103,616	62,998,926	2,104,690
Total liabilites	**69,199,204**	**65,350,209**	**3,848,995**
Net Position Restricted for Pensions	**$874,338,308**	**$891,225,734**	**$(16,887,426)**

Financial Analysis of Fiduciary Net Position

- The Statement of Fiduciary Net Position presents information on the Plan's assets and liabilities with the difference between the two reported as Net Position Restricted for Pensions. This statement reflects, at fair value, the contributions and investments which are available to pay benefits.

- The Police Retirement System's benefits are funded through member and City of Kansas City, Missouri contributions, and investment income. Net position of the Plan decreased to $874,338,308 as of April 30, 2020 from $891,225,734 as of April 30, 2019. Plan income is generated through the investment of contributions in stocks, bonds and alternative assets.

- **Assets –** Total assets of the Police Retirement System were $943.5 million as of April 30, 2020 and included cash, receivables, investments and securities lending collateral. Total assets decreased by ($13.0) million or (1.4%) from FY 2019. Investable assets decreased during the year by ($14.2) million while securities lending collateral increased by $2.1 million. The decrease in investable assets is due to negative investment performance in the stock and alternative asset portfolios as a result of the global pandemic. The Plan's fixed income portfolio returned 8.5% for the fiscal year and helped mitigate some of the losses in global equities. The increase in securities lending collateral was due to additional volatility in the markets which increased the demand for securities lending.

Liabilities – Total liabilities of the Police Retirement System were $69.2 million as of April 30, 2020 and included payables for money manager fees and refunds, amounts due to brokers for purchases of investments, and securities lending collateral. Total liabilities increased by $3.8 million during the year due to the $2.1 million increase in the offsetting liability for securities lending activity as well as an increase in money manager payables.

Net Position – Police Retirement System assets exceeded liabilities at April 30, 2020 by $874.3 million. The Net Position decreased by ($16.9) million or (1.9%) from the prior year as a result of the negative market performance that arose from the global pandemic.

Changes in Fiduciary Net Position

The following is a summary comparative statement of Changes in Fiduciary Net Position:

	April 30, 2020	April 30, 2019	Amount Change
Member contributions	$11,386,606	$11,412,617	$(26,011)
City contributions	33,432,570	32,280,943	1,151,627
Total Net Investment Income	9,535,314	34,916,020	(25,380,706)
Total additions	**54,354,490**	**78,609,580**	**(24,255,090)**
Benefits paid to members	69,341,685	65,504,670	3,837,015
Refunds of contributions	1,002,978	573,339	429,639
Administrative expenses	897,253	802,705	94,548
Total deductions	**71,241,916**	**66,880,714**	**4,361,202**
Net Increase / (Decrease) in Net Position	**(16,887,426)**	**11,728,866**	**(28,616,292)**
Net Position Restricted for Pensions, Beginning of Year	**891,225,734**	**879,496,868**	**11,728,866**
Net Position Restricted for Pensions, End of Year	**$874,338,308**	**$891,225,734**	**$(16,887,426)**

Financial Analysis of Changes in Fiduciary Net Position

The Statement of Changes in Fiduciary Net Position presents information showing how the Plan's Net Position Restricted for Pensions changed during the year ended April 30, 2020. This statement reflects contributions made by members and the City of Kansas City, Missouri. Investment activities during the fiscal year are also presented which include interest and dividends and the net appreciation or depreciation in fair value of the investments. Benefits paid to members, refunds of contributions and administrative expenses are also reported in the statement.

Revenues – Additions to Fiduciary Net Position – Member contributions, City contributions and investment income are the sources of revenue for the Police Retirement System. Members contributed 11.55% of covered payroll to the Plan while City contributions totaled $30.2 million or 30.36% of projected covered payroll. City contributions increased to pay the required contributions as determined by the Plan's actuary. The City also paid $200 per month for each member eligible to receive the supplemental benefit which totaled $3.3 million. Net investment income decreased compared to the prior year. The portfolio's investment rate of return, net of investment expenses, was 1.08% with net investment income of $9.5 million. Investment expenses, including custodial bank fees, manager fees, and investment consultation totaled $5.7 million. Investments in bonds, direct lending, real estate, and private equity all posted gains for the year. Investments in global equities and absolute return posted losses for the year due to the global pandemic.

Expenses – Deductions from Fiduciary Net Position – Benefits paid to members, refunds of member contributions and administrative expenses are the sources of expenses for the Police Retirement System. Benefit payments and refunds represent 98.7% of the total deductions. Benefits paid to members increased over the prior year because of new retirements and a cost of living adjustment for retirees. The amount of refunds to members leaving the Police Department increased over the prior year. Administrative expenses increased due to an increase in legal, actuarial and operating expenses.

City contributions continued to equal the amount recommended by the Plan's actuary. For the year beginning May 1, 2020, City contributions are budgeted to total the actuarial required contribution amount of $32.8 million. The contribution amount is calculated at 32.60% of projected covered payroll.

The Retirement Board has approved an asset allocation which over time is expected to realize a long-term investment rate of return of 7.40%. Fiscal year 2020 was the second year of a five year step down to lower the actuarial assumed rate of return to 7.25%. The Retirement Board continues to review investment allocations on a monthly basis and to rebalance the portfolio, as needed, with guidance from an independent financial consulting firm.

Requests for Information

This financial report is designed to provide members of the Police Retirement System, citizens, investors and creditors of the City of Kansas City, Missouri with a general overview of the Plan 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 Kansas City Police Employees' Retirement Systems, 9701 Marion Park Drive B, Kansas City, Missouri 64137.

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 Police Retirement System.

STATEMENT OF FIDUCIARY NET POSITION

April 30, 2020

Assets

Investments	
U.S. government securities	$59,413,427
Corporate bonds and notes	125,854,998
Common and preferred stock	78,822,542
All country world index fund	113,816,414
Government mortgage-backed securities	4,972,707
Partnerships - equity	10,634,515
Partnerships - fixed income	127,284,033
Real estate funds	120,096,340
Short-term investment funds	5,410,830
Hedge fund of funds	101,243,088
Equity funds	44,367,132
International small cap equity funds	7,647,281
Emerging market equity funds	22,001,993
Foreign equities	53,468,435
Total investments	875,033,735
Securities Lending Collateral	65,103,616
Receivables	
City contributions	278,000
Accrued interest and dividends	2,400,744
Due from broker for sales of investments	135,457
Pending foreign exchange purchases	114,454
Total receivables	2,928,655
Other assets	17,671
Cash	453,835
Total assets	943,537,512

Liabilities

Accounts and refunds payable	3,246,124
Due to broker for purchases of investments	735,488
Pending foreign exchange sales	113,976
Securities lending collateral	65,103,616
Total liabilities	69,199,204
Net Position Restricted for Pensions	$874,338,308

See Notes to the Financial Statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Year Ended April 30, 2020

Additions

Investment Income	
Net depreciation in fair value of investments	$(6,757,901)
Interest and dividends	21,810,314
Investment expense	(5,668,155)
Net investment income	9,384,258
Securities Lending Income	
Securities lending gross income	1,226,738
Securities lending expenses	
Borrower rebates	(1,010,980)
Management fees	(64,702)
Total securities lending expenses	(1,075,682)
Net securities lending income	151,056
Total net investment income	9,535,314
Contributions	
City	33,432,570
Members	11,386,606
Total contributions	44,819,176
Total additions	54,354,490

Deductions

Benefits Paid	
Retired members	48,898,010
Spouses	8,661,584
Children	166,362
Disabled	9,547,006
Partial lump sum option	2,041,723
Death benefits	27,000
Total benefits paid	69,341,685
Other Deductions	
Refunds of contributions	1,002,978
Adminstrative expenses	897,253
Total other deductions	1,900,231
Total deductions	71,241,916
Net Decrease in Net Position	**(16,887,426)**
Net Position Restricted for Pensions, Beginning of Year	**891,225,734**
Net Position Restricted for Pensions, End of Year	**$874,338,308**

See Notes to Financial Statements.

Note 1: Summary of Significant Accounting Policies

Reporting Entity

The Police Retirement System of Kansas City, Missouri (Plan) is considered a component unit of the City of Kansas City, Missouri (City) financial reporting entity and included in the City's financial reports as a pension trust fund due to the nature of the Plan's reliance on funding from the City of Kansas City, Missouri. Accounting principles generally accepted in the United States of America require that the financial reporting entity include the primary government, organizations for which the primary government is financially accountable and other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete. Based on these criteria, there are no other organizations or agencies whose financial statements should be combined and presented with these financial statements.

Measurement Focus and Basis of Accounting

The Plan uses a fund to report on its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. The Plan's fund is classified as a pension trust fund of fiduciary fund type. Pension trust funds account for assets held by the Plan in a trustee capacity or as an agent on behalf of others and are accounted for on the flow of economic resources measurement focus and the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. City contributions to the Plan are recognized when due and the City has made a formal commitment to provide the contributions. Interest and dividend income are recorded when earned. Expenses are recorded when the corresponding liabilities are incurred. Realized gains and losses on security transactions are based on the difference between sales proceeds and carrying value of the securities, and are recognized on the transaction date. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

Valuation of Investments and Income Recognition

Marketable securities, including mutual funds, are stated at fair value. Securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the Plan year; investments traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the average of the last reported bid and ask prices.

For certain investments consisting of corporate bonds and notes, U.S. Treasury obligations, U.S. agency obligations and government mortgage-backed securities that do not have an established fair value, the Plan has established a fair value based on yields currently available on comparable securities of issuers with similar credit ratings and quotations are obtained from brokerage firms or national pricing services.

Note 1: Summary of Significant Accounting Policies (Continued)

The private equity partnerships, equity funds, hedge fund of funds and real estate 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 the technology, communications, energy, real estate markets, as well as U.S. fixed income instruments and alternative or non-traditional investments. A portion of these funds is also invested in foreign operations under certain partnership agreements. 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 on the Fund's proportionate interest in the net position or net equity of the Portfolio Funds as determined by each Portfolio Fund's general partner or investment manager.

The Plan is obligated to pay certain capital commitments to the partnerships. These unfunded commitments totaled approximately $701,317 at April 30, 2020.

Securities, which are not traded on a national security exchange, are valued by the respective investment manager or other third parties based on similar sales.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Administrative Expenses

Actuarial, investment management and bank trustee fees and expenses are included in the Plan's expenses when incurred. These expenses are financed through investment income. The Kansas City, Missouri Police Department provides office space without any direct cost 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 management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein and disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

Plan Tax Status

The Plan obtained its most recent determination letter on December 17, 2014, in which the Internal Revenue Service stated that the Plan, as designed, was in compliance with the applicable requirements of the Internal Revenue Code (IRC) and, therefore, not subject to tax. The Plan's management believes that the Plan is designed and is being operated in compliance with the applicable requirements of the IRC exempting it from federal income taxes.

Note 2: Plan Description

The following summary description of the Police Retirement System of Kansas City, Missouri provides only general information. Participants should refer to the Plan Statutes (Sections 86.900 to 86.1280 RSMo) for a more complete description of the Plan's provisions.

The Plan is a single-employer, contributory, defined benefit plan established by the State of Missouri's General Assembly and administered by the Retirement Board of the Police Retirement System of Kansas City, Missouri (Board). The Board is composed of nine members, two are appointed by the Board of Police Commissioners, two are appointed by the City Council and five are elected by the membership of the Retirement Systems. The elected members must include one member of the Civilian Employees' Retirement System, one member retired from active service in the Police Retirement System and one active member of the Police Retirement System who has not attained the rank of Sergeant or higher. Elections are held annually and Board members are elected to serve for three-year terms.

Eligibility – All police officers who serve as law enforcement officers for compensation become members as a condition of employment.

Tier I member – A person who became a member prior to August 28, 2013 and remained a member on August 28, 2013.

Tier II member – A person who became a member on or after August 28, 2013.

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

	Tier I Members	Tier II Members	Total
Retirees and beneficiaries currently receiving benefits	1,402	2	1,404
Terminated members entitled to but not yet receiving benefits	25	–	25
Active members			
Vested	638	–	638
Non-vested	326	346	672
Total	**2,391**	**348**	**2,739**

Contributions – State Statutes set out the funding requirements for the Plan which can only be amended by the Missouri General Assembly. The Retirement Board establishes a rate based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by Plan members during the year, with an additional amount to finance any unfunded accrued liability. The City is required to contribute the employer actuarially determined contribution rate. For the year ended April 30, 2020, active members contributed at a rate of 11.55% of base pay, and the City contributed at a rate of 30.36% of annual projected covered payroll. In addition, the City was obligated to make contributions of $200 per month of supplemental benefit for eligible members.

Note 2: Plan Description (Continued)

Benefits Provided – Benefit terms for the Plan are established in Missouri Revised Statutes 86.900 to 86.1280 and can only be amended by the Missouri General Assembly. The Plan provides retirement benefits, as well as pre-retirement death benefits, duty and non-duty related disability benefits and termination benefits to sworn law enforcement employees of the Kansas City, Missouri Police Department.

Service Retirement

Eligibility –

Tier I member – 25 years of service, without regard to age, or at age 60 with at least 10 years of service.

Tier II member – 27 years of service, without regard to age, or at age 60 with at least 15 years of service.

All members must retire at the completion of 35 years of service, or at age 65, whichever occurs first.

Amount of Pension – For a member retiring prior to August 28, 2000, benefit equal to 2% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 60% of Final Compensation.

For a member retiring on or after August 28, 2000 and before August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 75% of Final Compensation.

For a member retiring on or after August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 80% of Final Compensation.

Final Compensation –

Tier I member – Average annual compensation during the two years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than two years.

Tier II member – Average annual compensation during the three years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than three years.

Deferred Retirement (Vested Termination)

Eligibility – 15 years of creditable service.

Tier I member – Benefit begins at age 55.

Tier II member –Benefit begins at age 60.

Amount of Pension – Computed as service retirement but based on service, Final Compensation and benefit formula in effect at termination of employment. Benefits are unreduced.

Note 2: Plan Description (Continued)

Disability

Duty Disability Eligibility – A member in active service who has become permanently unable to perform the full and unrestricted duties of a police officer, as determined by the Board of Police Commissioners, as the exclusive result of an accident or disease occurring in the line of duty.

Amount of Pension – For a member retiring on or after August 28, 2001 and before August 28, 2013, benefit equal to 75% of Final Compensation payable for life or as long as the permanent disability continues.

For a member retiring on or after August 28, 2013, benefit equal to 80% of Final Compensation payable for life or as long as the permanent disability continues.

Non-Duty Disability Eligibility – A member in active service, with a minimum of 10 years of service, who has become permanently unable to perform the full and unrestricted duties of a police officer as determined by the Board of Police Commissioners. Disability is not exclusively caused by the actual performance of official duties.

Amount of Pension – 2.5% of Final Compensation multiplied by years of creditable service payable for life or as long as the permanent disability continues.

Disability benefits may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law. A disability retiree who is not age 60 may be required by the Retirement Board to undergo continuing eligibility reviews once every three years which may include a medical re-examination.

Death in Service – Duty or Non-Duty

Eligibility – Benefit payable to a surviving spouse, if any, upon the death of an active member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18. No service requirement.

Amount of Pension – 40% of Final Compensation payable to surviving spouse for life.

Child Benefit – $600 annually for each child under the age of 18, if any, until the child reaches age 18 or age 21, if a full time student. A child who is mentally or physically incapacitated from wage earning at the time of a member's death shall qualify, without regard to age, for life or so long as the incapacity existing at time of member's death continues.

Funeral Benefit – $1,000 payable upon the death of an active member.

Note 2: Plan Description (Continued)

Line of Duty Death

Eligibility – Benefit payable to a surviving spouse. If no surviving spouse, benefit payable to children under age 21 or children over age 21 if mentally or physically incapacitated from wage earning, in equal shares. Death resulting from performance of official duties; no service requirement.

Amount of Benefit – In addition to benefits payable under Death in Service shown above, a lump sum of $50,000.

Death After Retirement

Eligibility – Benefit payable to an eligible surviving spouse, if any, upon the death of a retired member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18.

Amount of Pension –

Tier I member – Benefit equal to 80% of the straight life pension the deceased member was receiving at time of death.

Tier II member – Benefit equal to 50% of the straight life pension the deceased member was receiving at time of death. In lieu of the 50% surviving spouse benefit, a Tier II member may elect, at the time of retirement, a reduced actuarially equivalent annuity of either a 75% or 100% surviving spouse benefit.

Funeral Benefit – $1,000 payable upon the death of a retired member.

Non-Vested Termination

Eligibility – Termination of employment and no pension is or will become payable.

Amount of Benefit – Refund of member's contributions without interest.

