

70TH ANNUAL REPORT

# Police Retirement System of Kansas City, Missouri

A Component Unit of the City of Kansas City, Missouri



Comprehensive Annual Financial Report



May 1, 2015 to April 30, 2016

# Police Retirement System of Kansas City, Missouri

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Comprehensive Annual Financial Report May 1, 2015 to April 30, 2016

70th 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

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# Introductory Section

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#### **Retirement Board**

Police Retirement System of Kansas City, Missouri



Richard C. Smith, Chairman Major, Kansas City, Missouri Police Department



Bailus M. Tate, Vice-Chair & Treasurer Appointed Member



Walter E. Bixby III Appointed Member



Gary Jenkins (Ret.) Sergeant Kansas City, Missouri Police Department



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



Leslie Lewis
Appointed Member



Barbara L. Stuart (Ret.) Administrative Supervisor, Kansas City, Missouri Police Department



Matthew J. Tomasic (Ret.) Police Officer Kansas City, Missouri Police Department



Patrick J. Trysla
Appointed Member

#### **KCPERS Staff**



**Sharon Blancett** Assistant Pension Systems Manager



Lori Freeze Administrative Assistant



Jason Hoy Accountant



James Pyle
Pension Systems Manager
& Board Secretary



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

RETIREMENT BOARD MEMBERS

MAJOR RICHARD SMITH • CHAIR

BAILUS TATE • TREASURER

WALTER BIXBY III

(RET.) SERGEANT GARY JENKINS

(RET.) SERGEANT ROBERT JONES

LESLIE LEWIS

BARBARA STUART

(RET.) POLICE OFFICER MATT TOMASIC

PATRICK TRYSLA

October 14, 2016

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 2016 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 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 basic 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 basic financial statements comply with U.S. generally accepted accounting principles. Financial information presented throughout the CAFR is consistent with information displayed in the basic financial statements

The Retirement Systems' external auditor, BKD, LLP conducted an independent audit of the basic financial statements in accordance with U.S. generally accepted auditing standards. This audit is described in the Independent Auditors' Report on pages 18 and 19 of the Financial Section. Management has provided the external auditors with full and unrestricted access to staff to discuss their audit and related findings, to assure independent validation of the integrity of the Retirement Systems' financial reporting and the adequacy of internal controls. The Independent Auditors' Report also added the provisions of the Governmental Accounting Standards Board (GASB) Statement No. 72.

BKD identified deficiencies in internal controls that are not considered a material weakness. There are deficiencies related to the Contributions and Cash Receipts Cycle and Purchasing and Cash Disbursements Cycle due to a lack of segregation of duties that are the result of the small number of staff. BKD noted that compensating controls are in place to provide reasonable assurance that financial statements are free of any material misstatements. The Retirement Board has periodically reviewed these deficiencies and determined that the cost of additional staff, to improve the internal control process, outweighs the benefits of greater segregation of duties.

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, 2016. The funded ratio of the valuation assets to liabilities decreased by 1% from the prior year to 76%. More information on the actuarial valuation is available in the Actuarial Section of this report.

The investment portfolio produced a total return of -0.34% (net of fees) against the policy benchmark return of 1.3%, which means our investment managers and asset allocation had a 1.6% loss versus the market indexes. The investment performance was less than our assumed rate of return, for actuarial purposes, of 7.5%.

More information regarding the investment performance and the professionals who provide services to the Police Retirement System can be found in the Investment Section of this report.

#### Fiscal Year 2016 Projects

Due to the very challenging investment environment during the fiscal year, the Retirement Board Investment Committee increased the number of meetings with investment managers. The committee met with 5 of our 14 outside investment managers to review their performance and risk compared to the assigned index benchmark and to better understand how the manager was contributing towards our assumed rate of return for the investment portfolio. With the assistance of RVK, Inc., the Retirement Board also completed an operations review of our custodial banking relationship with The Northern Trust Company. The operations review included a close look at our fee structure, benefit payment services, and securities lending program. The review led to a restructuring and reduction of our fees with Northern Trust.

Retirement System staff continued working with BKD to create and document a business continuity plan. Part of that process included working with the Police Department to identify and implement a document scanning program. Staff is now working to create electronic backup copies of our active and retired member files.

Staff spent the first two months of the fiscal year working almost exclusively with active members who were considering the cash incentive offered by the Police Department to those members who separated or retired from the department. During the fiscal year we assisted 46 plan members through the retirement process, the bulk of those retirements occurred as a result of the incentive offer. Over 100 members of the Retirement Systems attended two information sessions set up to answer questions about the incentive offer. The majority of those members also requested benefit estimates and additional information to help them evaluate the incentive offer.

#### Legislative Changes

House Bill 515 became law on August 28, 2015. The legislation modified provisions related to Internal Revenue Code compliance and non-spouse rollovers, and creditable service for a leave of absence due to military service.

#### 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, 2015. This was the fourteenth 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 2016 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, 2015** 

Executive Director/CEO



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

RETIREMENT BOARD MEMBERS

MAJOR RICHARD SMITH • CHAIR

BAILUS TATE • TREASURER

WALTER BIXBY III

(RET.) SERGEANT GARY JENKINS

(RET.) SERGEANT ROBERT JONES

LESLIE LEWIS

BARBARA STUART

(RET.) POLICE OFFICER MATT TOMASIC

PATRICK TRYSLA

October 10, 2016

#### 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, 2016. This annual report to our members provides financial information about your retirement system and an update on changes that occurred during the past year.

Your Retirement System had a very busy year processing 46 new retirements. Many of the retirements came early in the fiscal year when the Police Department offered a cash incentive for members to retire or leave the department. The Retirement Board continued to work with our investment consultants to monitor the performance and investment processes of our 14 investment managers. Portfolio managers from Artisan Partners, Wellington Management, Fidelity, Prudential, and Morgan Stanley attended Investment Committee meetings to review their investment processes and to explain how they add value to our fund.

For the first time in several years we did not submit any legislation to the Missouri General Assembly to make changes to the statutes that govern the benefits of the Retirement System. The City continued to contribute the full amount of required contributions to the Retirement System for the fiscal year ending April 30, 2016.

This year we welcomed Walter (Web) Bixby III to the Retirement Board. Web was appointed to the Retirement Board by the City Council and is the Executive Vice President and Vice Chairman of the Board of Kansas City Life Insurance Company; and the President of Old American Insurance Company. He brings a wealth of business experience from a field that has many of the same challenges as our retirement system.

On a sad note, we recently said good bye to our longtime legal counsel Gerald Gorman, who passed away in September. Gerald served the Retirement Board for 37 years with grace and dignity and we will miss his wise counsel, intellect, knowledge of our retirement systems and statutes, friendship, and well timed humor.

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

Sincerely,

Pular Cf-th

Richard Smith

Retirement Board Chairman

#### **Outside Professional Services**

#### **ACTUARY**

Cavanaugh Macdonald

Consulting, LLC

Patrice Beckham, Brent Banister

Bellevue, Nebraska

#### **AUDITORS**

BKD, LLP

Jacob Holman

Kansas City, Missouri

### INVESTMENT MANAGEMENT CONSULTANTS

RVK, Inc.

Ryan Sullivan, Marcia Beard

Portland, Oregon

#### **Mariner Institutional Consulting**

Robert Woodard

Lawrence, Kansas

#### LEGAL COUNSEL

Slagle, Bernard & Gorman

Gerald W. Gorman

Kansas City, Missouri

#### **MASTER TRUSTEE/CUSTODIAN**

The Northern Trust Company

Patricia Somerville-Koulouris

Chicago, Illinois

#### **INVESTMENT ADVISORS**

**FCI Advisors** 

Peter Greig, Gary Cloud Kansas City, Missouri

LSV Asset Management

Keith Bruch

Chicago, Illinois

**PGIM** 

Darin Bright, Kevin Smith

Madison, New Jersey

Abbott Capital Management, LLC

Charles van Horne

New York, New York

JPMorgan Investment

Management, Inc.

Lawrence Unrein, Katherine Rosa

New York, New York

**Northern Trust Global Investments** 

Chelsea Smith

Chicago, Illinois

Shenkman Capital Management, Inc.

Nicole Lupo

New York, New York

**Artisan Global Partners** 

Chip Ridley

Milwaukee, Wisconsin

**Wellington Management Company** 

Ken Solano, Jr.