Minimum Pension Benefit

Eligibility – Any retired member who is entitled to a pension benefit and who either has at least 25 years of creditable service or is retired as a result of an injury or illness. A surviving spouse qualifies for the minimum monthly benefit if the member had at least 25 years of creditable service, died in service or was retired as a result of an injury or illness.

Amount of Benefit – Minimum monthly benefit of not less than $600 in combined pension benefit and cost-of-living adjustments. The minimum monthly pension benefit is in addition to the Supplemental Retirement Benefit.

Note 2: Plan Description (Continued)

Post-Retirement Benefit Increases

Eligibility –

Tier I members and surviving spouses – Member's pension must have commenced by December 31 of prior calendar year.

Tier II members and surviving spouses – Service retirements generally eligible in the year following the year in which member would have attained thirty-two years of service. Duty Disability retirements eligible in year following retirement. Non-duty Disability retirements eligible earlier of year following fifth year after retirement or year following the year in which they would have attained thirty-two years of service. Surviving spouses of retired members eligible at same time member would have been if living.

Amount of Benefit – May receive an annual cost-of-living adjustment (COLA) in an amount not to exceed 3% of their respective base pension. Base pension is the pension computed under the provisions of the law at the date of retirement, without regard to COLAs. The COLA is normally effective with the May 31st benefit payment.

Statutes require that the Retirement Board must act upon the advice of a qualified actuary when granting cost of living adjustments.

Supplemental Retirement Benefit

Tier I member – Current and future retired and disabled members and their surviving spouses are eligible to receive $420 per month in addition to pension benefits.

Tier II member – Current and future retired and disabled members and their surviving spouses are eligible to receive $200 per month in addition to pension benefits.

Optional Form of Benefit Payment

Tier I member – Member retiring with at least 26 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Tier II member – Member retiring with at least 28 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Members electing PLOP will receive an actuarially reduced monthly benefit for their lifetime.

Social Security and Medicare

Tier I member – Members do not participate in Social Security although members hired after 1986 do contribute to Medicare.

Tier II member – Members do not participate in Social Security but do contribute to Medicare.

Note 3: Deposits, Investments and Investment Income

Deposits

Custodial credit risk is the risk that, in the event of a bank failure, a government's deposits may not be returned to it. The Plan's deposit policy for custodial credit risk requires compliance with the provisions of state law.

State law requires collateralization of all deposits with federal depository insurance; bonds and other obligations of the U.S. Treasury, U.S. agencies or instrumentalities of the State of Missouri; bonds of any city, county, school district or special road district of the State of Missouri; bonds of any state; or a surety bond having an aggregate value at least equal to the amount of the deposits.

The Plan had no bank balances exposed to custodial credit risk at April 30, 2020.

Investments

For the year ended April 30, 2020, The Northern Trust Company (Northern Trust) was the master custodian for substantially all of the securities of the Plan. The investments held by the Plan are managed by 13 Board-appointed money managers. Each of the money managers has a different asset allocation based on Board- approved policy. The Plan may legally invest in direct obligations of and other obligations guaranteed as to principal by the U.S. Treasury and U.S. agencies and instrumentalities, real estate, partnerships, corporate bonds, commodities and equity securities.

The asset type and classes, target asset allocation and ranges to be used in the Plan are shown below. All percentages are based on fair values. The Board has authorized Plan staff, with guidance from the Investment Consultant, to rebalance the portfolio in accordance with the strategy guidelines below:

Asset Type and Class	Range	Target
Equities		
Global Equity	32% – 42%	37%
Private Equity	0% – 3%	2%
Fixed Income	25% – 35%	30%
Alternatives		
Real Estate	5% – 15%	11%
Absolute Return	10% – 20%	15%
Direct Lending	0% – 10%	5%
Cash	0% – 5%	0%

Note 3: Deposits, Investments and Investment Income (Continued)

Securities Lending Transactions

State statutes 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% of the fair value and international debt and equity securities of not less than 105% of the fair value. 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.

Fair value of securities loaned	$62,803,448
Fair value of cash collateral received from borrowers	65,103,616
Total fair value of collateral	$65,103,616

All securities lent 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.

Note 3: Deposits, Investments and Investment Income (Continued)

At April 30, 2020, the Plan had the following investments and maturities:

Type	Fair Value	Maturities in Years: Less than 1	1 – 5	6 – 10	More than 10	Loaned Under Securities Lending Agreements
U.S. Treasury obligations	$56,404,098	$–	$19,392,969	$9,665,322	$27,345,807	$42,819,174
U.S. agencies obligations	3,009,329	–	3,009,329	–	–	–
Corporate bonds and notes	125,854,998	–	47,246,028	62,844,334	15,764,636	7,219,535
Government mortgage-backed securities	4,972,707	586	–	–	4,972,121	–
Short term investment funds	5,410,830	5,410,830	–	–	–	–
		$5,411,416	$69,648,326	$72,509,656	$48,082,564	
Common and preferred stocks	78,822,542					11,930,032
All country world index fund	113,816,414					–
Real estate funds	120,096,340					–
Hedge fund of funds	101,243,088					–
Partnerships - equity	10,634,515					–
Partnerships - fixed income	127,284,033					–
Foreign equities	53,468,435					834,707
Equity funds	44,367,132					–
International small cap equity fund	7,647,281					–
Emerging markets equity funds	22,001,993					–
Total	**$875,033,735**					**$62,803,448**

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The short term investment funds are presented as an investment with a maturity of less than one year because they are redeemable in full immediately. The debt securities are presented in their respective category based on final maturity date. The Plan's investment policy does not specifically address exposure to fair value losses arising from rising interest rates.

Note 3: Deposits, Investments and Investment Income (Continued)

Credit Risk – Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. It is the Plan's policy to invest in corporate bonds that are rated BBB or better by credit rating agencies. Core fixed income managers may hold bonds with a rating equal to or above BB. At April 30, 2020, the Plan's investments in corporate bonds were rated BBB or better by *Standard & Poor's*. U.S. Treasury obligations were explicitly guaranteed by the U.S. Government. At the same date, the Plan's investments in U.S. agencies obligations not directly guaranteed by the U.S. Government (including Federal National Mortgage Association, Federal Home Loan Banks and Federal Home Loan Mortgage Corporation) and in government mortgage- backed securities were rated AA+ or better by *Standard & Poor's*. The Plan's investments in short term investment funds were not rated by *Standard & Poor's*.

These bond rating requirements do not apply to the high yield portion of the fixed income portfolio. The following table summarizes the Plan's fixed income portfolio exposure level and credit qualities at April 30, 2020:

Fixed Income Security Type	Fair Value April 30, 2020	S&P Weighted Average Credit Quality
U.S. agencies obligations	$3,009,329	AA+
Corporate bonds and notes	125,854,998	A
Government mortgage-backed securities	4,972,707	AA+
Short term investment funds	5,410,830	Not rated

Custodial Credit Risk – For an investment, 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 investment or collateral securities that are in the possession of an outside party. Consistent with the Plan's securities lending policy, $62,803,448 was held by the counterparty that was acting as the Plan's agent in securities lending transactions.

Investment Concentrations – The following presents investments that represent 5% or more of the Plan's net position as of April 30, 2020:

Investment	Fair Value
FCI Core Fixed Income	$190,241,132
Northern Trust Collective All Country World Investable Market Index Fund - Non Lending	113,816,414
Grosvenor FOB Fund, L.P.	101,243,088
PIMCO - Fixed Income Fund	76,210,135
Artisan Global Opportunities Trust Fund	71,902,872
Prudential PRISA II	61,779,236
LSV Global Value	60,388,105
Morgan Stanley - Prime Property Fund, LLC	58,317,105
White Oak Fixed Income Fund C, L.P.	51,073,898

Note 3: Deposits, Investments and Investment Income (Continued)

Foreign Currency Risk – This risk relates to adverse effects on the fair value of an investment from changes in exchange rates. The Plan's investment policy permits investments in international equities, American Depository Receipts (ADRs), warrants, rights, 144A securities, convertible bonds and U.S. registered securities whose principal markets are outside of the United States. All foreign equities and emerging market equities held are denominated in U.S. dollars.

Investment Income

Investment income (loss) for the year ended April 30, 2020, consisted of:

Interest and dividend income	$21,810,314
Net depreciation in fair value of investments	(6,757,901)
	15,052,413
Less investment expense	5,668,155
	$9,384,258

Annual Money-Weighted Rate of Return – For the year ended April 30, 2020, the annual money- weighted rate of return on the pension plan investments, net of pension plan investment expense, was 1.08%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 4: Net Pension Liability

The components of the net pension liability of the City at April 30, 2020, were as follows:

Total pension liability	$1,293,439,160
Plan fiduciary net position	(874,338,308)
City's net pension liability	419,100,852
Fiduciary net position as a % of total pension liability	67.60%

Note 5: Actuarial Methods and Assumptions

An actuary from Cavanaugh Macdonald Consulting, LLC determines the total pension liability. The total pension liability as of April 30, 2020 was determined based on an actuarial valuation prepared as of April 30, 2019, rolled forward one year to April 30, 2020, using the following actuarial assumptions:

Inflation	2.50%
Salary increases, including inflation	3.00% – 19.00%
Long-term investment rate of return, net of plan investment expense, including inflation	7.40%

For purposes of calculating the total pension liability, future ad hoc COLAs of 2.5% (simple COLA) were assumed to be granted in all future years.

Pre-retirement mortality rates were based on the RP-2000 Employee Table, projected to 2017 using Scale AA. Future mortality improvement is projected generationally using the ultimate projection scale of MP-2017.

Post-retirement mortality rates were based on the RP-2000 Healthy Annuitant Table, projected to 2017 using Scale AA. Future mortality improvement is projected generationally using the ultimate projection scale of MP-2017.

Disability mortality rates were based on the RP-2000 Healthy Annuitant Table with a 5-year age set-forward, projected to 2017 using Scale AA (also set forward 5 years). Future mortality improvement is projected generationally using the ultimate projection scale of MP-2017 and reflects the 5-year age set-forward.

The actuarial assumptions used in the valuation are based on the results of the most recent actuarial experience study, which covered the 5-year period ending April 30, 2017. The actuarial experience study is dated December 11, 2018.

Note 5: Actuarial Methods and Assumptions (Continued)

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 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global Equity	37%	5.15%
Fixed Income	30%	1.00%
Absolute Return	15%	3.33%
Real Estate	11%	3.75%
Direct Lending	5%	4.50%
Private Equity	2%	8.25%

Discount Rate – The discount rate used to measure the total pension liability was 7.40%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and the City contributions will be made at rates equal to the employer actuarially determined contribution rate.

A municipal bond rate was not used in determining the discount rate. If it were required, the rate would be 2.50% on the measurement date.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate – The following presents the net pension liability of the City, calculated using the discount rate of 7.40% 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 (6.40%) or one percentage point higher (8.40%) than the current rate:

	1% Decrease (6.40%)	Current Discount Rate (7.40%)	1% Increase (8.40%)
Net pension liability	$589,252,263	$419,100,852	$279,272,029

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

Plan contributions are made and the actuarial present value of accumulated Plan benefits 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: Litigation

The Plan is subject to claims and lawsuits that arise primarily in the ordinary course of operating a retirement system. It is the opinion of management that the disposition or ultimate resolution of such claims and lawsuits will not have a material adverse effect on the net position of the Plan.

Note 8: 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

Note 8: Fair Value Measurements (Continued)

Recurring Measurements

The following table presents the fair value measurements of assets and liabilities recognized in the accompanying financial statements measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements fall at April 30, 2020:

Investments by fair value level	Fair Value	Level 1	Level 2	Level 3
U.S. government securities	$59,413,427	$–	$59,413,427	$–
Corporate bonds and notes	125,854,998	–	125,854,998	–
Common and preferred stock	78,822,542	78,822,542	–	–
Government mortgage-backed securities	4,972,707	–	4,972,707	–
Short-term investment funds	5,410,830	5,410,830	–	–
All country world index fund	113,816,414	–	113,816,414	–
Foreign equities	53,468,435	53,468,435	–	–
Total Investments by fair value level	441,759,353	$137,701,807	$304,057,546	$–

Investments measured at the net asset value (NAV) (A)	
Real estate funds	120,096,340
Partnerships - equity	10,634,515
Partnerships - fixed income	127,284,033
Hedge fund of funds	101,243,088
Emerging markets equity funds	22,001,993
International small cap equity fund	7,647,281
Equity funds	44,367,132
Total investments measured at the NAV	433,274,382
Total investments	$875,033,735

(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 statement 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 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.

Note 8: 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.

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

	Fair Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real estate funds (A)	$120,096,340	–	Quarterly	90 Days
Partnerships - equity (B)	10,634,515	701,317	N/A	N/A
Partnerships - fixed income (C)	127,284,033	–	Monthly	10 Days
Hedge fund of funds (D)	101,243,088	–	Quarterly	70 Days
Emergining markets equity funds (E)	22,001,993	–	Monthly	10 Days
International small cap equity fund (F)	7,647,281	–	Monthly	8 Days
Equity funds (G)	44,367,132	–	Daily	1 Day
Total investments measured at the NAV	**$433,274,382**			

(A) This category includes two open-ended real estate funds that invest in U.S. commercial real estate. Periodic distributions from each fund are made as the underlying investments of the funds are liquidated. Redemptions can be made quarterly.

(B) This category includes two private equity fund of funds that invest primarily in U.S. and International Corporate Finance and Venture Capital. Distributions from each fund are made as the underlying investments of the funds are liquidated. It is estimated the underlying assets of the funds will be liquidated over the next three to five years.

(C) This category includes a commingled core fixed income fund and comingled private debt fund. The fixed income fund is a mutual fund that invests in core fixed income. The underlying bonds, and mutual fund, trade daily on public markets. The private debt fund focuses on lending to U.S. based middle market and small cap companies. The underlying loans have an average duration of 2–4 years. Periodic distributions from the fund are made as underlying loans are repaid. Redemptions can be made monthly.

Note 8: Fair Value Measurements (Continued)

(D) This category includes a hedge fund of funds which invests in 27 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The hedge funds' composite portfolio for this type includes investments in approximately 30% Equities, 28% Credit, 13% Relative Value, 5% Quantitative, 13% Macro and Commodities and 11% Multi- Strategy. Redemptions can be made quarterly.

(E) This category includes a commingled emerging markets equity fund which trades monthly. The underlying emerging market stocks trade daily on public markets.

(F) This category includes a commingled international small cap equity fund which trades monthly on public markets.

(G) This category includes commingled equity funds which trade daily on public markets.

Note 9: Retirement Plan

The Plan has a 408(k) SEP retirement plan covering its employees that meet certain eligibility requirements. The Plan's contributions to its employees' SEP are determined by the Retirement Board. Contributions to the SEP were $76,988 for fiscal year 2020.