Boston, Massachusetts

**Grosvenor Capital Management** 

Mark Roman

Chicago, Illinois

**GMO** 

Peter Nolan

Boston, Massachusetts

**Brandywine Global Investment Management** 

Jon Cordo

Philadelphia, Pennsylvania

**Morgan Stanley** 

Scott Brown

New York, New York

**Fidelity Investments** 

Ed Schollmeyer

Smithfield, Rhode Island

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#### **Independent Auditor's Report**

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

We have audited the accompanying basic financial statements of the Police Retirement System of Kansas City, Missouri (the Plan), a component unit of the City of Kansas City, Missouri, which comprise the statement of fiduciary net position as of April 30, 2016, and the statement of changes in fiduciary net position for the year then ended, and the related notes to the basic financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### **Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our 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 entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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



Retirement Board Police Retirement System of Kansas City, Missouri Page 2

#### **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, 2016, 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.

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

#### **Supplementary Information**

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plan's basic financial statements. The accompanying supplemental schedules listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic 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 basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole. We previously expressed unmodified opinions on the 2011 through 2015 financial statements.

Kansas City, Missouri September 19, 2016

BKD, LLP

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the Police Retirement System of Kansas City, Missouri (Police Retirement System or the Plan) financial statements provides an overview of its financial activities during the year ended April 30, 2016. 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, 2016, and the Statement of Changes in Fiduciary Net Position for the year ended April 30, 2016. 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 includes a description of the Plan, a summary of significant accounting policies, the method used to value investments, a summary of investments and actuarial methods and assumptions.
- Schedules related to the changes in net pension liability and related ratios, City of Kansas City, Missouri contributions and investment returns are included in the section entitled Required Supplementary Information.
- Other supplementary schedules consist of detailed information supporting administrative and investment expenses and a historical summary of additions and deductions.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **Fiduciary Net Position**

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

A	april 30, 2016	April 30, 2015	Amount Change
Cash	\$20,727	\$52,982	\$(32,255)
Receivables	6,968,634	4,120,910	2,847,724
Investments	770,246,435	792,269,242	(22,022,807)
Securities lending collateral	53,048,306	55,530,596	(2,482,290)
Office equipment	_	2,016	(2,016)
Other assets	2,342	_	2,342
Total assets	830,286,444	851,975,746	\$(21,689,302)
Accounts and refunds payable	364,969	514,742	(149,773)
Due to broker for purchases of investments	s 2,069,778	526,219	1,543,559
Pending foreign exchange sales	2,012,355	1,523,871	488,484
Securities lending collateral	53,048,306	55,530,596	(2,482,290)
Total liabilities	57,495,408	58,095,428	(600,020)
<b>Net Position Restricted for Pensions</b>	\$772,791,036	\$793,880,318	<u>\$(21,089,282)</u>

#### **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 \$772,791,036 as of April 30, 2016 from \$793,880,318 as of April 30, 2015. Plan income is generated through the investment of contributions in stocks, bonds and alternative assets.

**Assets** – Total assets of the Police Retirement System were \$830.3 million as of April 30, 2016 and included cash, receivables, investments and securities lending collateral. Total assets decreased by \$21.7 million or (2.6%) from FY 2015. Investable assets decreased during the year by \$22.0 million while securities lending collateral decreased by \$2.5 million. The decline in securities lending collateral was due to the market for securities available for lending.

**Liabilities** – Total liabilities of the Police Retirement System were \$57.5 million as of April 30, 2016 and included payables for money manager fees and refunds, amounts due to brokers for purchases of investments, and securities lending collateral. Total liabilities decreased by \$0.6 million during the year mainly due to the \$2.5 million decrease in the offsetting liability for securities lending activity.

**Net Position** – Police Retirement System assets exceeded liabilities at April 30, 2016 by \$772.8 million. This was a decrease of \$21.1 million or (2.7%) from the prior year.

#### **Changes in Fiduciary Net Position**

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

	April 30, 2016	April 30, 2015	Amount Change
Member contributions	\$10,748,236	\$10,874,921	\$(126,685)
City contributions	30,272,063	28,933,261	1,338,802
Net investment income (loss)	(2,959,229)	46,951,094	(49,910,323)
Total additions	38,061,070	86,759,276	(48,698,206)
Daniel Chamail Landers	57.070.760	55.006.617	2.064.151
Benefits paid to members	57,970,768	55,006,617	2,964,151
Refunds of contributions	617,993	399,052	218,941
Administrative expenses	561,591	549,742	11,849
<b>Total deductions</b>	59,150,352	55,955,411	3,194,941
Net Increase (Decrease) in Net Position	(21,089,282)	30,803,865	(51,893,147)
Net Position Restricted for Pensions,			
Beginning of Year	793,880,318	763,076,453	30,803,865
Net Position Restricted for Pensions,			
End of Year	\$772,791,036	\$793,880,318	\$(21,089,282)

#### **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, 2016. This statement reflects contributions made by members and the City of Kansas City. 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 salary to the Plan while City contributions totaled \$27.3 million or 27.33% of projected covered salary. Member contributions decreased during the year due to decreased total 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 \$3.0 million. Net investment income decreased due to investment market performance. The portfolio's investment rate of return, net of investment expenses, was -0.41% with investment income of \$1.6 million and investment expenses of \$4.7 million. Investments in bonds, real estate and private equity posted gains and investments in global stocks, absolute return and real return assets posted losses for the year.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI MANAGEMENT'S DISCUSSION AND ANALYSIS

**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 99% 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 increased due to more and longer-term members leaving the Police Department. Administrative expenses increased due to additional actuarial and audit services.

City contributions continued to equal the amount recommended by the Plan's actuary. For the year beginning May 1, 2016, City contributions are budgeted to total the actuarial required contribution amount of \$27.9 million. The contribution amount is calculated at 27.71% of projected covered salary.

The Retirement Board has approved an asset allocation which over time is expected to realize a long-term investment rate of return of 7.5%. 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, 2016

#### **Assets**

Investments	
U.S. government securities	\$36,371,877
Corporate bonds and notes	87,686,389
Common and preferred stock	65,187,578
All country world index fund	106,762,364
Government mortgage-backed securities	9,456,063
Government agency fund	62,503,948
Partnerships – equity	21,057,009
Partnerships – fixed income	24,679,690
Real estate funds	101,955,185
Short-term investment funds	20,358,137
Hedge fund of funds	80,765,224
Equity funds	72,692,574
International small cap equity funds	10,242,629
Emerging market equity funds	19,875,337
Foreign equities	50,652,431
Total investments	770,246,435
Securities Lending Collateral	53,048,306
Receivables	
City contributions	252,200
Member contributions	402,382
Accrued interest and dividends	1,727,399
Due from broker for sales of investments	2,699,376
Pending foreign exchange purchases	1,887,277
Total receivables	6,968,634
Other Assets	2,342
Cash	20,727
Total assets	830,286,444
Liabilities	
Accounts and refunds payable	364,969
Due to broker for purchases of investments	2,069,778
Pending foreign exchange sales	2,012,355
Securities lending collateral	53,048,306
Total liabilities	57,495,408
Net Position Restricted for Pensions	\$772,791,036

See Notes to the Financial Statements.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Year Ended April 30, 2016

#### **Additions**

Investment Income	
Net depreciation in fair value of investments	\$(13,769,275)
Interest and dividends	15,378,481
Investment expense	(4,703,681)
Net investment loss	(3,094,475)
Securities Lending Income	
Securities lending gross income	211,607
Securities lending expenses	
Borrower rebates	(18,439)
Management fees	(57,922)
Total securities lending expenses	(76,361)
Net securities lending income	135,246
Total net investment loss	(2,959,229)
Contributions	
City	30,272,063
Members	10,748,236
Total contributions	41,020,299
Total additions	38,061,070

#### **Deductions**

Benefits Paid	
Retired members	41,173,594
Spouses	6,926,250
Children	122,818
Disabled	7,658,207
Partial lump sum option	2,064,899
Death benefits	25,000
Total benefits paid	57,970,768
Other Deductions	
Refunds of contributions	617,993
Administrative expenses	561,591
Total other deductions	1,179,584
Total deductions	59,150,352
Net Decrease in Net Position	(21,089,282)
Net Position Restricted for Pensions, Beginning of Year	793,880,318
Net Position Restricted for Pensions, End of Year	\$772,791,036

See Notes to Financial Statements.