Schedule of Changes in Net Pension Liability and Related Ratios

Year Ended April 30

Total pension liability	**2020**	**2019**	**2018**
Service cost	$24,380,475	$25,427,633	$24,997,759
Interest on total pension liability	90,956,233	87,869,790	84,867,808
Differences between expected and actual experience	(14,630,427)	(1,263,810)	(4,446,480)
Effect of assumption/SEIR changes	7,647,937	5,435,086	–
Benefit payments, including member refunds	(70,344,663)	(66,078,009)	(64,731,647)
Net change in total pension liability	**38,009,555**	**51,390,690**	**40,687,440**
Total pension liability - beginning	**1,255,429,605**	**1,204,038,915**	**1,163,351,475**
Total pension liability - ending	**1,293,439,160**	**1,255,429,605**	**1,204,038,915**
Plan fiduciary net position			
Net investment income	9,384,258	34,772,357	73,985,926
Net securities lending income	151,056	143,663	116,726
City contributions	33,432,570	32,280,943	32,103,207
Member contributions	11,386,606	11,412,617	11,390,571
Benefits paid	(69,341,685)	(65,504,670)	(63,777,210)
Refunds of contributions	(1,002,978)	(573,339)	(954,437)
Administrative expenses	(897,253)	(802,705)	(714,956)
Net change in fiduciary net position	**(16,887,426)**	**11,728,866**	**52,149,827**
Plan fiduciary net position - beginning	**891,225,734**	**879,496,868**	**827,347,041**
Plan fiduciary net position - ending	**874,338,308**	**891,225,734**	**879,496,868**
Net pension liability, ending	**$419,100,852**	**$364,203,871**	**$324,542,047**
Fiduciary net position as a percentage of total pension liability	**67.60%**	**70.99%**	**73.05%**
Covered payroll	**$95,096,000**	**$94,574,000**	**$91,598,000**
Net pension liability as a percentage of covered payroll	**440.71%**	**385.10%**	**354.31%**

Schedule of Changes in Net Pension Liability and Related Ratios, continued

Year Ended April 30

Total pension liability	**2017**	**2016**	**2015**
Service cost	$28,978,200	$27,423,797	$26,900,131
Interest on total pension liability	81,761,243	79,502,922	76,210,579
Differences between expected and actual experience	(13,081,322)	(11,656,885)	–
Effect of assumption/SEIR changes	(76,763,170)	40,565,354	14,987,963
Benefit payments, including member refunds	(60,163,764)	(58,588,761)	(55,405,669)
Net change in total pension liability	**(39,268,813)**	**77,246,427**	**62,693,004**
Total pension liability - beginning	**1,202,620,288**	**1,125,373,861**	**1,062,680,857**
Total pension liability - ending	**1,163,351,475**	**1,202,620,288**	**1,125,373,861**
Plan fiduciary net position			
Net investment income	72,448,615	(3,094,475)	46,824,719
Net securities lending income	182,798	135,246	126,375
City contributions	30,979,978	30,272,063	28,933,261
Member contributions	11,751,066	10,748,236	10,874,921
Benefits paid	(59,554,625)	(57,970,768)	(55,006,617)
Refunds of contributions	(609,139)	(617,993)	(399,052)
Administrative expenses	(642,688)	(561,591)	(549,742)
Net change in fiduciary net position	**54,556,005**	**(21,089,282)**	**30,803,865**
Plan fiduciary net position - beginning	**772,791,036**	**793,880,318**	**763,076,453**
Plan fiduciary net position - ending	**827,347,041**	**772,791,036**	**793,880,318**
Net pension liability, ending	**$336,004,434**	**$429,829,252**	**$331,493,543**
Fiduciary net position as a percentage of total pension liability	**71.12%**	**64.26%**	**70.54%**
Covered payroll	**$90,571,000**	**$91,952,000**	**$91,750,000**
Net pension liability as a percentage of covered payroll	**370.98%**	**467.45%**	**361.30%**

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

Schedule of Employer Contributions

Last Ten Fiscal Years

	2020	2019	2018	2017	2016
Actuarially determined employer contribution	$33,433,000	$32,281,000	$32,103,000	$30,980,000	$30,272,000
Actual employer contributions	33,433,000	32,281,000	32,103,000	30,980,000	30,272,000
Annual contribution deficiency	$–	$–	$–	$–	$–
Covered payroll	$95,096,000	$94,574,000	$91,598,000	$90,571,000	$91,952,000
Actual contributions as a percentage of covered payroll	35.16%	34.13%	35.05%	34.21%	32.92%

	2015	2014	2013	2012	2011
Actuarially determined employer contribution	$28,933,000	$35,062,000	$31,653,000	$28,277,000	$32,020,000
Actual employer contributions	28,933,000	22,242,000	16,934,000	16,477,000	16,532,000
Annual contribution deficiency	$–	$12,820,000	$14,719,000	$11,800,000	$15,488,000
Covered payroll	$91,750,000	$89,320,000	$86,036,000	$83,784,000	$87,105,000
Actual contributions as a percentage of covered payroll	31.53%	24.90%	19.68%	19.67%	18.98%

Note: Effective with FY 2015, the actuarially determined contribution is developed as a dollar amount rather than a percent of actual pensionable payroll.

Schedule of Investment Returns

Fiscal Year Ending April 30	2020	2019	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expense	1.08%	4.13%	9.06%	9.62%	-0.41%	6.08%

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

Changes of benefit and funding terms – The following changes to the plan provisions were reflected in the valuation performed as of April 30 listed below:

2013 – The 2013 Missouri General Assembly passed Senate Bill 215/House Bill 418 which provided for the following changes to the System:

- Increased the number of years of creditable service from 30 to 32 (which results in the maximum benefit increasing from 75% to 80% of final average pay).
- Created a new benefit tier for new hires with the same benefit structure except final compensation is based on the average of the highest three years, eligibility for service retirement is the earlier of 27 years of service or age 60 with 15 years of service, and the form of payment is a joint and 50% survivor benefit, if married.
- Required the City to contribute the full employer actuarial contribution plus an additional $200 per month for every member entitled to receive a supplemental benefit.The Retirement Board increased the employee contribution rate by 1.00% from 10.55% to 11.55%.

2011 – A new employer policy allowed police officers to continue working until they reach 32 years of service, although benefit accruals and member contributions ended at 30 years.

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

4/30/2020 Valuation:

- Reduction of the investment return assumption from 7.45% to 7.40%.

4/30/2019 Valuation:

- Reduction of the investment return assumption from 7.50% to 7.45%.
- Reduction of the price inflation assumption from 3.00% to 2.50%.
- Reduction of the general wage increase assumption from 3.75% to 3.00%.
- Reduction of the payroll growth assumption from 3.75% to 3.00%.
- Increased the administrative expense assumption from 0.40% to 0.60%.
- Modification of retirement rates to better reflect the actual, observed experience.
- Changed the mortality improvement scale prospectively from Scale AA to the ultimate projection scale of MP-2017.
- Modification of the disability assumption and increase of the percentage of disabilities that are assumed to be duty-related.
- Modification of termination rates to better reflect the actual, observed experience.

4/30/2017 Valuation:

- The amortization of the unfunded actuarial accrued liability at April 30, 2017 is amortized over a closed 30-year period. Subsequent changes in the unfunded actuarial liability due to experience are amortized in a separate base with payments over a closed 20-year period.

4/30/2013 Valuation:

- Reduction of the investment return assumption from 7.75% to 7.50%.
- Reduction of the assumed cost of living adjustment from 3.00% to 2.50%.
- Reduction of the general wage increase assumption from 4.00% to 3.75%.
- Modification of retirement rates to reflect the change in the benefit structure (years of creditable service increasing from 30 to 32), the change in the mandatory retirement policy of the Police Department (from 32 to 35 years of service), and to better reflect the actual, observed experience.
- Lowered termination rates.
- Adjusted the merit scale component of the salary scale to reflect the current pay scale.
- The amortization of the UAAL was changed to be a single base, recalculated each year and amortized as a level percentage of payroll over an open 30-year period.

4/30/2011 Valuation:

- The Board of Trustees adopted a change in the asset smoothing method and implemented it by resetting the actuarial value of assets equal to the fair value of assets as of April 30, 2011. The new smoothing method recognizes the difference between the actual and expected return on the fair value of assets evenly over a five-year period.

The Actuarially Determined Contribution rates, as a percentage of pensionable payroll, used to determine the Actuarially Determined Contribution amounts in the Schedule of Employer Contributions are calculated as of April 30, two years prior to the end of the year in which Actuarially Determined Contribution amounts are reported. In the 12 years prior to FY 2014, the City contributed a fixed contribution rate (19.70%) of covered payroll, regardless of the amount of the actuarial determined contribution rate. Beginning September 1, 2013, the City began to contribute the full dollar amount of the Actuarially Determined Contribution.

The following actuarial methods and assumptions were used to determine the Actuarially Determined Employer Contribution reported in the most recent fiscal year (April 30, 2020), which was based on the April 30, 2018 actuarial valuation:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	30 years closed for Legacy UAAL (29 remaining as of April 30, 2018)
	20 years closed for experience bases (1 base with 20 years at April 30, 2018)
Asset valuation method	5-year smoothing of actual vs. expected return n fair value
Price inflation	3.00%
Wage inflation	3.75%
Salary increases	3.75% to 8.75% per year, including wage inflation
Investment rate of return	7.50%, net of investment expenses and including price inflation
Future cost-of-living adjustments	2.50% (simple)

POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI
SCHEDULE OF EXPENSES
Year Ended April 30, 2020

Investment Expenses	
Bank custodial fees and expenses	$109,068
Financial management expenses	5,385,916
Financial consultation	173,171
Total	**$5,668,155**
Administrative Expenses	
Salaries and payroll taxes	$490,525
Legal	60,947
Audit	24,990
Medical fees	74,471
Actuarial fees	71,992
Fringe benefits	94,566
Printing and office expense	10,760
Postage	6,610
Board meetings	10,593
Travel and education expense	16,214
Insurance	3,777
Legislative consultation	23,745
Other	8,063
Total	**$897,253**

POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI

SCHEDULE OF ADDITIONS BY SOURCE AND DEDUCTIONS BY TYPE

Year Ended April 30, 2020

ADDITIONS BY SOURCE

Fiscal Year Ended	Employee Contributions	City Contributions	Investment Income (Loss)	Total
2013	9,343,416	16,933,694	55,542,099	81,819,209
2014	10,198,831	22,241,769	66,842,964	99,283,564
2015	10,874,921	28,933,261	46,951,094	86,759,276
2016	10,748,236	30,272,063	(2,959,229)	38,061,070
2017	11,751,066	30,979,978	72,631,413	115,362,457
2018	11,390,571	32,103,207	74,102,652	117,596,430
2019	11,412,617	32,280,943	34,916,020	78,609,580
2020	11,386,606	33,432,570	9,535,314	54,354,490

DEDUCTIONS BY TYPE

		Administrative Expenses		
Fiscal Year Ended	Benefits	General	Refunds	Total
2013	50,979,009	576,470	816,459	52,371,938
2014	52,627,501	535,628	361,910	53,525,039
2015	55,006,617	549,742	399,052	55,955,411
2016	57,970,768	561,591	617,993	59,150,352
2017	59,554,625	642,688	609,139	60,806,452
2018	63,777,210	714,956	954,437	65,446,603
2019	65,504,670	802,705	573,339	66,880,714
2020	69,341,685	897,253	1,002,978	71,241,916

Investment Section

October 9, 2020

Board of Trustees
Police Retirement System of Kansas City, Missouri
9701 Marion Park Drive
Kansas City, MO 64137

Dear Board Members,

This letter serves to provide an overview of capital markets and the Police Retirement System of Kansas City (the "System") portfolio's positioning for the fiscal year ended April 30, 2020.

Economic Overview

The 2020 fiscal year (May 1, 2019 to April 30, 2020) was affected by the COVID-19 pandemic that triggered economic lockdowns across the world in March of 2020. These economic shutdowns contributed to major economies dipping into recessions, unemployment rates increasing, and global trade slowing significantly, precipitating swift moves from the Federal Reserve and many other central banks globally. Within the U.S., the Federal Open Market Committee ("FOMC") decreased the federal funds rates by a total of 225 basis points over the fiscal year, from 2.25%-2.50% to 0.00%-0.25%, and many other central banks took similar actions.

Governments also issued unprecedented amounts of fiscal stimulus in an attempt to offset the economic effects of the shutdowns. On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the CARES Act), a $2.2 trillion economic stimulus bill, was signed into law in the U.S. that included $300 billion in one-time cash payments to individuals, $350 billion in forgivable loans to small businesses, and $260 billion in increased unemployment benefits, among many other provisions.

This unexpected end to the 2020 fiscal year represented a sharp divergence from economic conditions during the first nine months of the fiscal year (May 1, 2019 – January 31, 2020), when economic headlines were dominated by near-record low unemployment rates and improving optimism around trade agreements.

Capital Markets Overview

Following a strong end to the calendar year 2019, financial markets sold off sharply during March 2020, with both the MSCI All Country World Index returning -14.4% and the Bloomberg US Aggregate Bond Index returning -2.6% for the month of March. However, markets rebounded in April 2020 to finish out the fiscal year on a more optimistic note.

For the complete fiscal year 2020, global equity markets, as measured by the MSCI All Country World Index, returned -6.2%. U.S. equities outperformed their non-U.S. counterparts with the broad Russell 3000 stock index returning a positive 1.0% for FY 2020. Developed non-U.S. equity markets, as measured by the MSCI Europe Asia Far East (EAFE) Index, declined 11.3%, while emerging markets, as measured by the MSCI EM Index, fell a similar amount, posting a -12.0% return. International equity markets were adversely affected by international economic tensions and deceleration of international economic growth. Emerging markets were further affected by decreasing oil prices and coronavirus-related reductions in demand.

U.S. fixed income markets experienced positive returns amid declining interest rates during the time period. Global fixed income markets also posted positive returns; however, underperforming the U.S., partially due to the strengthening of the U.S. dollar and weak performance from emerging market debt. The Bloomberg U.S. Aggregate Bond Index returned 10.8%, while the Bloomberg Global Aggregate

Bond Index increased 6.6%. The Bloomberg Commodity Index dropped sharply during the fiscal year, recording a -23.2% decline, as oil prices dropped significantly during the fiscal year and spot prices for oil with May delivery briefly dropped below zero for the first time in history as oil inventories approached physical storage capacity.

Plan Updates and Positioning

The total market value of the Police Retirement System investments decreased from $891.7 million to $866.3 million in the year ending April 30, 2020. During the prior fiscal year, the Board approved a gradual reduction in the System's actuarial assumed rate of return from 7.5% to 7.25% over a five-year period. As of fiscal year-end, the System's actuarial assumed rate of return, which represents the System's long-term return goal, was 7.45%. The System's overall investment return over the past year was 1.5% and the System's three-year annualized return was 5.2%. The seven-year annualized return for the System was 6.2% and the System's ten-year annualized return was 6.5%.[1]

During the fiscal year, Staff, the Investment Committee, and RVK, Inc. ("RVK") reviewed the System's asset allocation targets and alternative investment portfolios. No significant changes were made to the portfolio. In the coming year, the Investment Committee and RVK will continue to review the System's asset allocation target, given the System's updated assumed rate of return, recommending changes aimed at improving potential return and/or diversification.

The System's investment policies, goals, and objectives, as well as the performance of its assets continue to be regularly monitored and evaluated by Staff, the Board, the Investment Committee, and RVK. These evaluations include analysis of the investment management firms and the custodial bank that serve the System.

The System's publicly traded assets managed through separate accounts are held in custody at Northern Trust Bank. Market values and returns referenced above are based upon statements prepared by Northern Trust Bank. Their statements are, to the best of our knowledge, reliable and accurate. Investment performance is calculated using a time-weighted rate of return methodology (gross of fees) based upon market values and cash flows.

We look forward to continuing to work with Staff, the Investment Committee, and the Board to monitor, review, and best position the System's portfolio to meet its long-term goals and objective.

Sincerely,

Rebecca Gratsinger, CFA
Chief Executive Officer

[1] Returns are gross of fees.

Police Employees'
Summary of Investment Policies and Objectives

Investment performance objectives were established to give the Retirement System a method to evaluate the investment return of the system's portfolio and individual managers. The system's overall annualized total net of fees return, as measured over the course of a typical market cycle and/or a minimum period of five years, should exceed the return that would have been achieved if the system had been fully invested according to the approved asset allocation policy benchmark. The policy benchmark consists of 37% MSCI All Country World Investable Markets Index (Net), 30% Bloomberg US Aggregate Bond Index, 15% Absolute Return Custom Benchmark, 11% NCREIF ODCE Index (Net), 5% ICE Bank of America Merrill Lynch 3 Month Treasury Bill Index plus 5%, and 2% Cambridge US Private Equity Index (one quarter lag).

The portfolio underperformed the policy benchmark by 2.2% with a 1.1% return (net of fees) for the fiscal year.

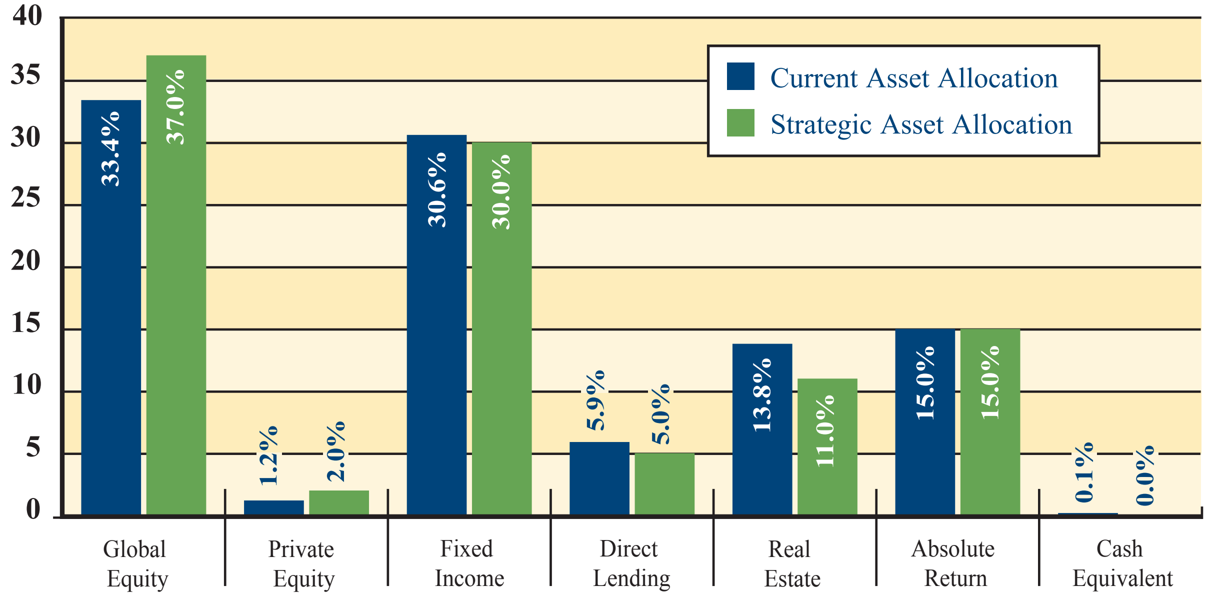
During the fiscal year, the Retirement Board monitored its strategic asset allocation policy using seven broad and distinct asset classes in the portfolio. Return, risk, and diversification assumptions have been established for each asset class. Based on its determination of the appropriate risk tolerance and its long-term return expectations, the Retirement Board has implemented the following strategic asset allocation: Global Equity 37%, Fixed Income 30%, Absolute Return 15%, Real Estate 11%, Direct Lending 5%, Private Equity 2%, and Cash 0%. Based on the RVK, Inc. capital market assumptions, the expected long term return for the strategic asset allocation is 5.5% and expected standard deviation (risk) is 8.4%.