#### **Note 1: Summary of Significant Accounting Policies**

#### **Reporting Entity**

The Police Retirement System of Kansas City, Missouri (the Plan) is considered a component unit of the City of Kansas City, Missouri 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 basic financial statements.

#### **Adoption of New Accounting Standard**

The Plan adopted fair value guidance as set forth in Governmental Accounting Standards Board Statement No. 72, *Fair Value Measurement and Application*. This Statement sets forth guidance for determining and disclosing fair value of assets and liabilities reported in the financial statements. Adoption did not have a significant impact on amounts reported or disclosed.

#### **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.

#### NOTES TO THE FINANCIAL STATEMENTS

#### **Note 1: Summary of Significant Accounting Policies** (Continued)

#### **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.

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 outstanding commitments totaled approximately \$2,370,000 at April 30, 2016.

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 tradedate 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, disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

#### NOTES TO THE FINANCIAL STATEMENTS

#### **Note 1: Summary of Significant Accounting Policies** (Continued)

#### **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 and, therefore, not subject to tax.

#### **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 (the "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 amember on August 28, 2013.

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

At April 30, 2016, the Plan's membership consisted of the following:

	Tier I	Tier II	Total
Retirees and beneficiaries currently receiving benefits	1,274	_	1,274
Terminated members entitled to but not yet			
receiving benefits	22	_	22
Active members			
Vested	633	_	633
Non-vested	601	103_	704
Total	2,530	103	2,633

#### **Note 2: Plan Description** (Continued)

**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, 2016, active members contributed at a rate of 11.55% of base pay, and the City contributed at a rate of 27.33% of annual projected payroll. In addition, the City was obligated to make contributions of \$200 per month of supplemental benefit for eligible members.

**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.

#### NOTES TO THE FINANCIAL STATEMENTS

#### Note 2: Plan Description (Continued)

#### **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.

#### **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.

#### NOTES TO THE FINANCIAL STATEMENTS

**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.

#### **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.

#### NOTES TO THE FINANCIAL STATEMENTS

#### **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, 2016.

#### **Investments**

For the year ended April 30, 2016, Northern Trust was the master custodian for substantially all of the securities of the Plan. The investments held by the Plan are managed by 14 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	30% - 40%	35%	
Private Equity	0% - 10%	5%	
Fixed Income	25% – 35%	30%	
Alternatives			
Real Return	0% - 10%	5%	
Real Estate	5% – 15%	10%	
Absolute Return	10% - 20%	15%	
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	\$51,710,289
Fair value of cash collateral received from borrowers	\$53,048,306
Fair value of non-cash collateral received from borrowers	_
Total fair value of collateral	\$53,048,306

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

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.

At April 30, 2016, the Plan had the following investments and maturities:

			Maturities in Years			Loaned Under Securities Lending
Туре	Fair Value	Less than 1	1 – 5	6 – 10	More than 10	Agreements
U.S. Treasury obligations	\$30,981,917	<b>\$</b> -	\$6,975,821	\$8,371,058	\$15,635,038	\$26,474,406
U.S. agencies obligations	5,389,960	_	_	5,389,960	_	_
Corporate bonds and notes	87,686,389	8,286,780	29,582,526	38,007,347	11,809,736	3,606,397
Government mortgage-						
backed securities	9,456,063	_	324,764	_	9,131,299	_
Government agency fund	62,503,948	_	62,503,948	_	_	-
Money market mutual funds	s 20,358,137	20,358,137				_
		\$28,644,917	\$99,387,059	\$51,768,365	\$36,576,073	
Common and preferred						=
stocks	65,187,578					18,154,802
All country world index						
fund	106,762,364					_
Real estate funds	101,955,185					_
Hedge fund of funds	80,765,224					_
Partnerships - equity	21,057,009					_
Partnerships - fixed income	24,679,690					_
Foreign equities	50,652,431					3,474,684
Equity funds	72,692,574					_
International small cap						
equity funds	10,242,629					_
Emerging markets						
equity funds	19,875,337					
	\$770,246,435					\$51,710,289

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

**Interest Rate Risk** – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The money market mutual 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 government agency fund is presented based on the weighted average maturity of the fund. The Plan's investment policy does not specifically address exposure to fair value losses arising from rising interest rates.

**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, 2016, 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 money market mutual funds and government agency 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, 2016:

Fixed Income Security Type	Fair Value April 30, 2016	S&P Weighted Average Credit Quality
U.S. agencies obligations	\$5,389,960	AA+
Corporate bonds and notes	87,686,389	A
Government mortgage-backed securities	9,456,063	AA+
Government agency fund	62,503,948	Not rated
Money market mutual funds	20,358,137	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, \$51,710,289 was held by the counterparty that was acting as the Plan's agent in securities lending transactions.

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

**Investment Concentrations** – The following presents investments that represent 5% or more of the Plan's net position:

Investment	Fair Value
Northern Trust Collective All Country World Investable Market	
Index Fund – Non Lending	\$106,762,364
Grosvenor FOB Fund, L.P.	80,765,224
Brandywine Global Opportunity Fixed Income	62,503,948
Prudential PRISA II	56,652,918
Morgan Stanley – Prime Property Fund, LLC	45,302,267

**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 for the year ended April 30, 2016, consisted of:

Interest and dividend income	\$15,378,481
Net decrease in fair value of investments	(13,769,275)
	1,609,206
Less investment expense	4,703,681
	\$(3,094,475)

**Annual Money-Weighted Rate of Return –** For the year ended April 30, 2016, the annual money-weighted rate of return on the pension plan investments, net of pension plan investment expense, was -0.41%. 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, 2016, were as follows:

Total pension liability	\$1,202,620,288
Plan fiduciary net position	(772,791,036)
City's net pension liability	\$429,829,252
Fiduciary net position as a % of total pension liability	64.26%

#### **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, 2016 was determined based on an actuarial valuation prepared as of April 30, 2015, rolled forward one year to April 30, 2016, using the following actuarial assumptions:

Inflation	3.00%
Salary increases, including inflation	3.75% to 8.75%
Long-term investment rate of return, net of plan	
investment expense, including inflation	7.50%

Mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table for Males or Females as appropriate, with adjustments for mortality improvements based on Scale AA.

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, 2012. The actuarial experience study is dated October 3, 2013.

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.

#### **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, 2016 are summarized in the following table:

	Target	Long-Term Expected
Asset Class	Allocation	Real Rate of Return
Global Equity	35%	5.40%
Fixed Income	30%	1.00%
Real Return	5%	3.00%
Real Estate	10%	4.00%
Absolute Return	15%	4.00%
Private Equity	5%	7.75%

**Discount Rate** – The discount rate used to measure the total pension liability was 6.97%. 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. Based on the assumptions, the Plan's fiduciary net position is projected to be available to make projected future benefit payments to current plan members through 2067. Therefore, the long-term expected rate of return on Plan investments was applied to the period of projected benefit payments before 2067 and the Municipal Bond Index Rate of 3.30% was applied to periods on or after 2067, resulting in a single equivalent interest rate of 6.97%.

There was a change in the Municipal Bond Index Rate from the prior measurement date from 3.51% to the current rate of 3.30%.

**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 6.97% 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 (5.97%) or one percentage point higher (7.97%) than the current rate:

	1% Decrease (5.97%)	Current Discount Rate (6.97%)	1% Increase (7.97%)
Net pension liability	\$594,737,741	\$429,829,252	\$294,476,425

#### **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, 2016:

Investments by fair value level	Total Fair Value	Level 1	Level 2	Level 3
U.S. government securities	\$36,371,877	\$-	\$36,371,877	<b>\$</b> —
Corporate bonds and notes	87,686,389		87,686,389	_
Common and preferred stock	65,187,578	65,187,578	_	_
Government mortgage-backed securities	9,456,063	_	9,456,063	_
Short-term investment funds	20,358,137	20,358,137	_	_
All country world index fund	106,762,364	_	106,762,364	_
Foreign equities	50,652,431	50,645,568	<u> </u>	6,863
Total investments	\$376,474,839	\$136,191,283	\$240,276,693	\$6,863

Investments measured at the net asset value (NAV) (A)	
Government agency fund	62,503,948
Real estate funds	101,955,185
Partnerships – equity	21,057,009
Partnerships – fixed income	24,679,690
Hedge fund of funds	80,765,224
Emerging markets equity funds	19,875,337
International small cap equity funds	10,242,629
Equity funds	72,692,574
Total investments measured at the NAV	393,771,596
Total investments measured at fair value	\$770,246,435

(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, 2016. 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. See the table below for inputs and valuation techniques used for Level 3 securities.

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
Government agency fund (A)	\$62,503,948	\$-	Daily	1 Day
Real estate funds (B)	101,955,185	_	Quarterly	90 Days
Partnerships – equity (C)	21,057,009	2,368,918		
Partnerships – fixed income (D)	24,679,690	_	Monthly	10 Days
Hedge fund of funds (E)	80,765,224	_	Quarterly	70 Days
Emerging markets equity funds (F)	19,875,337	_	Monthly	10 Days
International small cap equity funds (G)	10,242,629	_	Monthly	8 Days
Equity funds (H)	72,692,574	_	Daily	1 Day
Total investments measured at the NAV	\$393,771,596			

- (A) This category includes government agency funds which trade daily on public markets.
- (B) 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.
- (C) 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.

#### **Note 8: Fair Value Measurements** (Continued)

- (D) This category includes a commingled high yield bond fund which trades monthly. The underlying high yield bonds trade daily on public markets.
- (E) This category includes a hedge fund of funds which invests in 29 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. The hedge funds' composite portfolio for this type includes investments in approximately 27% equities, 25% credit, 15% relative value, 13% event driven, 12% Macro and Commodities and 7% Multi-Strategy. Investments representing approximately 71% of the value of the investments in this type can be redeemed quarterly and 17% annually or less. The remaining 12% can be redeemed between 18 and 36 months.
- (F) This category includes a commingled emerging markets equity fund which trades monthly. The underlying emerging market stocks trade daily on public markets.
- (G) This category includes a commingled international small cap equity fund which trades monthly on public markets.
- (H) This category includes commingled equity funds which trade daily on public markets.

#### Note 9: Retirement Plan

The Retirement System has a 408(k) SEP retirement plan covering its employees that meet certain eligibility requirements. The Retirement System's contributions to its employees' SEP are determined by the Retirement Board. Contributions to the SEP were \$53,215 for fiscal year 2016.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI REQUIRED SUPPLEMENTARY INFORMATION

#### **Schedule of Changes in Net Pension Liability and Related Ratios**

April 30, 2016

	2016	2015
Total pension liability		
Service cost	\$27,423,797	\$26,900,131
Interest on total pension liability	79,502,922	76,210,579
Differences between expected and actual experience	(11,656,885)	_
Effect of assumption changes or inputs	40,565,354	14,987,963
Benefit payments, including member refunds	(58,588,761)	(55,405,669)
Net change in total pension liability	77,246,427	62,693,004
Total pension liability – beginning	1,125,373,861	1,062,680,857
Total pension liability – ending	1,202,620,288	1,125,373,861
Plan fiduciary net position		
Net investment income	(3,094,475)	46,824,719
Net securities lending income	135,246	126,375
City contributions	30,272,063	28,933,261
Member contributions	10,748,236	10,874,921
Benefits paid	(57,970,768)	(55,006,617)
Refunds of contributions	(617,993)	(399,052)
Administrative expenses	(561,591)	(549,742)
Net change in fiduciary net position	(21,089,282)	30,803,865
Plan fiduciary net position – beginning	793,880,318	763,076,453
Plan fiduciary net position – ending	772,791,036	793,880,318
Net pension liability, ending	\$429,829,252	\$331,493,543
Fiduciary net position as a percentage		
of total pension liability	64.26%	70.54%
Covered payroll	\$91,952,000	\$91,750,000
Net pension liability as a percentage of covered payroll	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.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI REQUIRED SUPPLEMENTARY INFORMATION

#### **Schedule of City Contributions**

Last Ten Fiscal Years

	2016	2015	2014	2013	2012
Actuarially determined employer contribution	\$30,272,000	\$28,933,000	\$35,062,000	\$31,653,000	\$28,277,000
Actual city contributions  Annual contribution deficiency	30,272,000	28,933,000 \$-	22,242,000 \$12,820,000	16,934,000 \$14,719,000	16,477,000 \$11,800,000
Covered payroll	\$91,952,000	\$91,750,000	\$89,320,000	\$86,036,000	\$83,784,000
Actual contributions as a percentage of covered payroll	32.92%	31.53%	24.90%	19.68%	19.67%

	2011	2010	2009	2008	2007
Actuarially determined employer contribution	\$32,020,000	\$22,154,000	\$24,619,000	\$23,181,000	\$21,429,000
Actual city contributions Annual contribution deficiency	16,532,000	16,645,000 \$5,509,000	16,701,000 \$7,918,000	15,747,000 \$7,434,000	14,527,000 \$6,902,000
Covered payroll	\$87,105,000	\$84,494,000	\$84,775,000	\$79,935,000	\$73,740,000
Actual contributions as a percentage of covered payroll	18.98%	19.70%	19.70%	19.70%	19.70%

#### **Schedule of Investment Returns**

Fiscal Year Ending April 30	2016	2015
Annual money-weighted rate of return, net of investment expense	-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.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

**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.
- **2008** Plan provisions were changed, effective August 28, 2008, to require that a member must be in active service to be eligible for either a duty related or non-duty related disability retirement benefit.
- **2007** Creditable service for military leave may be granted without payment of member contributions under certain conditions.

## POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

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

#### 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.

#### 4/30/2008 Valuation:

- Changed the mortality table to the RP-2000 Table. Scale AA is used to project mortality improvements in future years.
- Adjusted the retirement rates to better fit observed experience.
- Increased the probability of disability for active members.
- Decreased the termination of employment rates.
- Changed from an age-based to a service-based salary increase assumption.
- Assume that all vested terminating members will elect a deferred benefit.

# POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

The Actuarially Determined Contribution rates, as a percentage of pensionable payroll, used to determine the Actuarially Determined Contribution amounts in the Schedule of City 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, which was based on the April 30, 2014 actuarial valuation:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	30 years
Asset valuation method	5 years smoothing of actual vs expected return on fair value
Price inflation	3%
Salary increases	3.75% to 8.75%, including inflation
Investment rate of return	7.50%, net of investment expenses and including inflation
Future cost-of-living adjustments	2.50% (simple)

## POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI SCHEDULE OF EXPENSES

Year Ended April 30, 2016

nvestment Expenses	
Bank custodial fees and expenses	\$96,826
Financial management expenses	4,480,975
Financial consultation	125,880
Total	\$4,703,681
Administrative Expenses	
Salaries and payroll taxes	\$339,313
Legal	16,395
Audit	18,398
Medical fees	12,598
Actuarial fees	47,120
Fringe benefits	63,450
Printing and office expense	8,932
Postage	5,639
Board meetings	1,047
Travel and education expense	13,245
Insurance	3,769
Depreciation	2,016
Legislative consultation	25,822
Other	3,847
Total	\$561,591

# Investment Section

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October 7, 2016

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 Systems' portfolio positioning for the fiscal year ended April 30, 2016.

Meaningful volatility and uncertainty was experienced across all markets during the 2016 fiscal year (May 1, 2015 to April 30, 2016), which made for a challenging investment period. During the fiscal year, global equity markets produced mixed results, with U.S. equity markets, as measured by the S&P 500 Index, returning 1.2% amid improving U.S. economic conditions. In contrast, developed non-U.S. equity markets, as measured by the MSCI EAFE Index, returned -9.3% and emerging markets, as measured by the MSCI EM Index, declined 17.9%. Global growth concerns, Greece's default on their loan repayment to the International Monetary Fund, the Chinese government intervention, political unrest, US dollar strengthening, and a significant decline in commodity prices weighed on international markets.

While most economies struggled to spark growth, the U.S. economy proved resilient enough for the Federal Reserve Open Market Committee (FOMC) to raise the targeted Federal Funds rate in December 2015 by 25 basis points, from 0.00%-0.25% to 0.25%-0.50%s, the first rate increase since 2006. This marked the first major Central Bank to diverge from the far more common monetary easing policies employed by most developed countries. After raising the key rate, the FOMC has communicated a more dovish policy stance throughout 2016 and has kept the rate unchanged. The U.S. unemployment rate dropped from 5.4% at the start of the fiscal year to 5.0% at the end of April 2016, although labor participation rate remains historically low.