The current asset allocation is 34% equities, 31% bonds and cash, and 35% alternatives. The equity allocation is made up entirely of global stocks. The bond and fixed income allocation is divided into core fixed income and cash. The alternative allocation is divided into core and value added real estate, absolute return strategies, direct lending, and private equity. The differences between the year-end allocation and the strategic allocation are due to market performance of the asset classes.

The Retirement Board met with staff from RVK, Inc. periodically to review the performance of each of the investment managers hired by the Retirement Systems. Performance is reviewed both on an absolute basis (did the manager make or lose money) and on a relative basis (how did the manager perform compared to their designated benchmark). RVK also provides comparative statistical information about the source of the manager's performance against the benchmark and how their performance stacked up against other managers in their asset class.

Asset Allocation

Year Ending April 30, 2020



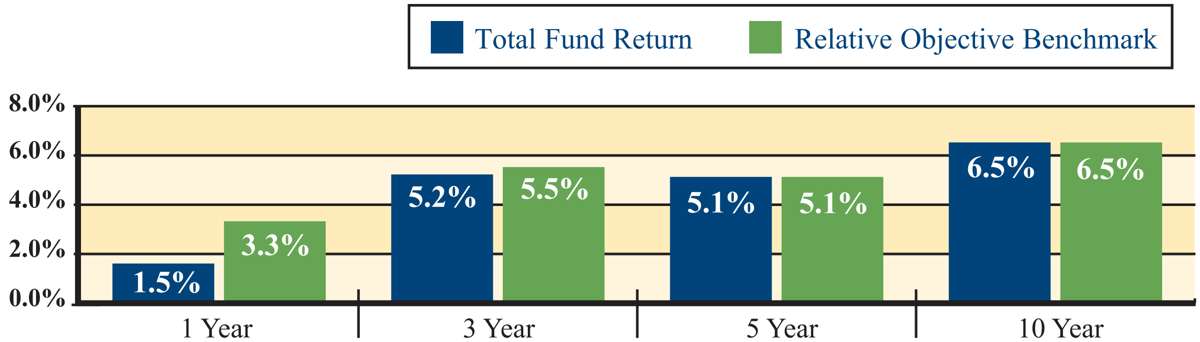
Schedule of Investment Results

Comparative investment results are for the fiscal year ending April 30, 2020. Results for Real Estate and Private Equity managers are available for the quarter ending March 31, 2020 rather than for the fiscal year ending April 30, 2020.

Annualized Manager Returns as of April 30, 2020

Investment Manager	Investment Class	One Year	Three Years	Five Years	Ten Years
FCI Advisors	Bonds & Fixed Income	13.3%	6.2%	4.5%	4.4%
Bloomberg US Govt/Credit		*12.2%*	*5.7%*	*4.1%*	*4.3%*
PIMCO Income Fund	Bonds & Fixed Income	-1.4%			
Bloomberg US Bond Index		*10.8%*			
White Oak Fixed Income Fund	Direct Lending	6.1%			
ICE Bank of America T Bill Index		*4.8%*			
Artisan Partners	Global Equities	9.9%	12.6%	11.6%	
LSV Global LC Value	Global Equities	-13.6%	-0.5%	1.8%	
MSCI World		*-4.0%*	*5.0%*	*4.9%*	
Wellington US SC 2000	Global Equities	-13.0%	2.8%	6.1%	
Russell 2000		*-16.4%*	*-0.8%*	*2.9%*	
Wellington Int'l SC Rsrch	Global Equities	-9.0%	0.5%	2.7%	
MSCI World Ex US SC		*-12.0%*	*-1.1%*	*1.6%*	
Northern Trust Index	Global Equities	-6.0%	4.2%	4.5%	
MSCI ACW IMI		*-6.2%*	*3.8%*	*4.1%*	
LSV Emerging Mkts	Global Equities	-19.1%	-3.9%	-2.3%	1.9%
MSCI Emerging Mkts		*-12.0%*	*0.6%*	*-0.1%*	*1.5%*
LSV EM Small Cap	Global Equities	-19.9%	-5.1%	-2.1%	
MSCI EM Small Cap		*-19.3%*	*-6.0%*	*-4.3%*	
Morgan Stanley	Real Estate	6.7%	8.3%	10.0%	
Prudential PRISA II	Real Estate	5.4%	7.9%	9.8%	14.0%
NCREIF ODCE		*3.9%*	*5.9%*	*7.5%*	*10.4%*
GMO	Absolute Return	-6.4%	0.5%	0.6%	
MSCI ACW 60% / B Gbl Agg 40%		*0.0%*	*4.5%*	*4.0%*	
Grosvenor	Absolute Return	-0.4%	1.2%	1.4%	
HFN FOF Multi-Strat Index		*-2.1%*	*1.0%*	*0.4%*	
Abbott Capital	Private Equity	-6.3%	6.4%	7.4%	9.5%
JP Morgan	Private Equity	12.9%	9.6%	8.3%	12.5%
Cambridge US Prvt Equ Index		*13.9%*	*14.0%*	*12.1%*	*13.9%*
Total Fund		**1.5%**	**5.2%**	**5.1%**	**6.5%**
Relative Objective		***3.3%***	***5.5%***	***5.1%***	***6.5%***

Schedule of Investment Results, (Continued)



Returns provided by R V Kuhns & Associates, Inc. to the Kansas City Police Employees' Retirement System.

Note: Performance returns were calculated using a time weighted rate of return based on market values.

Schedule of Largest Assets Held

Ten Largest Equity Holdings April 30, 2020	Fair Value
1) Microsoft Corp	$4,066,454
2) Astrazeneca	3,657,034
3) IHS Inc.	3,611,520
4) Lonza Group	3,200,396
5) Lowes, Inc.	2,969,558
6) Fidelity	2,942,070
7) Techtronic Industries	2,883,052
8) Veeva Systems Inc.	2,515,889
9) L3Harris Technologies, Inc.	2,460,184
10) Genmab AS	2,227,124

Ten Largest Bond Holdings April 30, 2020	Fair Value
1) US Treasury Bonds 1.75% Due 2022	7,223,398
2) US Treasury Bonds 1.75% Due 2023	3,658,320
3) US Treasury Bonds 2.25% Due 2027	4,188,428
4) US Treasury Bonds 2.875% Due 2046	8,177,344
5) US Treasury Bonds 2.25% Due 2049	1,237,031
6) US Treasury Bonds 3.625% Due 2044	4,328,590
7) US Treasury Bonds 4.25% Due 2039	9,795,654
8) US Treasury Bonds 2.5% Due 2046	3,807,188
9) US Treasury Bonds 1.625% Due 2026	4,384,277
10) US Treasury Bonds 1.625% Due 2029	1,092,617

A complete list of portfolio holdings is available upon request.

Schedule of Brokerage Commissions

Year Ending April 30, 2020

Brokerage Firms	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Value Per Share
J.P. Morgan Securities (Asia Pacific)	294,200	2,055,534	6,074	0.021
Goldman, Sachs and Co.	166,919	5,512,216	3,599	0.022
ITG Inc.	238,163	20,414,534	3,573	0.015
Morgan Stanley and Co., LLC	230,444	4,685,536	2,635	0.011
Credit Suisse Securities (Europe) Ltd	92,102	3,620,909	2,594	0.028
USB AG London Branch	63,962	4,263,941	1,679	0.026
Citigroup Global Markets Limited	60,292	1,445,504	1,667	0.028
Merrill Lynch International Limited	110,652	1,840,529	1,463	0.013
Robert W. Baird Co. Incorporated	44,735	2,898,384	1,458	0.033
Sanford C. Bernstein Ltd	46,621	992,455	1,424	0.031
Credit Suisse Securities (USA) LLC	85,597	2,819,283	1,412	0.016
J.P. Morgan Securities PLC	86,264	1,609,273	1,332	0.015
J.P. Morgan Securities LLC	71,668	2,186,476	1,094	0.015
CLSA Limited	25,500	499,652	1,034	0.041
Jefferies LLC.	89,147	5,804,755	950	0.011
Others (Including 95 Brokerage Firms)	90,987,107	127,098,591	16,579	0.000
Totals	**92,693,373**	**$187,747,571**	**$48,568**	**$0.326**

Zero Commission Trades Excluded From Above	$24,202,558	$57,509,462

Investment Summary

Year Ending April 30, 2020

Investment Manager	Date Hired	Investment Class	Portfolio Fair Value As of 4/30/20	% of Total Fair Value
FCI Advisors	Oct 1974	Fixed Income	$190,241,132	21.7%
Cash			5,410,830	0.6%
Prudential	Sep 2004	Real Estate	61,779,236	7.1%
Abbott Capital	Aug 2005	Private Equity	8,035,806	0.9%
JPMorgan	Jan 2006	Private Equity	2,598,709	0.3%
LSV	Aug 2007	Equity Emerging Markets	14,921,299	1.7%
LSV	Jan 2014	Equity Emerging Markets Small Cap	7,080,694	0.8%
Northern Trust	Feb 2014	Global Equity Index	113,816,414	13.0%
Artisan	Apr 2014	Global Equity	71,902,872	8.2%
LSV	Apr 2014	Global Equity	60,388,105	6.9%
Wellington	May 2014	Equity International Small Cap	7,647,281	0.9%
Wellington	May 2014	Equity US Small Cap	12,429,834	1.4%
Grosvenor	Jul 2014	Absolute Return - Hedge Fund	101,243,088	11.6%
GMO	Aug 2014	Absolute Return - GTAA	31,937,298	3.7%
Morgan Stanley	Sep 2014	Real Estate	58,317,105	6.7%
PIMCO	Aug 2017	Fixed Income	76,210,135	8.7%
White Oak	Apr 2018	Direct Lending	51,073,898	5.8%
		Total	**$875,033,735**	**100%**

Fees and Commissions

Year Ending April 30, 2020

Investment Manager	Management Fee	Commission Expense	Commission per Share
Abbott	$153,600	$–	$–
Artisan Global	528,835	43,429	0.023
FCI	286,260	–	–
GMO	275,104	–	–
Grosvenor	844,378	–	–
JP Morgan PE	68,400	–	–
LSV	794,374	5,138	0.006
Morgan Stanley	576,000	–	–
Northern Trust	87,603	–	–
PIMCO	444,000	–	–
PGIM	768,000	–	–
Wellington	259,361	–	–
White Oak	300,000	–	–
Total	**$5,385,915**	**$48,568**	**$0.000**

Actuarial Section

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

3802 Raynor Pkwy, Suite 202
Bellevue, NE 68123

Phone 402 905 4461
Fax 402 905 4464

www.CavMacConsulting.com

Offices in
Englewood, CO
Kennesaw, GA
Bellevue, NE

October 20, 2020

The Retirement Board
Police Retirement System of
Kansas City, Missouri
9701 Marion Park Drive, B
Kansas City, MO 64137

Dear Members of the Board:

The basic financial objective of the Police Retirement System of Kansas City, Missouri is to establish and receive contributions which:

- when expressed in terms of percentages of active member payroll will remain approximately level from generation to generation, and
- when combined with present assets and future investment return will be sufficient to meet the financial obligations of the Police Retirement System of Kansas City, Missouri to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial funding valuation. The valuation process develops contribution rates that are sufficient to fund the plan's current cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund the unfunded actuarial accrued liability (UAAL), as a level percent of active member payroll, over the amortization period defined in the System's Funding Policy. The most recent valuation was completed based upon population data, asset data, and plan provisions as of April 30, 2020.

The administrative staff of the System provides the actuary with census data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year to year consistency. The actuary summarizes and tabulates population data in order to analyze longer term trends. The plan's external auditor also audits the actuarial membership data annually.

For funding valuation purposes, an asset smoothing method is used to develop the actuarial value of assets. The smoothing method recognizes the difference between the dollar amount of the actual and expected return on the market value of assets over a five-year period.

Actuarial valuations for funding the System are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. In our opinion, the assumptions and the methods comply with the requirements of Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the actuarial contribution rates as needed. The April 30, 2020 actuarial valuation reflects the actuarial assumptions and methods included in the experience study covering the five-year period from May 1, 2012 to April 30, 2017, as adopted by the Board based on advice of the actuary. The change in the investment return assumption/discount rate is being phased in over a five-year period. The scheduled decrease from 7.45% to 7.40% was implemented in the April 30, 2020 valuation. The assumption change increased the unfunded actuarial liability by $6.7 million.

The unfunded actuarial accrued liability increased from the last valuation by $21 million due to the actual experience. There was an actuarial loss of $25.6 million on assets and an actuarial gain of $15.5 million on demographic experience. The liability gain was largely due to salary increases and cost of living increases that were lower than expected, based on the actuarial assumptions.

The 2013 session of the Missouri General Assembly passed legislation that modified the benefit provisions for members hired on or after August 28, 2013 (called Tier II). As a result, the normal cost for this group of members is lower than the normal cost rate for members hired before that date. As of April 30, 2020, there were 346 members in Tier II out of a total of 1,297 active members (about 27% of total actives) so the Tier II members had a small impact on the results of the April 30, 2020 valuation. Over time, the normal cost rate is expected to decline as the pre-August 28, 2013 members retire or leave covered employment and are replaced by members covered by Tier II. However, it will likely take another 10 to 15 years before a noticeable difference is observed in the valuation results.

The System is 74% funded as of April 30, 2020, based on the actuarial value of assets. Reflecting the impact of the Tier II benefit structure for future hires and the City's statutory requirement to contribute the full actuarial contribution rate, the funded ratio of the System is expected to increase over the next thirty years, if all actuarial assumptions are met.

Cavanaugh Macdonald also prepared actuarial computations as of April 30, 2020 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board (GASB) Statement No. 67. The results are presented in a separate report dated July 23, 2020. The assumptions used in the funding valuation report were also used in the GASB 67 report. In addition, the entry age normal actuarial cost method, is required to be used under GASB 67, is also used in the funding valuation report. The actuarial assumptions and methods used in both the funding and the GASB 67 valuation meet the parameters set by the Actuarial Standards of Practice (ASOPs), as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United States of America as promulgated by the Governmental Accounting Standards Board.

The actuary prepared, or assisted in preparing, the following supporting information for the Comprehensive Annual Financial Report:

Financial Section

- Total Pension Liability
- Net Pension Liability
- Sensitivity Analysis
- Schedule of Changes in the Net Pension Liability
- Schedule of City Contributions

Actuarial Section

- Summary of Assumptions
  - Funding Method, Asset Valuation Method, Interest Rate
  - Payroll Growth
  - Probabilities of Age & Service Retirement
  - Probabilities of Separation from Active Employment Before Age & Service Retirement
- Short-Term Solvency Test
- Membership Data
- Analysis of Financial Experience
- Schedule of Funding Progress
- Computed and Actual City Contributions

Respectfully submitted,

CAVANAUGH MACDONALD CONSULTING, LLC

Patrice Beckham

Patrice A. Beckham, FSA, FCA, EA, MAAA
Principal and Consulting Actuary

Summary of Actuarial Assumptions and Methods

Actuarial assumptions are suggested by the retirement system actuary and approved by the Retirement Board.

The investment rate of return is 7.40% for the 4/30/20 valuation, stepping down to 7.25% over the next three years (adopted 11/8/18) based on an underlying rate of inflation of 2.5% per year (adopted 11/8/18).

The System uses a 5-year smoothing of actual vs. expected return on market value approach to value plan assets for actuarial purposes. (Adopted 9/20/11)

For healthy and disabled retirees and surviving beneficiaries, and all active employees, the System uses the RP-2000 tables projected to 2017 using scale AA. Future mortality improvement is projected generationally using the ultimate projection scale MP-2017 for both males and females (adopted 11/8/18).

The rates to measure the probabilities of age and service retirements are included in the Rates of Retirement table on the following pages.

Tables for Rates of Separation from Active Membership and Rates of Disability are shown on the following pages.

The projected general wage growth is 3.0% (adopted 11/8/18); merit and longevity increases range from 0.0% to 16.0% (adopted 11/8/18) depending upon the sample years of service. These increases include an underlying assumption of 2.5% for inflation (adopted 11/8/18). The table for Pay Increase Assumptions is shown on the following pages.

Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using the entry age normal actuarial cost method. Unfunded actuarial accrued liabilities were amortized by level percent of payroll contributions (principal and interest combined) over a closed 30 year period, beginning with the April 30, 2017 valuation. Any new UAAL generated in subsequent years will be layered and amortized over a closed 20-year period. (Adopted 11/8/16)

The System assumes the Retirement Board will grant a 2.5% cost of living adjustment, as allowed by state statute, in each year that statutory provisions are met. (Adopted 7/9/13)

The System periodically prepares a study using actual experience in order to develop assumptions to be used in its actuarial valuations. The latest study was initially completed and presented to the Board in April 2018 for the period May 1, 2012 through April 30, 2017. Further analysis of the investment return assumption was required. That work was completed and the Retirement Board adopted the recommendations and assumptions at the November 8, 2018 board meeting to be used in the valuation for the fiscal year ending April 30, 2019. The experience study report is dated December 11, 2018.

The most recent valuation was completed by Cavanaugh Macdonald Consulting, LLC and was based on members of the System as of April 30, 2020. All census data was supplied by the System and was subject to reasonable consistency checks. Cavanaugh Macdonald Consulting, LLC completed the 2011 through 2020 valuations. Milliman, Inc. completed the 2007 through 2010 valuations. Gabriel, Roeder, Smith & Company completed the valuations from 2002 through 2006. William M. Mercer, Inc. completed all previous valuations.

Summary of Actuarial Assumptions and Methods (Continued)

Mortality Tables. For active members, RP-2000 Employee Table projected to 2017 using Scale AA. Future Mortality improvement is projected generationally using the ultimate projection scale of MP-2017. (Adopted 11/8/18)

For healthy retirees, the RP-2000 Healthy Annuitant Table projected to 2017 using Scale AA. Future mortality improvement is projected generationally using the ultimate projection scale MP-2017. (Adopted 11/8/18)

For disabled retirees, the RP-2000 Healthy Annuitant Table set forward 5 years, projected to 2017, using Scale AA. Future mortality improvement is projected generationally using the ultimate projection scale of MP-2017 and reflects the 5-year age set-forward. (Adopted 11/8/18)

Rates of separation from active membership. The rates do not apply to members eligible to retire and do not include separation on account of death or disability. All vested members are assumed to leave their contributions with the Retirement System and receive a deferred benefit. This assumption measures the probabilities of members remaining in employment. (Adopted 11/8/18)

Years of Service	% of Active Members Separating Within Next Year
0	5.00%
1	4.75%
2–9	3.75%
10	3.00%
11–19	1.00%
20	0.30%
21+	0.00%

Rates of Disability. These assumptions represent the probabilities of active members becoming disabled. It was assumed that 75% of disabilities would be duty related. (Adopted 11/8/18)

Sample Ages	% of Active Members Becoming Disabled within Next Year	
	Male	Female
30	0.075%	0.140%
35	0.390%	0.700%
40	0.550%	1.000%
45	0.600%	1.250%
50	0.800%	1.900%
55	1.456%	3.200%
60	2.579%	5.500%

Summary of Actuarial Assumptions and Methods (Continued)

Rates of Retirement. These rates are used to measure the probabilities of an eligible member retiring during the next year. Deferred members are assumed to retire at age 55 for Tier 1 and age 60 for Tier 2. (Adopted 11/8/18)

Active Members Retiring Within Next Year	
Years of Service	Percent Retiring
25	20%
26	20%
27	20%
28	20%
29	20%
30	20%
31	20%
32	50%
33	50%
34	50%
35	100%

Pay increase assumptions for individual active members are shown below. (Adopted 11/8/18)

	Annual Rate of Pay Increase for Sample Years of Service		
Years of Service	General Wage Growth	Merit and Longevity	Total
0–7	3.00%	5.00%	8.00%
8	3.00%	16.00%	19.00%
9–10	3.00%	2.00%	5.00%
11–12	3.00%	1.00%	4.00%
13+	3.00%	0.00%	3.00%

Schedule of Active Member Valuation Data

Ten Years Ended April 30, 2020

Valuation April 30	Active Members	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2011	1,391	86,762,488	62,374	3.4%
2012	1,366	83,143,924	60,867	(2.4%)
2013	1,359	85,903,657	63,211	3.9%
2014	1,408	91,050,890	64,667	2.3%
2015	1,397	91,864,876	65,759	1.7%
2016	1,334	90,909,410	68,148	3.6%
2017	1,286	88,683,426	68,961	1.2%
2018	1,284	90,957,198	70,839	2.7%
2019	1,279	93,289,696	72,940	3.0%
2020	1,297	93,584,319	72,154	-1.1%

Schedule of Retirants and Beneficiaries Added to and Removed from Rolls

Ten Years Ended April 30, 2020

	Added to Rolls		Removed from Rolls		Rolls End of Year			
Year Ended April 30	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits	% Increase in Annual Benefits	Average Annual Benefits
2011	33	1,175,093	32	699,395	1202	40,616,220	3.4	33,791
2012	43	1,782,017	36	974,256	1209	42,319,944	4.2	35,004
2013	57	2,427,998	26	638,909	1240	45,035,688	6.4	36,319
2014	45	1,921,853	42	1,120,677	1243	46,645,440	3.6	37,527
2015	48	1,976,226	39	914,248	1252	48,530,088	4.0	38,762
2016	63	2,863,595	41	1,160,134	1274	50,918,292	4.9	39,967
2017	76	3,689,966	42	1,423,134	1308	54,078,840	6.2	41,345
2018	66	3,201,779	42	1,308,892	1332	56,724,696	4.9	42,586
2019	73	3,537,016	36	1,087,607	1369	59,556,077	5.0	43,503
2020	74	3,842,914	39	1,286,161	1404	62,098,464	4.3	44,230

Benefit amounts do not include $420 supplemental benefit.

Short-Term Solvency Test

Valuation Date April 30	ENTRY AGE ACTUARIAL ACCRUED LIABILITIES (1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Financed Portion)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
2011	86,306,128	537,670,377	316,632,587	715,764,084	100	100	29%
2012	91,427,576	551,677,775	329,022,523	734,375,923	100	100	28
2013	93,709,417	554,078,691	316,514,107	749,617,334	100	100	32
2014	100,221,012	568,199,815	337,822,316	773,338,034	100	100	31
2015	106,540,143	585,754,594	344,962,180	803,672,621	100	100	32
2016	109,073,053	613,092,387	354,658,781	821,895,127	100	100	28
2017	111,119,569	652,700,808	355,127,688	853,286,442	100	100	25
2018	114,197,453	681,913,348	365,677,701	886,676,375	100	100	25
2019	114,812,821	726,393,431	370,009,776	913,895,177	100	100	20
2020	115,177,685	763,780,744	368,303,174	928,957,803	100	100	14

Note: For years prior to 2011, information is shown from a prior actuary's report.

Analysis of Financial Experience

Year Ended April 30, 2020

The actuarial gains or losses realized in the operation of the Retirement System provide an experience test. Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is expected that gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the actuarial gain (loss) is shown below.

	$ Millions
Unfunded Actuarial Liability, April 30, 2019	$297.3
- effect of contributions less than actuarial rate	–
- expected change due to amortization method	5.3
- loss from investment return on actuarial assets	25.6
- demographic experience[1]	(15.5)
- assumption changes	6.7
- all other experience	(1.1)
Unfunded Actuarial Liability, April 30, 2020	$318.3

[1] Liability gain is 1.25% of total actuarial accrued liability

Schedule of Funding Progress

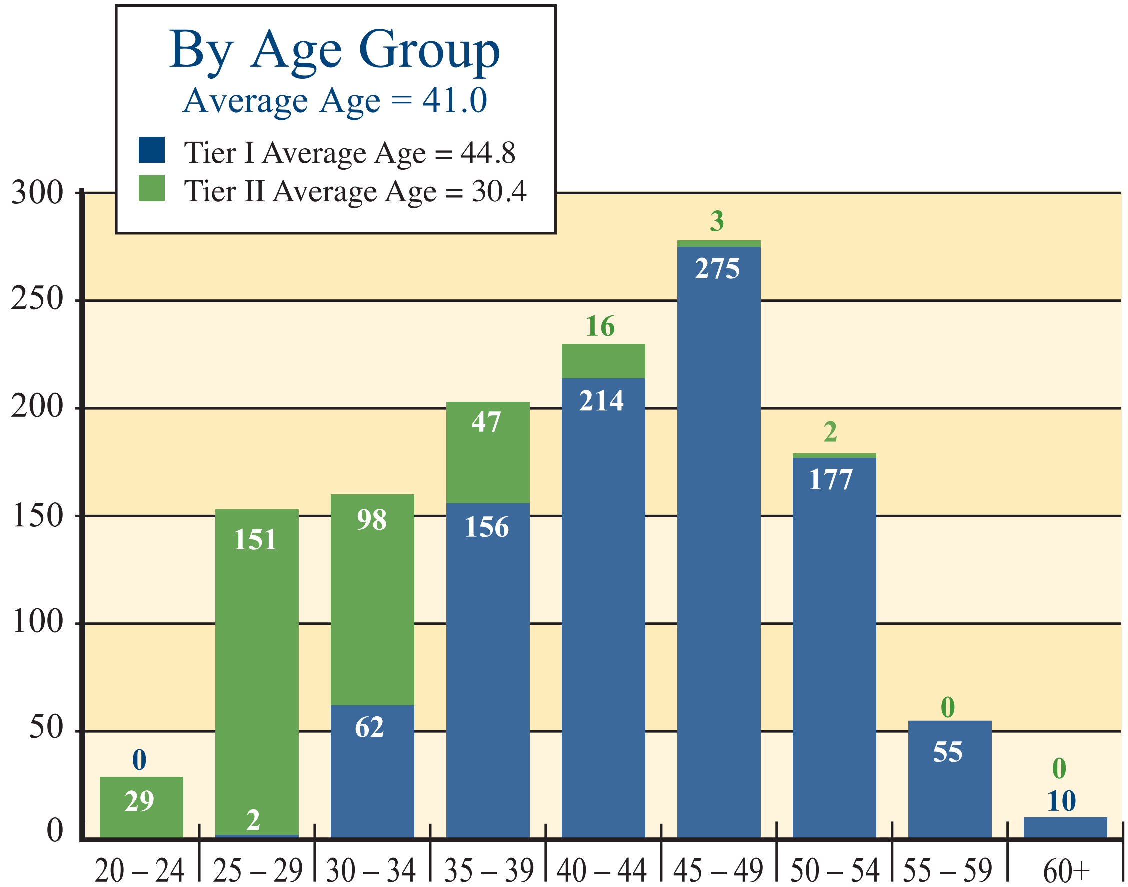
Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL) Entry Age	(b–a) Unfunded AAL (UAAL)	(a/b) Funded Ratio	(c) Active Member Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
4/30/11	715,764,084	940,609,092	224,845,008	76%	88,444,971	254%
4/30/12	734,375,923	972,127,874	237,751,951	76%	87,880,774	271%
4/30/13	749,617,334	964,302,215	214,684,881	78%	90,708,350	237%
4/30/14	773,338,034	1,006,243,143	232,905,109	77%	96,150,178	242%
4/30/15	803,672,621	1,037,256,917	233,584,296	77%	97,103,400	241%
4/30/16	821,895,127	1,076,824,221	254,929,094	76%	96,005,062	266%
4/30/17	853,286,442	1,118,948,065	265,661,623	76%	93,410,606	284%
4/30/18	886,676,375	1,161,788,502	275,112,127	76%	95,741,607	287%
4/30/19	913,895,177	1,211,216,028	297,320,851	75%	97,674,929	304%
4/30/20	928,957,803	1,247,261,603	318,303,800	74%	97,937,822	325%

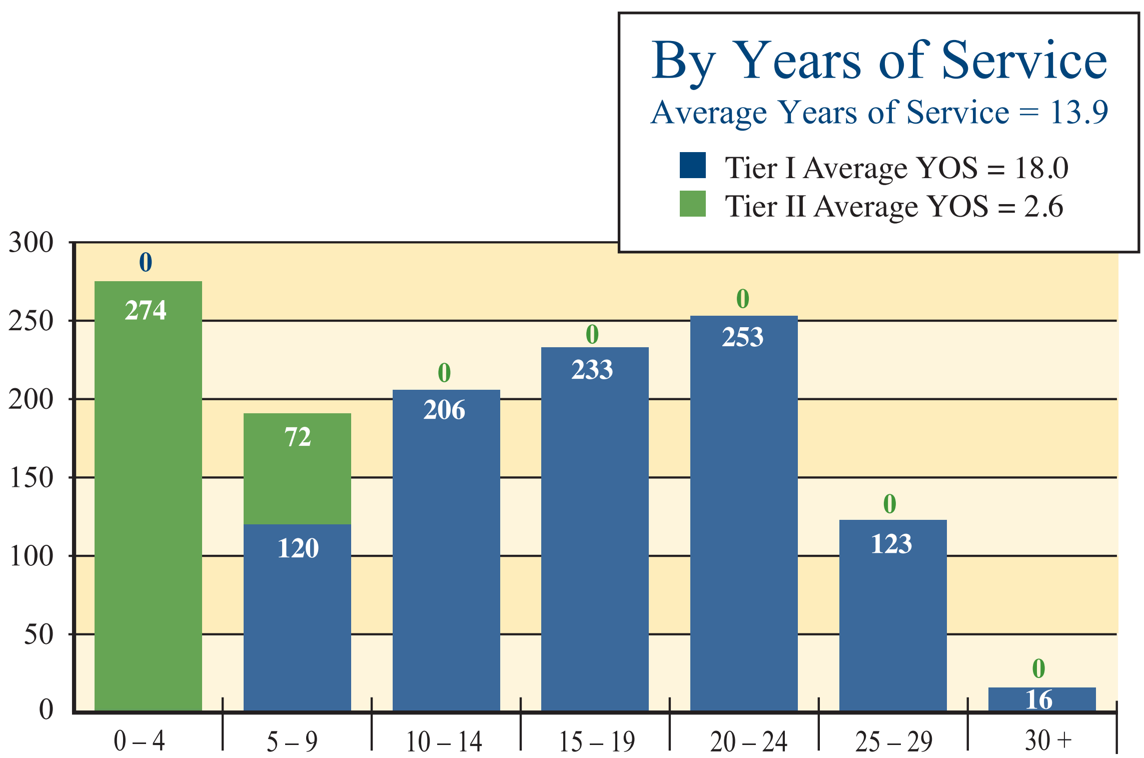
Schedule of Computed and Actual City Contributions*

Year Ended April 30	Actuarial Determined Contributions	Actual Contributions
2011	34,363,170	16,532,015
2012	31,756,810	16,476,608
2013	33,840,461	16,933,694
2014	35,507,348	20,528,569
2015	25,739,061	25,739,061
2016	27,263,263	27,263,263
2017	27,916,378	27,916,378
2018	28,965,207	28,965,207
2019	29,083,743	29,083,743
2020	30,157,170	30,157,170

Does not include $200 per eligible member supplemental contributions.

Active Membership





Summary Plan Description at April 30, 2020

Membership

All police officers who serve as law enforcement officers for compensation shall become members of the Police Retirement System of Kansas City, Missouri as a condition of their employment. Members do not include police commissioners, reserve officers, or civilian employees.

Tier I members include employees hired before August 28, 2013.

Tier II members include employees hired on or after August 28, 2013.

Any Tier I member who terminates their membership and later returns to membership on or after August 28, 2013 will become a Tier II member.

Creditable Service

Membership service includes all service rendered as a police officer for compensation. Creditable service includes current membership service and may also include purchases of prior service, military service, and other qualifying public service.

Service Interruptions
With certain exceptions, any time a member is on leave without compensation, the member will not receive creditable service in the Retirement System for such period of time. However, upon returning from unpaid leave to active service, the member may purchase creditable service for such time by paying the actuarial cost calculated at the time of the purchase. Under certain conditions, members who have been on a period of unpaid leave for military purposes may receive creditable service without being required to pay the actuarial cost. Creditable service does not include any time a member is suspended from service without pay.