Contrary to the U.S., the European Central Bank (ECB) expanded monetary stimulus measures, extending the quantitative easing program and enacting a negative interest rate policy. A negative interest rate meant the ECB would charge banks when they deposited money at the central bank as part of their regular banking operations. The "fee" is akin to a penalty for banks and is designed to encourage them to lend to businesses and consumers in order to increase capital flow and fuel economic activity. The same held true for the Bank of Japan, which also announced additional monetary stimulus and enacted a negative interest rate policy on marginal new reserves. Despite these actions, initial results of these efforts were disappointing with the Yen and Euro strengthening relative to the U.S. Dollar.

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Fixed income markets proved to be a safe haven for investors seeking safety from volatility in equity markets. The Barclays U.S. Aggregate Bond Index returned 2.7% and the Barclays Global Aggregate Bond Index gained 4.8% during the fiscal year as yields fell. Performance for inflation-sensitive assets varied as the Wilshire U.S. REIT Index returned 8.1% and the Bloomberg Commodity Index declined 17.5%. While commodity markets rebounded in 2016, significant losses were experienced in 2015 as oil prices steeply declined and relatively slow growth in China and other emerging markets further depressed commodity prices.

The market value of the Police Retirement System investments decreased from \$789.0 million to \$765.6 million in the year ending April 30, 2016. The System's current actuarial assumed rate of return is 7.5%, which represents the System's long-term return goal. The System's overall investment return over the past year was 0.1% and the System's three-year annualized return was 5.6%. The seven-year annualized return for the System was 9.2% and the System's ten-year annualized return was 4.9%.

There were no meaningful changes to the System's portfolio during the 2016 fiscal year, as implementation of the System's approved asset allocation targets and portfolio re-structuring was just completed during the prior fiscal year.

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. During the fiscal year, RVK provided Staff and the Investment Committee with a custody review and education presentation on securities lending and reviews of the System's various asset class portfolios. The System's current managers continued to meet with the Investment Committee throughout the year as part of Staff and the Investment Committee's due diligence and monitoring process.

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

<sup>&</sup>lt;sup>1</sup> Returns are gross of fees.

#### **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 35% MSCI All Country World Investable Markets Index (Net), 30% Barclays US Aggregate Bond Index, 15% Absolute Return Custom Benchmark, 10% NCREIF ODCE Index (Net), 5% Real Return Custom Benchmark, and 5% Cambridge US Private Equity Index (one quarter lag).

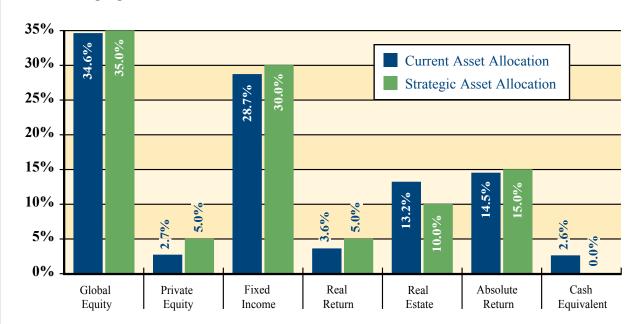
The portfolio underperformed the policy benchmark by 1.6% with a -0.34% return (net of fees) for the fiscal year.

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 35%, Fixed Income 30%, Absolute Return 15%, Real Estate 10%, Real Return/Diversified Inflation Hedge 5%, Private Equity 5%, and Cash 0%. Based on the current RVK, Inc. capital market assumptions, the expected long term return for the strategic asset allocation is 6.25% and expected standard deviation (risk) is 10.53%.

The current strategic asset allocation is 35% equities, 30% 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, high yield bonds, global bonds and cash. The alternative allocation is divided into real return/diversified inflation hedge strategies, core and value added real estate, private equity, and absolute return strategies. The small differences between the year-end allocation and the target allocation are due to market performance of the asset classes.

The Retirement Board met with staff from RVK, Inc. on a monthly basis 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**



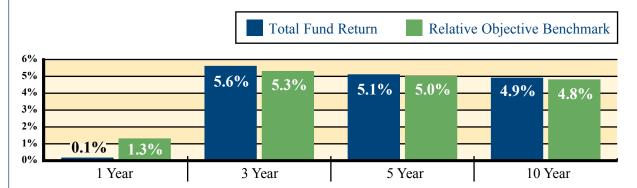
#### **Schedule of Investment Results**

Comparative investment results are for the fiscal year ending April 30, 2016. Results for Real Estate and Private Equity managers are available for the quarter ending March 31, 2016 rather than for the fiscal year ending April 30, 2016.

#### **Annualized Manager Returns as of April 30, 2016**

Investment	Investment	One	Three	Five	Ten
Manager	Class	Year	Years	Years	Years
Financial Counselors	Bonds & Fixed Income	3.6%	2.6%	3.9%	5.2%
Barclays US Govt/Credit		2.8%	2.2%	3.9%	5.0%
Shenkman Capital Mgmt	High Yield Bonds	-2.0%	2.8%	4.9%	
ML US Hi Yld Master II		-1.3%	2.5%	5.2%	
Brandywine Global Group	Bonds & Fixed Income	1.9%			
Citi Wrld Gov't Bond Index		6.1%			
Fidelity	Real Return	-4.0%			
Fidelity Strat RR Comp Index		-2.7%			
Artisan Global Opp	Global Equities	0.5%			
LSV Global LC Value	Global Equities	-4.2%			
MSCI World		-4.2%			
Wellington US SC 2000	Global Equities	-4.0%			
Russell 2000		-5.9%			
Wellington Int'l SC Rsrch	Global Equities	-1.3%			
MSCI World Ex US SC		0.1%			
Northern Trust Index	Global Equities	-4.9%			
MSCI ACW IMI		-5.5%			
LSV Emerging Mkts	Global Equities	-21.1%	-5.0%	-4.0%	
MSCI Emerging Mkts		-17.8%	-4.6%	-4.6%	
LSV EM Small Cap	Global Equities	-15.4%			
MSCI EM Small Cap		-15.5%			
Morgan Stanley	Real Estate	14.7%			
PGIM PRISA II	Real Estate	16.3%	15.8%	15.7%	5.5%
NCREIF ODCE		12.7%	12.6%	12.2%	5.4%
GMO	Absolute Return	-6.2%			
MSCI ACW 60% / B Gbl Agg 40%		-1.3%			
Grosvenor	Absolute Return	-5.0%			
HFN FOF Multi-Strat Index		-6.3%			
Abbott Capital	Private Equity	6.3%	11.0%	12.0%	3.2%
JP Morgan	Private Equity	8.5%	16.4%	16.1%	
Cambridge US Prvt Equ Index		5.9%	13.7%	14.3%	12.2%
Total Fund		0.1%	5.6%	5.1%	4.9%
Relative Objective		1.3%	5.3%	5.0%	4.8%

#### 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, 2016	Fair Value
1) Visa Inc. Class A	\$3,091,685
2) IHS Inc. Class A	2,917,026
3) Markit, Ltd.	2,368,577
4) Facebook Inc. Class A	2,366,180
5) Alphabet, Inc. Class A	2,244,687
6) Tencent Holdings Ltd.	2,218,438
7) S&P Global, Inc.	2,151,104
8) Boston Scientific Corp	1,973,370
9) Genmab	1,912,870
10) Direct Line Insurance Group	1,873,843

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85
30

A complete list of portfolio holdings is available upon request.

### **Schedule of Brokerage Commissions**

			Commission	
Brokerage Firms	Shares Traded	Dollar Volume of Trades	Dollar Amount	Value Per Share
Itg Inc.	208,172	14,630,752	3,345	0.016
Morgan Stanley And Co., Llc	152,091	4,475,584	2,316	0.015
Korea Investments And Securities Co	5,031	1,706,265	2,048	0.407
J.P. Morgan Clearing Corp.	103,981	3,407,833	1,833	0.018
Merrill Lynch International Limited	369,632	2,644,847	1,734	0.005
Credit Agricole Securities Usa Inc	37,741	2,035,151	1,668	0.044
Robert W. Baird Co.Incorporated	30,917	1,373,652	1,546	0.050
Deutsche Bank Securities Inc.	89,092	1,103,466	1,313	0.015
Jefferies Llc.	27,012	867,271	1,171	0.043
Daiwa Capital Markets America Inc.	42,400	1,232,093	1,034	0.024
Credit Suisse Securities(Europe)Ltd	69,383	1,780,379	995	0.014
J.P. Morgan Securities Plc	33,894	954,198	911	0.027
Citigroup Global Markets Inc.	180,485	1,159,723	805	0.004
Others (Including xx Brokerage Firms)	2,022,008	33,557,637	18,846	0.009
Totals	3,371,839	\$70,928,850	\$39,564	\$0.692
Zero commission trades excluded from above	35,361,232	\$48,064,419		

#### **Investment Summary**

Investment Manager	Date Hired	Investment Class	Portfolio Fair Value As of 4/30/16	% of Total Fair Value
FCI Advisors	Oct 1974	Fixed Income	\$133,514,329	17.3%
Cash			20,358,137	2.6%
PGIM	Sep 2004	Real Estate	56,652,918	7.4%
Abbott Capital	Aug 2005	Private Equity	14,692,403	1.9%
JPMorgan	Jan 2006	Private Equity	6,364,606	0.8%
LSV	Aug 2007	Equity Emerging Markets	13,217,810	1.7%
Shenkman Capital	May 2009	Fixed Income	24,679,690	3.2%
LSV	Jan 2014	Equity Emerging Markets Small Cap	6,657,526	0.9%
Northern Trust	Feb 2014	Global Equity Index	106,762,364	13.9%
Artisan	Apr 2014	Global Equity	54,956,022	7.1%
LSV	Apr 2014	Global Equity	61,410,286	8.0%
Wellington	May 2014	Equity International Small Cap	10,242,629	1.3%
Wellington	May 2014	Equity US Small Cap	13,941,854	1.8%
Grosvenor	Jul 2014	Absolute Return – Hedge Fund	80,765,224	10.5%
GMO	Aug 2014	Absolute Return – GTAA	30,773,142	4.0%
Brandywine	Sep 2014	Fixed Income	62,503,948	8.1%
Morgan Stanley	Sep 2014	Real Estate	45,302,267	5.9%
Fidelity	Oct 2014	Real Return	27,955,798	3.6%
		Total	\$770,750,953	

#### **Fees and Commissions**

Investment Manager	Management Fee	Commission Expense	Commission per Share
FCI Advisors	\$221,767	\$-	\$-
PGIM	473,176	_	_
Abbott Capital	193,236	_	-
JPMorgan	71,823	_	_
Northern Trust	93,230	_	_
LSV	616,185	6,602	0.004
Shenkman Capital	121,310	_	_
Artisan Global	451,764	32,962	0.021
Wellington	194,952	_	_
Grosvenor	787,486	_	_
GMO	260,808	_	_
Brandywine	263,103	_	_
Morgan Stanley	518,435		_
Fidelity	213,702	_	_
Total	\$4,480,975	\$39,564	\$0.001

# Actuarial Section

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September 30, 2016

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

Dear Members of the Board:

Bellevue, NE 68123

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Kennesaw, GA
Bellevue, NE

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 as a level percent of active member payroll over a 30 year period. The most recent valuation was completed based upon population data, asset data, and plan provisions as of April 30, 2016.

The plan administrative staff provides the actuary with 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 Board of Trustees, upon the recommendation of the actuary, adopted a different asset smoothing method and implemented it in the April 30, 2011 valuation by setting the actuarial value of assets equal to the market value of assets. The smoothing method has now been effective long enough to reflect the smoothing of five years of investment experience.

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, 2016 actuarial valuation reflects the actuarial assumptions and methods included in the experience study covering the five year period from May 1, 2007 to April 30, 2012, as adopted by the Board based on advice of the actuary.







The unfunded actuarial accrued liability (UAAL) increased from the last valuation by \$21 million due to the actual experience. There was an actuarial loss of \$23 million on assets and an actuarial gain of \$6 million on demographic experience. The gain was largely due to salary increases and cost-of-living adjustments 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, 2016, there were 103 members in Tier II out of a total of 1,334 active members (about 8% of total actives) so the Tier II members had little impact on the results of the April 30, 2016 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 10 to 15 years before a noticeable difference is observed in the valuation results.

The System is 76% funded as of April 30, 2016 based on the actuarial value of assets. However, reflecting the impact of the Tier II benefit structure for future hires and the City's commitment 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, 2016 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 September 16, 2016. The assumptions used in the funding valuation report were also used in the GASB 67 report, except for the use of a 6.97% discount rate for the GASB 67 calculation of the Total Pension Liability. In addition, the entry age normal actuarial cost method, which 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





This work product was prepared solely for the Police Retirement System of Kansas City for the purposes described herein and may not be appropriate to use for other purposes. CMC does not intend to benefit and assumes no duty or liability to other parties who receive this work.



#### **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 A. Beckham, FSA, FCA, EA, MAAA

Principal and Consulting Actuary

Patrice Beckham





#### **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 7.50% per year (adopted 7/9/13) based on an underlying rate of inflation of 3.0% per year (adopted 2/12/08).

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 for both males and females (adopted 2/12/08).

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 average salary increase attributable to inflation is 3.75% (adopted 7/9/13); merit and longevity increases range from 0.0% to 5.0% (adopted 7/9/13) depending upon the sample years of service. These increases include an underlying assumption of 3.0% for inflation (adopted 2/12/08). 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 an open 30 year period. (Adopted 7/9/13)

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 completed in July 2013 for the period May 1, 2007 through April 30, 2012. The Retirement Board adopted the recommendations and assumptions from the July 2013 experience study for the valuation dated April 30, 2013 at the July 9, 2013 board meeting.

The most recent valuation was completed by Cavanaugh Macdonald Consulting, LLC and was based on members of the System as of April 30, 2016. All census data was supplied by the System and was subject to reasonable consistency checks. Cavanaugh Macdonald Consulting, LLC completed the 2011 through 2016 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, the RP-2000 Employee Table using Scale AA to model future mortality improvement was used. (Adopted 2/12/08)

For healthy retirees, the RP-2000 Healthy Annuitant Table using Scale AA to model future mortality improvement was used. (Adopted 2/12/08)

For disabled retirees, the RP-2000 Healthy Annuitant Table set forward 5 years using Scale AA to model future mortality improvement was used. (Adopted 2/12/08)

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 7/9/13)

Sample Ages	% of Active Members Separating within Next Year
	All Members
25	5.51%
30	3.61%
35	2.21%
40	1.25%
45	0.25%
50	0.00%

**Rates of Disability.** These assumptions represent the probabilities of active members becoming disabled. It was assumed that 55% of disabilities would be duty related. (Adopted 2/12/08)

Sample Ages		of Active Members Becoming Disabled within Next Year		
	Male	Female		
30	0.062%	0.134%		
35	0.312%	0.672%		
40	0.416%	0.896%		
45	0.437%	0.941%		
50	0.759%	1.635%		
55	1.456%	3.136%		
60	2.579%	5.555%		

# **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 I and age 60 for Tier II. (Adopted 7/9/13)

Active Members Ret	iring Within Next Year
Years of Service	Percent Retiring
25	25%
26	25%
27	20%
28	20%
29	20%
30	15%
31	15%
32	35%
33	30%
34	30%
35	100%

**Pay increase assumptions** for individual active members are shown below. (Adopted 7/9/13)

	Annual Rate of Pay Increase for Sample Years of Service			
Years of Service	General Wage Growth	Merit and Longevity	Total	
0	3.75%	5.00%	8.75%	
1	3.75%	5.00%	8.75%	
2	3.75%	5.00%	8.75%	
3	3.75%	5.00%	8.75%	
4	3.75%	5.00%	8.75%	
5	3.75%	5.00%	8.75%	
10	3.75%	2.00%	5.75%	
15	3.75%	0.00%	3.75%	
20	3.75%	0.00%	3.75%	

#### **Schedule of Active Member Valuation Data**

Ten Years Ended April 30, 2016

Valuation April 30	Active Members	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2007	1,391	\$75,377,572	\$54,189	2.2%
2008	1,433	81,825,577	57,101	5.4%
2009	1,410	84,741,206	60,100	5.3%
2010	1,418	85,500,737	60,297	0.3%
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%

# Schedule of Retirants and Beneficiaries Added to and Removed from Rolls

Ten Years Ended April 30, 2016

	Add	ed to Rolls	Removed from Rolls		Rolls End of Year			
Year Ended April 30	Numbe	Annual er Benefits	Number	Annual Benefits	Number	Annual r Benefits	% Increase in Annual Benefits	Average Annual Benefits
2007	42	\$1,352,192	39	\$783,851	1189	\$35,867,172	3.9	\$30,166
2008	45	1,259,038	46	803,604	1188	37,132,056	3.5	31,256
2009	26	926,993	28	523,897	1186	38,357,598	3.3	32,342
2010	38	1,426,523	23	533,519	1201	39,272,337	2.4	32,700
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

Benefit amounts do not include \$420 supplemental benefit.