Prior Service
A member who terminates membership with five years or more of creditable service and later returns to membership may purchase credit toward retirement for that prior service. The cost shall be determined using the member's portion of actuarial rates.

Prior Military Service
Members may elect to purchase creditable service in the Retirement System based upon any active duty time they served in the U.S. military prior to employment with the Kansas City, Missouri Police Department. A member may purchase up to two years of qualifying military service. The cost shall be determined at the time of purchase using current actuarial rates, and must be paid in full prior to retirement.

Other Public Employment
Under Section 105.691 RSMo. a member who has been employed in nonfederal public employment in the State of Missouri prior to becoming a member of the Police Retirement System may purchase service up to the actual number of years of public service in an eligible position. A member becomes eligible under this section after they have been a member of the Police Retirement System for five years. The cost shall be determined using actuarial rates.

Contributions

All members contribute a percentage of their base pay until they retire or have completed 32 years of creditable service. The member contribution rate is 11.55% of base pay. Member contributions are made through payroll deduction on a pre-tax basis and paid into the Retirement System by the Board of Police Commissioners each pay period.

As of May 1, 2019, the City of Kansas City, Missouri will contribute the actuarial required amount of $30.2 million based on a projected payroll of $99.3 million using a contribution rate of 30.4% of members' base pay. Future contribution rates will be based on actuarial requirements. The City of Kansas City, Missouri also contributes $200 per month for each person receiving the Supplemental Retirement Benefit.

Retirement Benefits

A Tier I member is eligible to retire after completing 25 or more years of creditable service.

A Tier II member is eligible to retire after completing 27 or more years of creditable service.

Members can continue to accrue creditable service until they reach 32 years. Members with 32 years of creditable service in the Retirement System may remain in active service with the Police Department until they reach a total of 35 years of service. Members must retire at age 65

Pension benefits begin in the month following the member's effective retirement date.

Age and Service Retirement

Upon retirement, a Tier I member with at least 25 years of creditable service or who is age 60 with at least 10 years of creditable service, or a Tier II member with at least 27 years of creditable service or who is age 60 with at least 15 years of creditable service shall receive an annual pension calculated as follows:

For a member retiring on or after August 28, 2013, the annual benefit is calculated by multiplying 2.5% of the member's Final Compensation by the number of years of total creditable service. The pension benefit may not exceed 80% of the member's Final Compensation.

For a member retiring on or after August 28, 2000 and before August 28, 2013, the annual benefit is calculated by multiplying 2.5% of the member's Final Compensation by the number of years of total creditable service. The pension benefit may not exceed 75% of the member's Final Compensation.

For a member retiring before August 28, 2000, the annual benefit was calculated by multiplying 2.0% of the member's Final Compensation by the number of years of total creditable service. The pension benefit may not exceed 60% of the member's Final Compensation.

Final Compensation of a Tier I member is generally the member's average annual compensation over the 24 months of service for which the member received the highest base salary.

Final Compensation of a Tier II member is generally the member's average annual compensation over the 36 months of service for which the member received the highest base salary.

A Tier II member who is married at the time of retirement may, with their spouse's consent, select an optional annuity in lieu of a normal pension. The optional annuity provides a monthly pension to the member for life and, upon the death of the member, provides an amount to the surviving spouse that is either equal to the amount the member was receiving or 75% of the amount the member was receiving at the time of death. The value of the optional annuity will be the actuarial equivalent of the member's normal pension amount at the date of retirement, including the value of survivorship rights for the surviving spouse. The optional annuity will be paid to the member's surviving spouse for life without regard to remarriage.

Minimum Pension Benefit
Any member who retired entitled to a pension benefit and who either has at least 25 years of creditable service or is retired as a result of an injury or illness, shall receive a minimum monthly benefit of not less than $600 in combined pension benefit and cost-of-living adjustments. A surviving spouse qualifies for the minimum monthly benefit if the officer had at least 25 years of creditable service, died in service, or was retired as a result of an injury or illness. The minimum monthly pension benefit is in addition to the Supplemental Retirement Benefit.

Disability Benefits
A member eligible for disability benefits must be in active service and have a permanent disability that prevents the member from performing the full and unrestricted duties of a police officer. A duty disability is the exclusive result of an accident occurring within the actual performance of duty or through an occupational disease arising out of and in the course of employment. A non-duty disability is the result of an injury or illness not exclusively caused by the actual performance of official duties or the member's own negligence.

A member eligible for a duty disability pension, as certified by the Medical Board of the Retirement System to the Board of Police Commissioners shall have no age or service requirement. Duty disability pensions are calculated as follows and shall be paid for as long as the permanent disability shall continue:

A member retiring on or after August 28, 2013 will receive a pension equal to 80% of the member's Final Compensation.

A member retiring on or after August 28, 2001 and before August 28, 2013 will receive a pension equal to 75% of the member's Final Compensation.

A member retiring before August 28, 2001 will receive a pension equal to 60% of the member's Final Compensation.

The pension may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law.

A member eligible for a non-duty disability pension, as certified by the Medical Board of the Retirement System to the Board of Police Commissioners, must have 10 or more years of creditable service and will receive a pension equal to 2.5% of the member's Final Compensation multiplied by the number of years of the member's creditable service for so long as the permanent disability shall continue.

Any disability retiree who is not age 60 may be required by the Retirement Board to undergo periodic medical examinations.

Partial Lump-sum Option Payment (PLOP)
A Partial Lump-sum Option Payment (PLOP) is available to members who have one or more years of creditable service beyond their eligible retirement date. A member with one or more years of creditable service beyond their eligible retirement date may elect a lump-sum equal to 12 times the initial monthly base pension they would have received without making the PLOP election.

A member with two or more years of creditable service beyond their eligible retirement date may elect a lump-sum equal to 24 times the initial monthly base pension they would have received without making the PLOP election.

A member with three or more years of creditable service beyond their eligible retirement date may elect a lump-sum equal to 36 times the initial monthly base pension they would have received without making the PLOP election.

When a member makes an election to receive a PLOP, the member's base pension calculated at the time of retirement will be actuarially reduced to reflect the PLOP payment. The reduction in a member's retirement benefit with a PLOP is dependent upon the member's age, marital status and the amount of the PLOP.

Survivor Benefits
Upon the death of a member in service or of a member after retirement, there shall be paid the following:

If a member dies while in service, the surviving spouse shall be paid a base annual pension equal to 40% of the Final Compensation of the member.

If a Tier I member dies after commencement of pension benefits, and after August 28, 1999, the member's surviving spouse shall be paid a pension and/or special consultant supplement in an amount equal to 80% of the pension being received by the member, including cost of living adjustments, at the time of the member's death.

If a Tier II member retired and did not elect an optional spousal annuity in lieu of a normal pension, the surviving spouse shall receive a pension payable for life equaling 50% of the member's benefit as of the member's retirement date, plus cost of living adjustments.

If a Tier II member retired and elected an optional spousal annuity, the surviving spouse shall receive (depending on the member's election) either the same amount as the member was receiving at the time of death or 75% of the amount the member was receiving at the time of death and will be paid such amount for the lifetime of such surviving spouse.

The benefit amounts calculated above are in addition to the Supplemental Retirement Benefit.

A member's child or children under the age of 18, at the time of the member's death, shall be paid $50.00 per month each. Each child who is a full-time student may continue to receive payments until they reach the age of 21. Any child who is physically or mentally incapacitated from earning wages shall be entitled to the same benefits as a child under the age of 18.

A funeral benefit of $1,000.00.

If there is no qualified surviving spouse, or if the surviving spouse dies, the pension to which the surviving spouse would be entitled shall be payable to the qualified child or children of the deceased member in equal shares.

If there is no surviving spouse or children qualified to receive a pension, the remainder of the accumulated contributions of the deceased member, and any prorated benefit for the month of the member's death shall be paid to a named beneficiary.

For entitlement to benefits, the surviving spouse of a member who retired on or after August 28, 1997 must have been married to the member at the time of the member's retirement. The surviving spouse of a member who retired prior to August 28, 1997 must have been married to the member for at least two years prior to the member's retirement.

A surviving spouse applying for a pension must furnish a copy of their marriage certificate and the death certificate of the deceased member. Children applying for a pension must furnish a copy of the death certificate and a copy of their birth certificate.

Any prorated benefit for the month of a surviving spouse's death shall be paid to a named beneficiary.

When the surviving spouse or children receive Workers' Compensation benefits on account of the death of a member in service, the amounts of any payments under this section may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law.

Cost of Living Adjustments
Members, including surviving spouses, may receive an annual cost of living adjustment in an amount not to exceed 3% of their respective base pension. Statutes require that the Retirement System remain actuarially sound and that the Retirement Board must act upon the advice of a qualified actuary when granting cost of living adjustments. A Tier I member is eligible for the cost of living increase if they were retired by December 31 of the prior year. With certain exceptions, a Tier II member becomes eligible for the cost of living increase in the year following the year in which they would have attained 32 years of creditable service. The annual cost of living increase is normally granted on the May 31 retirement check.

Supplemental Retirement Benefit
All retired Tier I members and eligible surviving spouses receive a supplemental retirement benefit, currently in the amount of $420.00 monthly, in addition to pension benefits. All retired Tier II members and eligible surviving spouses are eligible to receive a supplemental retirement benefit, currently in the amount of $200.00 monthly, in addition to pension benefits. No supplemental benefit will be paid in any month when only a partial monthly pension payment is made due to the death of a member or survivor.

Resignation or Termination
Upon resignation or termination of a member, with less than 15 years of creditable service, the member will be paid the amount of the member's contributions and this return of contributions shall be in lieu of any and all benefits to which the member might be entitled. The member will receive their accumulated contributions in one lump sum payment without interest.

With 15 or more years of creditable service, a member may elect to leave their contributions in the Retirement System and will become entitled to future lifetime benefits upon meeting the eligibility requirements. A Tier I member becomes entitled to a pension beginning at age 55. A Tier II member becomes entitled to a pension beginning at age 60.

Any member who receives a refund of their member contributions, thereby terminating their membership in the Retirement System, and who later returns to membership on or after August 28, 2013 due to re-employment will become a Tier II member.

Service Connected Death Benefit

Upon receipt of the proper proofs that the death of a member in service was the natural result of an event occurring within the performance of duty or of an occupational disease arising out of and in the course of the member's employment, there shall be paid to the member's eligible surviving spouse, or eligible child or children, the sum of $50,000. Eligible children are children under the age of 21 or over the age of 21 if mentally or physically incapacitated from wage earning. Amounts payable under this section shall not be subject to offset or reduction by amounts paid or payable under Workers' Compensation.

Retirement Board

The Retirement Board is composed of nine members, two are appointed by the Board of Police Commissioners, two are appointed by the City Council and five are elected by the membership of the Retirement Systems. The elected members must include one member of the Civilian Employees' Retirement System, one member retired from active service in the Police Retirement System, and one active member of the Police Retirement System who has not attained the rank of Sergeant or higher. Elections are held annually and board members are elected to serve for three-year terms.

The above summary is not intended to serve as a legal document or substitute for the law. In all circumstances the language of the actual text of the law and the policies adopted by the Retirement System Board will take precedence. Copies of sections 86.900 to 86.1280 of the Revised Statutes of Missouri, which govern the Police Retirement System of Kansas City, Missouri, are available on our web site at www.kcpers.org or upon request at the KCPERS Office.

Statistical Section

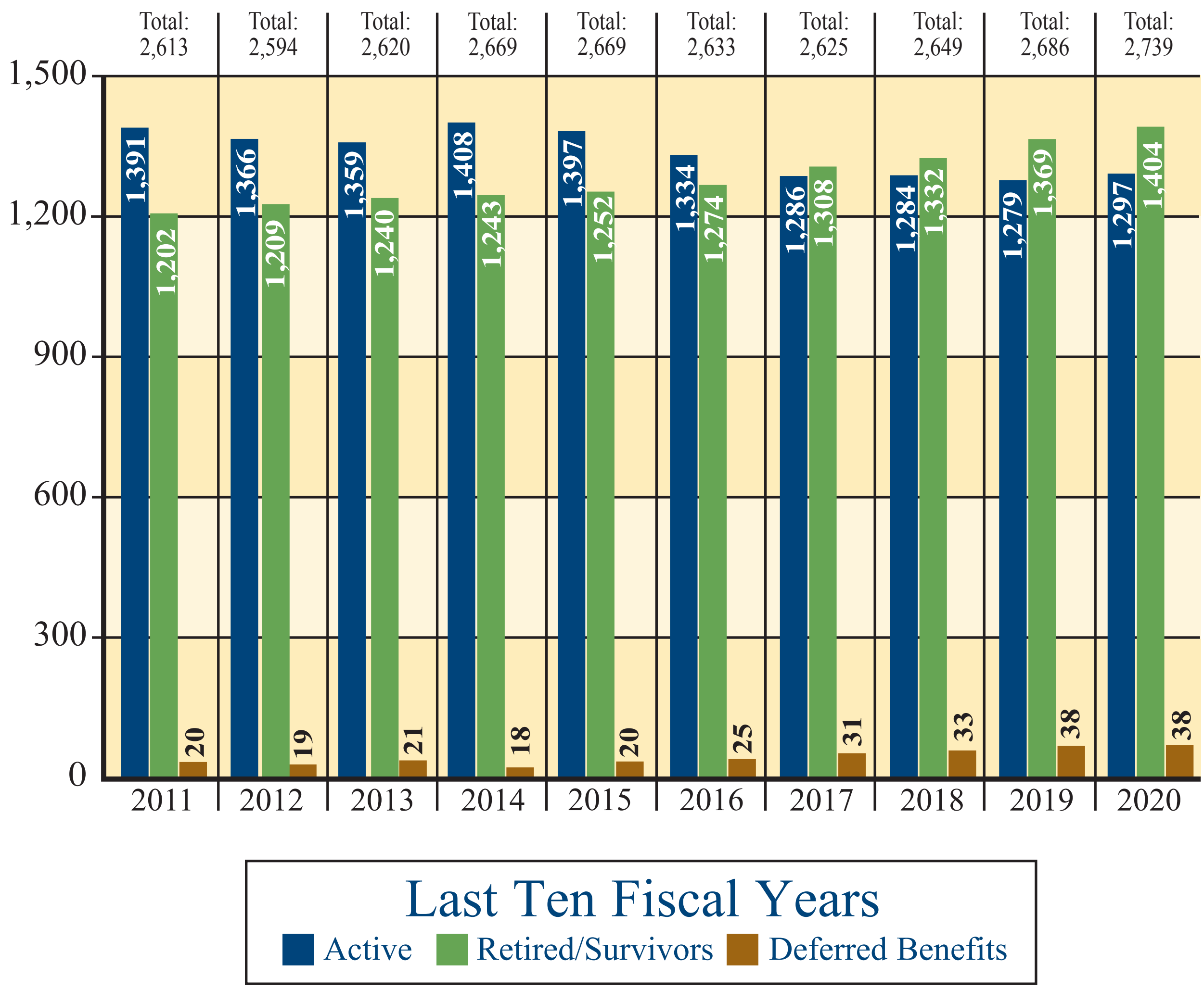
Statistical Summary

The Police Retirement System of Kansas City, Missouri has implemented the provisions of GASB Statement No. 44, Economic Condition Reporting: The Statistical Section. GASB Statement No. 44 established reporting requirements related to the supplementary information presented in this section.

Each of the schedules in the statistical section contain ten years of historical data to provide more comprehensive comparisons and track the progress of changes to member demographics and plan benefits.

All of the member demographic and benefit data used in the statistical section was obtained from internal sources. Participant data is separated into active, retired/survivor, and deferred categories where appropriate. Retirement benefit data is separated into service retirement, duty disability retirement, and non-duty disability retirement categories where appropriate.