#### **Short-Term Solvency Test**

ENTRY AGE ACTUARIAL ACCRUED LIABILITIES						of Act	
Valuation Date April 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Financed Portion)	Valuation Assets	Co Repo	ed Liab overed l orted As	ssets
April 30	Contributions	Deficitaties	1 of tion)	Assets	(1)	(2)	(3)
2007	\$64,314,276	\$487,633,976	\$255,953,924	\$698,078,688	100%	100%	57%
2008	70,012,081	511,571,757	269,179,907	742,060,223	100	100	60
2009	76,321,890	521,607,916	295,629,284	641,176,940	100	100	15
2010	81,310,956	526,521,860	307,630,221	722,464,003	100	100	37
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

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

#### **Analysis of Financial Experience**

Year Ended April 30, 2016

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 Accrued Liability, April 30, 2015	\$233.6
- effect of contributions less than actuarial rate	0.0
- expected change due to amortization method	4.8
- loss from investment return on actuarial assets	23.3
- demographic experience <sup>1</sup>	(5.6)
- all other experience	(1.2)
Unfunded Actuarial Accrued Liability, April 30, 2016	\$254.9

<sup>&</sup>lt;sup>1</sup> Liability gain is about .052% of total actuarial liability

#### **Schedule of Funding Progress**

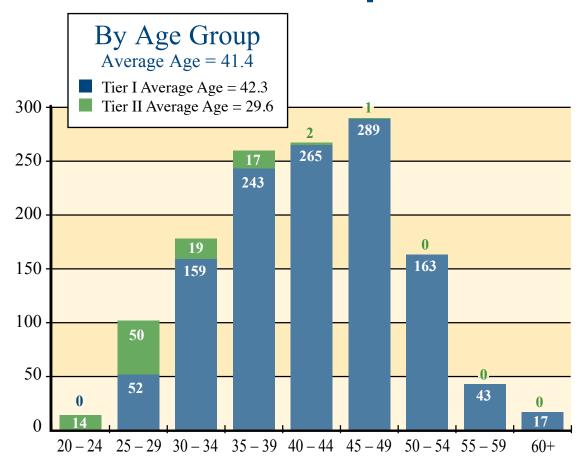
Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Actuarial Accrued Liability (AAL) Entry Age	(b–a) Unfunded AAL (UAAL)	(a/b) Funded Ratio	(c) Active Member Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
4/30/07	\$698,078,688	\$807,902,176	\$109,823,488	86%	\$80,111,515	137%
4/30/08	742,060,223	850,763,745	108,703,522	87%	86,700,836	125%
4/30/09	641,176,940	893,559,090	252,382,150	72%	89,884,411	281%
4/30/10	722,464,003	915,463,037	192,999,034	79%	90,475,241	213%
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%

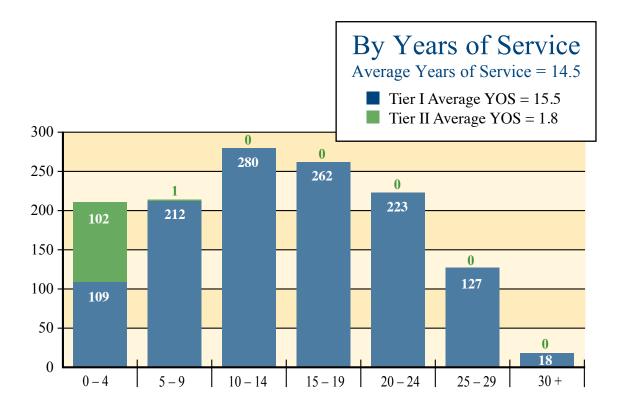
#### **Schedule of Computed and Actual City Contributions\***

Year Ended April 30	Actuarial Determined Contributions	Actual Contributions
2007	\$21,444,703	\$14,526,734
2008	22,749,385	15,747,111
2009	24,311,281	16,700,688
2010	23,642,278	16,645,229
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

<sup>\*</sup> Does not include \$200 per eligible member supplemental contributions.

## **Active Membership**





# **Summary Plan Description** at April 30, 2016

#### **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, 2015, the City of Kansas City, Missouri will contribute the actuarial required amount of \$27.2 million based on a projected payroll of \$99.7 million using a contribution rate of 27.33% 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 nonduty 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 <a href="https://www.kcpers.org">www.kcpers.org</a> or upon request at the KCPERS Office.

# Statistical Section

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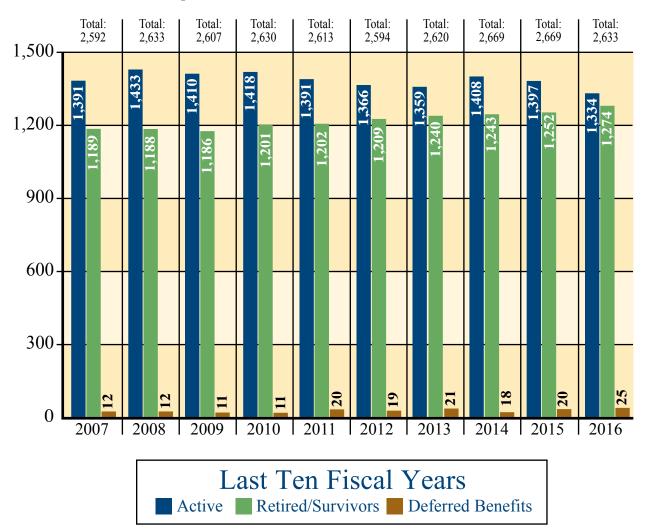
# **Statistical Summary**

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	2007	2008	2009	2010	2011
Additions:					
Member Contributions	\$7,814,142	\$8,459,762	\$8,982,366	\$8,934,700	\$9,223,994
City Contributions	14,526,734	15,747,111	16,700,688	16,645,229	16,532,015
Net Investment Income	83,730,123	(911,856)	(180,354,444)	142,765,846	82,002,086
<b>Total Additions to</b>					
<b>Plan Net Position</b>	106,070,999	23,295,017	(154,671,390)	168,345,775	107,758,095
<b>Deductions:</b>					
Benefits	42,293,180	42,802,584	44,097,817	46,290,964	46,377,135
Refunds	694,903	621,174	746,454	231,947	557,214
Administrative	515,720	598,548	550,069	565,362	631,281
<b>Total Deductions from</b>					
<b>Plan Net Position</b>	43,503,803	44,022,306	45,394,340	47,088,273	47,565,630
<b>Change in Net Position</b>	\$62,567,196	(\$20,727,289)	(\$200,065,730)	\$121,257,502	\$60,192,465

Fiscal Year	2012	2013	2014	2015	2016
Additions:					
Member Contributions	\$8,894,208	\$9,343,416	\$10,198,831	\$10,874,921	\$10,748,236
City Contributions	16,476,608	16,933,694	22,241,769	28,933,261	30,272,063
Net Investment Income	(3,584,270)	55,542,099	66,842,964	46,951,094	(2,959,229)
<b>Total Additions to</b>					
<b>Plan Net Position</b>	21,786,546	81,819,209	99,283,564	86,759,276	38,061,070
<b>Deductions:</b>					
Benefits	48,578,196	50,979,009	52,627,501	55,006,617	57,970,768
Refunds	549,026	816,459	361,910	399,052	617,993
Administrative	552,751	576,470	535,628	549,742	561,591
<b>Total Deductions from</b>					
<b>Plan Net Position</b>	49,679,973	52,371,938	53,525,039	55,955,411	59,150,352
<b>Change in Net Position</b>	(\$27,893,427)	\$29,447,271	\$45,758,525	\$30,803,865	\$(21,089,282)