Membership in Retirement Plan



Schedule of Changes in Plan Net Position

Last Ten Fiscal Years

Fiscal Year	2011	2012	2013	2014	2015
Additions:					
Member Contributions	$9,223,994	$8,894,208	$9,343,416	$10,198,831	$10,874,921
City Contributions	16,532,015	16,476,608	16,933,694	22,241,769	28,933,261
Net Investment Income	82,002,086	(3,584,270)	55,542,099	66,842,964	46,951,094
Total Additions to Plan Net Position	107,758,095	21,786,546	81,819,209	99,283,564	86,759,276
Deductions:					
Benefits	46,377,135	48,578,196	50,979,009	52,627,501	55,006,617
Refunds	557,214	549,026	816,459	361,910	399,052
Administrative	631,281	552,751	576,470	535,628	549,742
Total Deductions from Plan Net Position	47,565,630	49,679,973	52,371,938	53,525,039	55,955,411
Change in Net Position	$60,192,465	$(27,893,427)	$29,447,271	$45,758,525	$30,803,865

Fiscal Year	2016	2017	2018	2019	2020
Additions:					
Member Contributions	$10,748,236	$11,751,066	$11,390,571	$11,412,617	$11,386,606
City Contributions	30,272,063	30,979,978	32,103,207	32,280,943	33,432,570
Net Investment Income	(2,959,229)	72,631,413	74,102,652	34,916,020	9,535,314
Total Additions to Plan Net Position	38,061,070	115,362,457	117,596,430	78,609,580	54,354,490
Deductions:					
Benefits	57,970,768	59,554,625	63,777,210	65,504,670	69,341,685
Refunds	617,993	609,139	954,437	573,339	1,002,978
Administrative	561,591	642,688	714,956	802,705	897,253
Total Deductions from Plan Net Position	59,150,352	60,806,452	65,446,603	66,880,714	71,241,916
Change in Net Position	$(21,089,282)	$54,556,005	$52,149,827	$11,728,866	$(16,887,426)

Schedule of Deductions from Plan Net Position for Benefits and Refunds by Type*

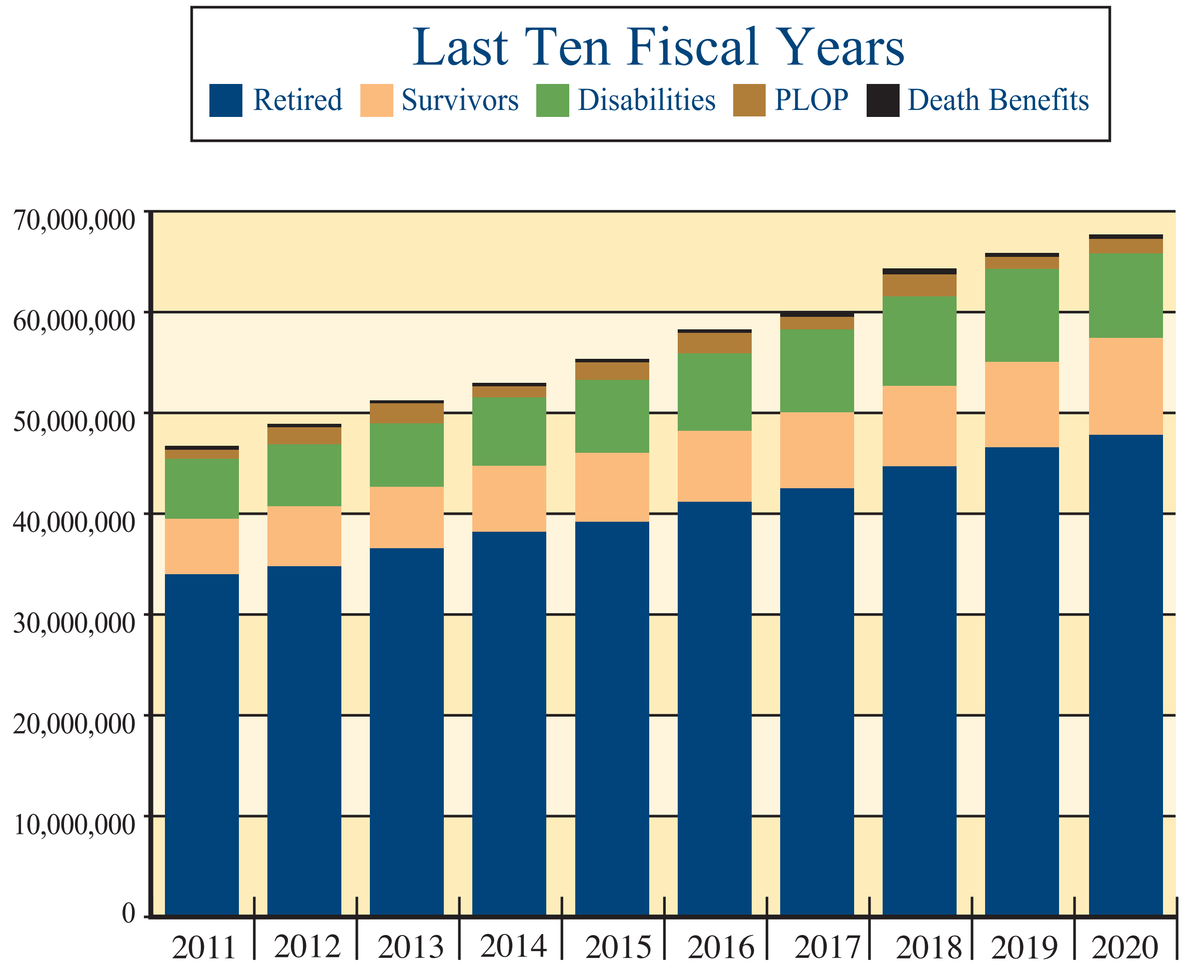
Last Ten Fiscal Years

Fiscal Year	2011	2012	2013	2014	2015
Type of Benefit:					
Retired	$33,964,741	$34,794,455	$36,539,274	$38,206,133	$39,215,578
Survivors	5,513,933	5,936,074	6,106,116	6,513,492	6,802,463
Disabilities	5,983,509	6,124,737	6,345,482	6,829,946	7,272,582
PLOP	889,952	1,697,930	1,967,137	1,052,930	1,690,994
Death Benefits	25,000	25,000	21,000	25,000	25,000
Total Benefits	$46,377,135	$48,578,196	$50,979,009	$52,627,501	$55,006,617
Type of Refund:					
Separation	$557,214	$441,701	$682,890	$361,910	$399,052
Death	–	107,325	133,569	–	–
Total Refunds	$557,214	$549,026	$816,459	$361,910	$399,052

Fiscal Year	2016	2017	2018	2019	2020
Type of Benefit:					
Retired	$41,173,594	$42,513,617	$44,709,760	$46,587,309	$48,898,010
Survivors	7,049,068	7,526,323	7,978,086	8,458,799	8,827,946
Disabilities	7,658,207	8,242,415	8,870,241	9,258,915	9,547,006
PLOP	2,064,899	1,240,270	2,186,123	1,173,647	2,041,723
Death Benefits	25,000	32,000	33,000	26,000	27,000
Total Benefits	$57,970,768	$59,554,625	$63,777,210	$65,504,670	$69,341,685
Type of Refund:					
Separation	$617,993	$609,139	$830,739	$573,339	$700,403
Death	–	–	123,699	–	302,575
Total Refunds	$617,993	$609,139	$954,437	$573,339	$1,002,978

*Benefit amounts include $420 supplemental benefit for eligible members
*Benefit amounts include cost of living adjustments

Schedule of Deductions from Plan Net Position for Benefits and Refunds by Type* (Continued)



*Benefit amounts include $420 supplemental benefit for eligible members

*Benefit amounts include cost of living adjustments

Schedule of Retired Members by Type of Benefit

April 30, 2020

Amount of Monthly Benefit*	Total Monthly Benefits*	Total Number of Recipients	Type of Benefit: Retired	Surviving Spouses	Surviving Children	Duty Disability	Non-Duty Disability
$1 to 500	350	7	0	0	7	0	0
501 to 1,000	3,047	4	1	2	1	0	0
1,001 to 1,500	28,239	23	6	13	1	1	2
1,501 to 2,000	73,780	42	5	28	0	5	4
2,001 to 2,500	173,850	77	14	50	2	7	4
2,501 to 3,000	363,518	131	41	67	0	8	15
3,001 to 3,500	393,799	121	63	39	1	10	8
3,501 to 4,000	875,441	236	164	39	0	21	12
4,001 to 4,500	1,122,454	263	229	11	0	17	6
4,501 to 5,000	826,091	174	153	5	0	12	4
5,001 to 5,500	890,945	171	115	3	0	51	2
5,501 to 6,000	351,429	61	51	1	0	9	0
6,001 to 6,500	277,032	44	38	1	0	5	0
6,501 to 7,000	121,164	18	18	0	0	0	0
7,001 to 7,500	86,192	12	12	0	0	0	0
7,501 to 8,000	77,477	10	10	0	0	0	0
Over 8,000	94,271	10	10	0	0	0	0
Totals	**$5,759,079**	**1,404**	**930**	**259**	**12**	**146**	**57**

*Benefit amounts include $420 supplemental benefit for eligible members
*Benefit amounts include cost of living adjustments

Schedule of Average Monthly Base Benefit Amounts*

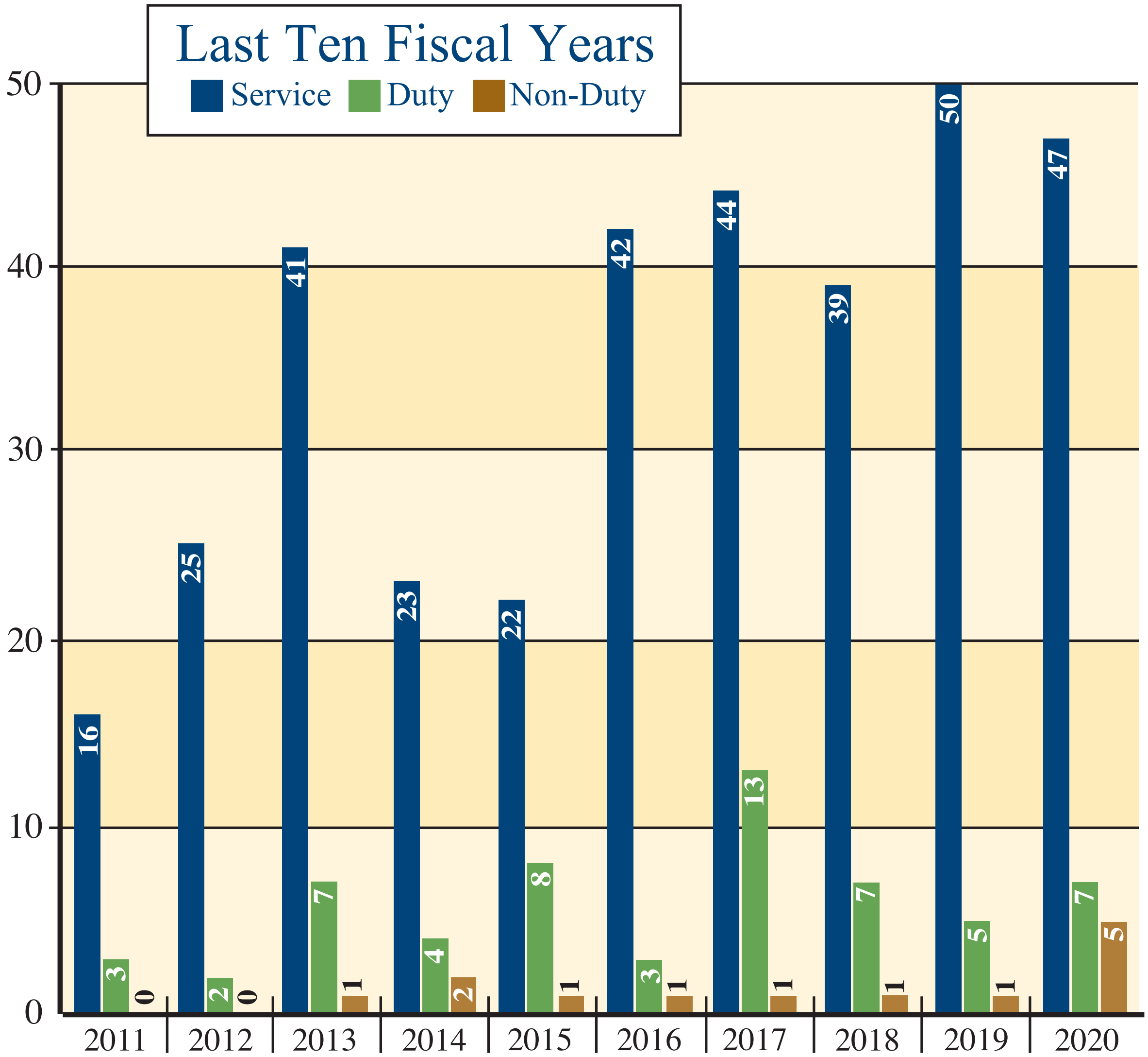
Ten Years Ended April 30, 2020

Years Credited Service

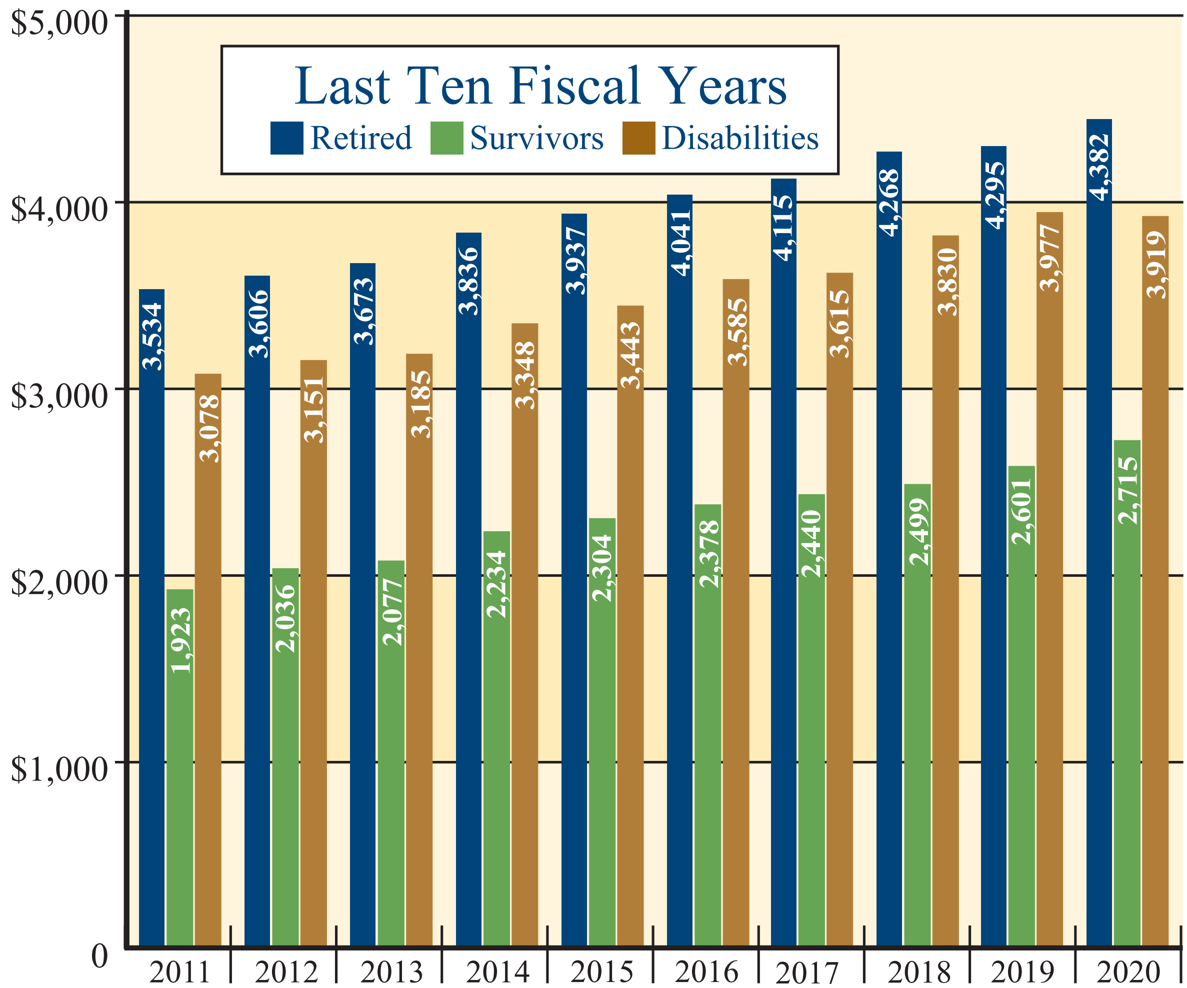
Members Retiring During	<25	25–26	26–27	27–28	28–29	29–30	30+	All Members
Fiscal Year Ending 04/30/11								
Average monthly benefit	$3,553	3,469	4,271	3,996	4,340	4,190		3,912
Average final compensation	$4,978	5,428	6,829	5,950	6,847	6,502		5,985
Number of retirees	4	4	3	2	2	4		19
Fiscal Year Ending 04/30/12								
Average monthly benefit	$4,087	3,711	3,668	3,341	4,114	4,796		4,021
Average final compensation	$5,449	5,893	5,697	5,601	6,735	7,437		6,308
Number of retirees	2	8	4	2	5	6		27
Fiscal Year Ending 04/30/13								
Average monthly benefit	$3,076	3,659	4,004	3,977	3,536	4,463		3,693
Average final compensation	$5,242	5,809	6,038	6,266	5,801	7,101		5,929
Number of retirees	12	14	6	5	5	7		49
Fiscal Year Ending 04/30/14								
Average monthly benefit	$3,746	4,084	3,845		4,032	3,449	4,609	4,079
Average final compensation	$5,747	6,469	5,931		5,692	5,656	7,037	6,298
Number of retirees	8	7	4		1	1	8	29
Fiscal Year Ending 04/30/15								
Average monthly benefit	$4,477	3,709	4,079	3,938	3,412	4,378	4,647	4,096
Average final compensation	$5,760	5,892	6,316	6,626	6,063	5,901	7,222	6,120
Number of retirees	9	6	5	4	3	2	2	31
Fiscal Year Ending 04/30/16								
Average monthly benefit	$3,315	4,481	3,815	4,209	4,109	4,776	4,780	4,288
Average final compensation	$5,545	7,026	6,211	6,856	6,301	6,679	7,016	6,650
Number of retirees	6	12	3	7	5	3	10	46
Fiscal Year Ending 04/30/17								
Average monthly benefit	$3,975	4,105	4,418	4,050	3,987	5,852	5,424	4,435
Average final compensation	$5,557	6,349	6,717	5,900	6,272	7,980	7,274	6,414
Number of retirees	16	14	6	1	6	3	11	57
Fiscal Year Ending 04/30/18								
Average monthly benefit	4,093	3,984	4,567	4,321	4,259	4,529	5,927	4,654
Average final compensation	5,807	6,341	7,295	6,585	6,403	7,144	8,299	6,865
Number of retirees	10	10	1	7	4	2	13	47
Fiscal Year Ending 04/30/19								
Average monthly benefit	3,637	4,142	3,695	4,578	4,560	4,602	5,630	4,500
Average final compensation	6,269	6,576	6,086	6,423	6,795	6,242	7,485	6,718
Number of retirees	11	18	1	5	4	3	14	56
Fiscal Year Ending 04/30/20								
Average monthly benefit	3,815	4,252	5,338	4,442	4,761	5,559	5,447	4,620
Average final compensation	6,437	6,646	7,455	6,540	7,210	8,301	7,630	7,029
Number of retirees	13	19	2	1	6	4	14	59

*Benefit amounts do not include supplemental benefits or cost of living adjustments.
*Benefit amounts are after reductions for optional benefits.

New Pensions Started



Average Monthly Benefit*



* Benefit amounts include $420 supplemental benefit for eligible members
* Benefit amounts include cost of living adjustments

Cost of Living Increases

Ten Year History

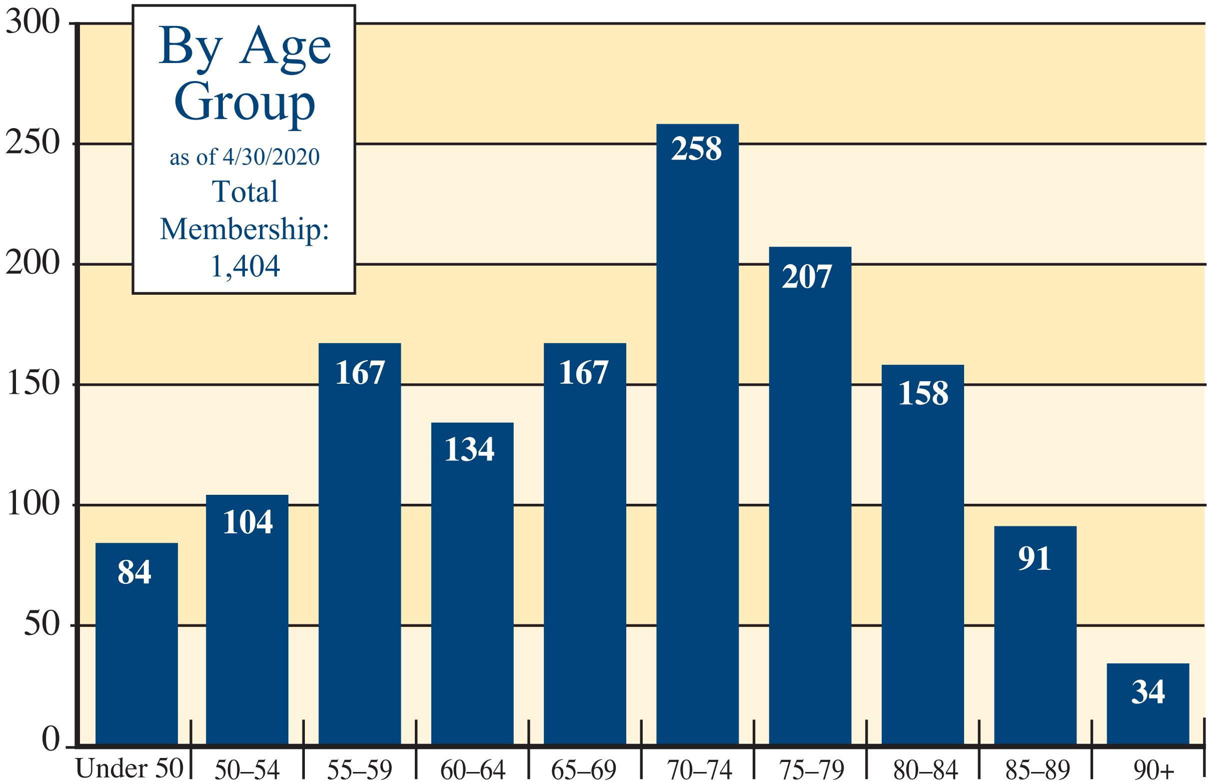
Fiscal Year	% Increase to Monthly Base Pension
2011	0.00%
2012	3.00%
2013	3.00%
2014	3.00%
2015	2.50%
2016	2.50%
2017	2.00%
2018	2.50%
2019	1.00%
2020	0.00%

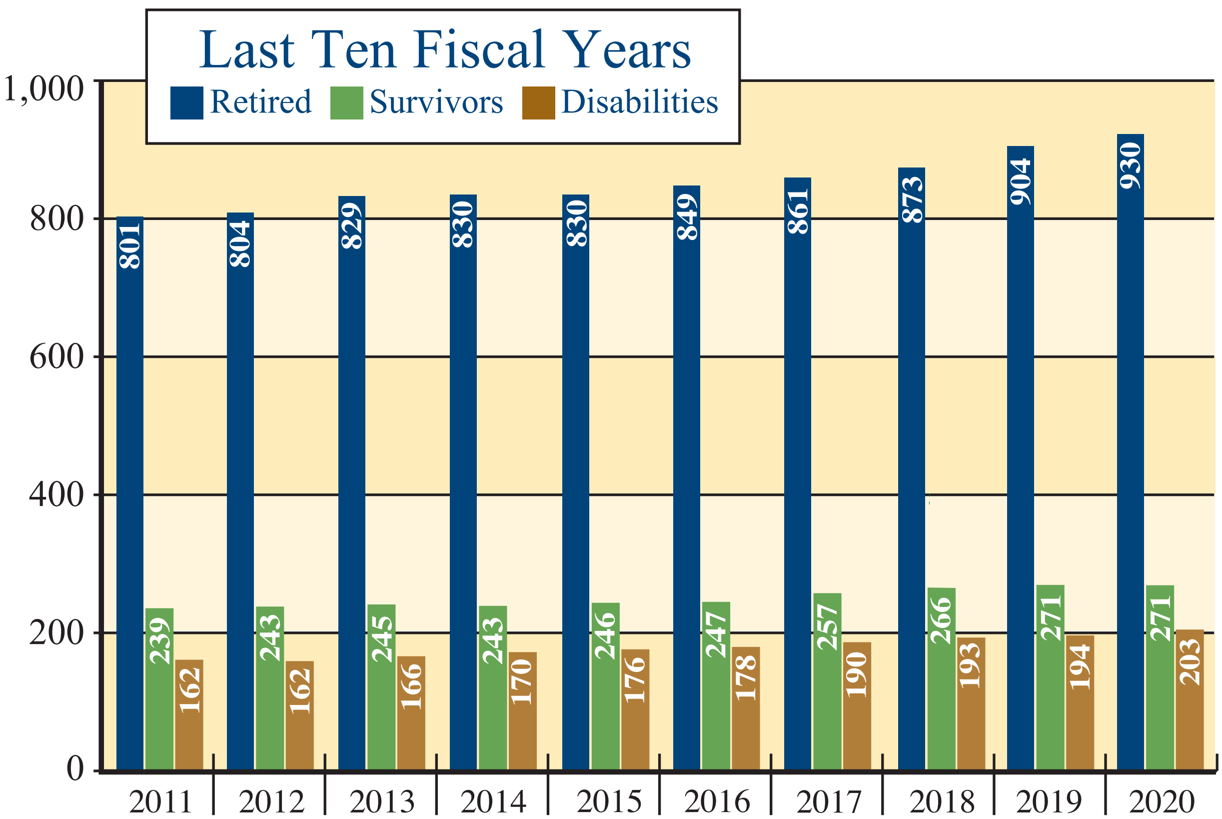
Supplemental Retirement Benefit

History of Increases

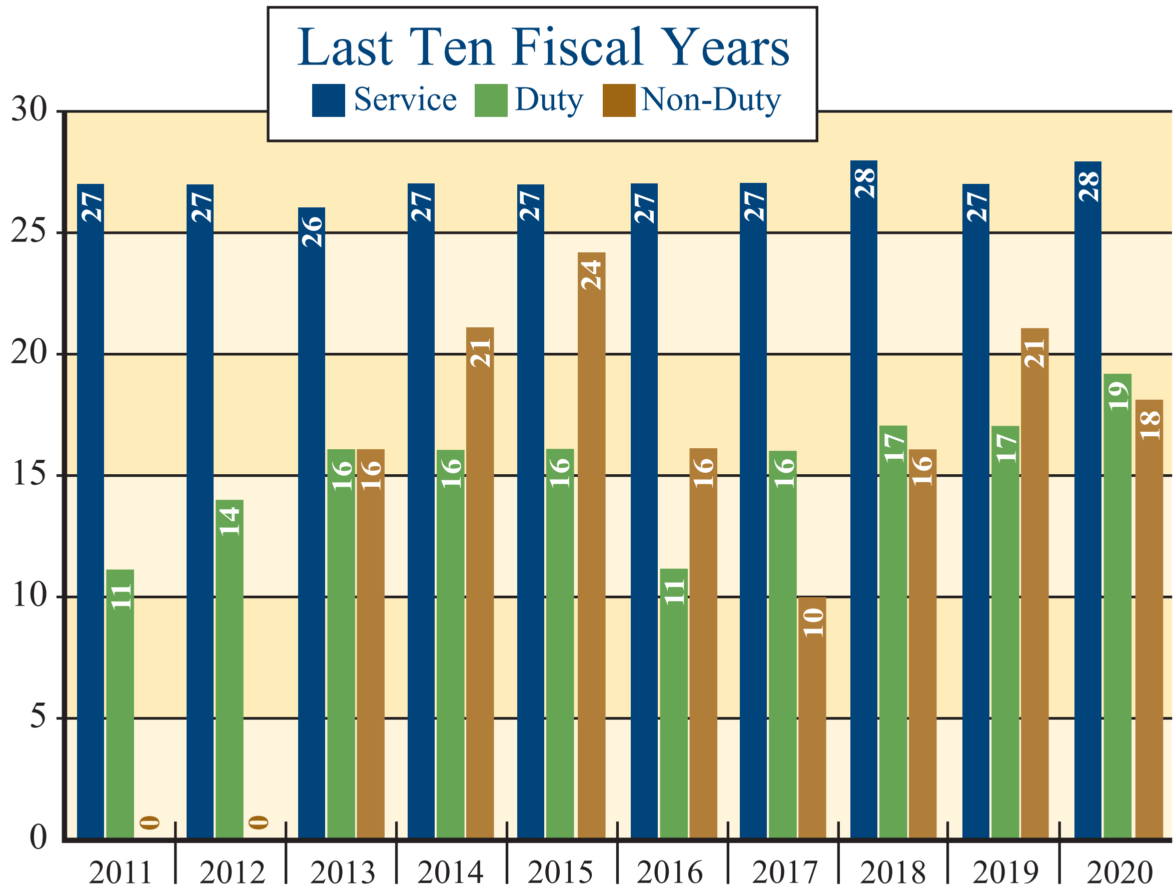
Fiscal Year	Monthly Benefit Amount	Annual Benefit Amount
1992	$50.00	$600.00
1993	70.00	840.00
1994	80.00	960.00
1995	90.00	1,080.00
1996	140.00	1,680.00
1997	180.00	2,160.00
1998	230.00	2,760.00
1999	270.00	3,240.00
2000	380.00	4,560.00
2001	420.00	5,040.00

Membership Receiving Benefits

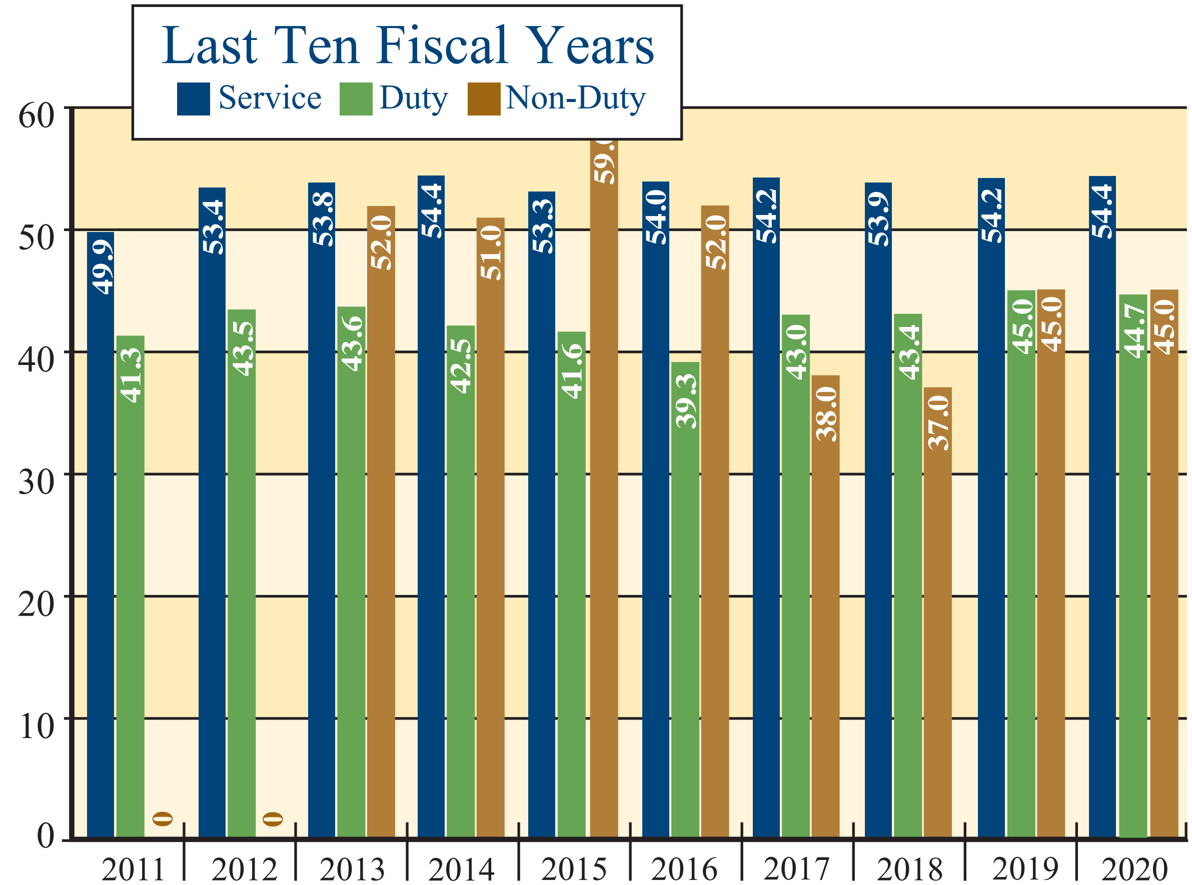




Average Years of Service at Retirement



Average Age at Retirement



Average Age of Retirees as of April 30, 2020

Service (930 retired members ranging in age from 45 to 96)	**68.8**
Duty Disability (146 retired members ranging in age from 35 to 88)	**59.0**
Non-Duty Disability (57 retired members ranging in age from 39 to 82)	**63.2**

www.kcpers.org

KCPERS
Kansas City Police Employees' Retirement Systems
9701 Marion Park Drive, B
Kansas City, MO 64137