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

### **Last Ten Fiscal Years**

Fiscal Year	2007	2008	2009	2010	2011
Type of Benefit:					
Retired	\$30,657,765	\$31,212,247	\$31,911,809	\$33,368,992	\$33,964,741
Survivors	4,546,298	4,943,672	5,233,830	5,384,022	5,513,933
Disabilities	5,544,299	5,827,078	5,978,251	6,065,418	5,983,509
PLOP	1,522,818	790,587	957,927	1,455,532	889,952
Death Benefits	22,000	29,000	16,000	17,000	25,000
<b>Total Benefits</b>	\$42,293,180	\$42,802,584	\$44,097,817	\$46,290,964	\$46,377,135
Type of Refund:					
Separation	\$694,903	\$621,174	\$746,454	\$231,947	\$557,214
Death	_	_	_	_	_
<b>Total Refunds</b>	\$694,903	\$621,174	\$746,454	\$231,947	\$557,214

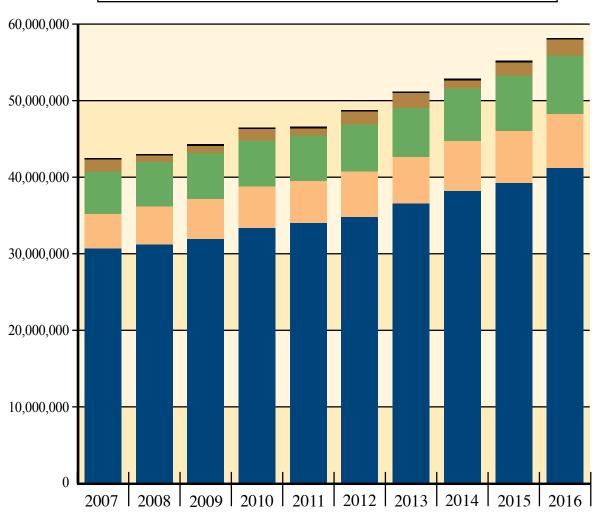
Fiscal Year	2012	2013	2014	2015	2016
Type of Benefit:					
Retired	\$34,794,455	\$36,539,274	\$38,206,133	\$39,215,578	\$41,173,594
Survivors	5,936,074	6,106,116	6,513,492	6,802,463	7,049,068
Disabilities	6,124,737	6,345,482	6,829,946	7,272,582	7,658,207
PLOP	1,697,930	1,967,137	1,052,930	1,690,994	2,064,899
Death Benefits	25,000	21,000	25,000	25,000	25,000
<b>Total Benefits</b>	\$48,578,196	\$50,979,009	\$52,627,501	\$55,006,617	\$57,970,768
Type of Refund:					
Separation	\$441,701	\$682,890	\$361,910	\$399,052	\$617,993
Death	107,325	133,569	_	_	
<b>Total Refunds</b>	\$549,026	\$816,459	\$361,910	\$399,052	\$617,993

<sup>\*</sup>Benefit amounts include \$420 supplemental benefit for eligible members

<sup>\*</sup>Benefit amounts include cost of living adjustments

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





<sup>\*</sup>Benefit amounts include \$420 supplemental benefit for eligible members

<sup>\*</sup>Benefit amounts include cost of living adjustments

# **Schedule of Retired Members by Type of Benefit**

**April 30, 2016** 

				T	ype of Ben	efit	
Amount of Monthly Benefit*	Total Monthly Benefits*	Total Number of Recipients	Retired	Surviving Spouses	Surviving Children	Duty Disability	Non-Duty Disability
\$1 to 500	\$250	5			5		
501 to 1,000	6,709	8	2	3	3		
1,001 to 1,500	41,177	34	6	24	1	1	2
1,501 to 2,000	101,085	57	11	35		8	3
2,001 to 2,500	209,397	92	20	57	1	7	7
2,501 to 3,000	392,183	142	58	55	2	15	12
3,001 to 3,500	649,069	196	139	36		10	11
3,501 to 4,000	725,989	194	151	11		22	10
4,001 to 4,500	922,659	218	190	6		17	5
4,501 to 5,000	841,407	177	150	4		23	
5,001 to 5,500	318,703	61	40	2		17	2
5,501 to 6,000	239,123	42	35	1		6	
6,001 to 6,500	167,726	27	26	1			
6,501 to 7,000	66,935	10	10				
Over 7,000	90,842	11	11				
Totals	\$4,773,254	1,274	849	235	12	126	52

<sup>\*</sup>Benefit amounts include \$420 supplemental benefit for eligible members

<sup>\*</sup>Benefit amounts include cost of living adjustments

# **Schedule of Average Monthly Base Benefit Amounts\***

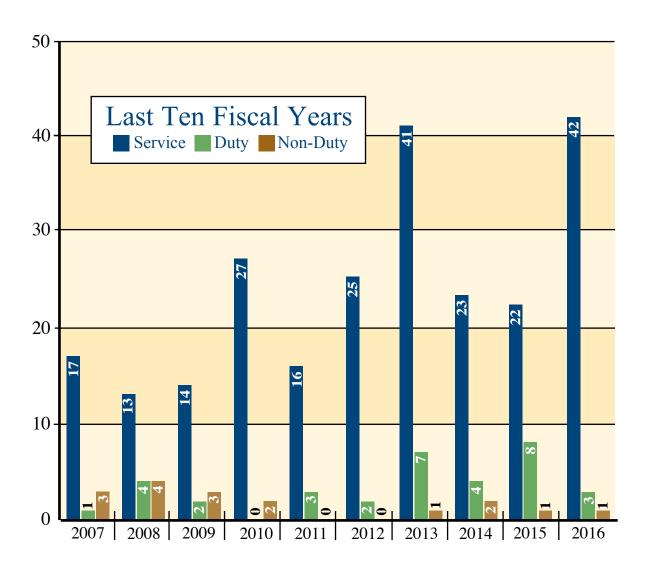
Ten Years Ended April 30, 2016

### **Years Credited Service**

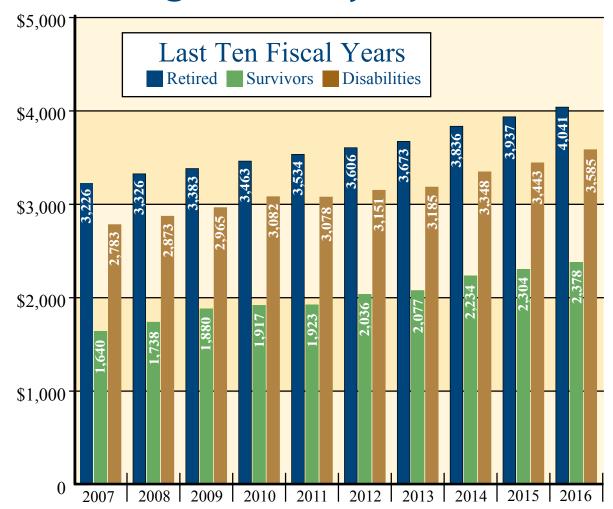
Members Retiring During	<25	25–26	26–27	27–28	28–29	29–30	30+	All Members
Fiscal Year Ending 04/30/07 Average monthly benefit Average final compensation Number of retirees	\$2,168 \$4,969 5	2,954 4,691 2	2,848 4,705 1		3,311 4,730 1	4,226 6,405 12		3,505 5,739 21
Fiscal Year Ending 04/30/08 Average monthly benefit Average final compensation Number of retirees	\$2,553 \$4,584 7	3,405 5,360 5		3,876 6,084 3	2,778 4,922 2	3,814 5,778 4		3,206 5,243 21
Fiscal Year Ending 04/30/09 Average monthly benefit Average final compensation Number of retirees	\$2,646 \$5,163 8	3,537 5,644 2		5,550 8,048 1	2,965 5,152 1	3,827 5,932 7		3,345 5,648 19
Fiscal Year Ending 04/30/10 Average monthly benefit Average final compensation Number of retirees	\$2,474 \$5,394 7	3,580 5,691 6	3,705 5,885 2	4,230 6,546 3	3,006 5,276 1	4,297 6,605 10		3,616 6,022 29
Fiscal Year Ending 04/30/11 Average monthly benefit Average final compensation Number of retirees	\$3,553 \$4,978 4	3,469 5,428 4	4,271 6,829 3	3,996 5,950 2	4,340 6,847 2	4,190 6,502 4		3,912 5,985 19
Fiscal Year Ending 04/30/12 Average monthly benefit Average final compensation Number of retirees	\$4,087 \$5,449 2	3,711 5,893 8	3,668 5,697 4	3,341 5,601 2	4,114 6,735 5	4,796 7,437 6		4,021 6,308 27
Fiscal Year Ending 04/30/13 Average monthly benefit Average final compensation Number of retirees	\$3,076 \$5,242 12	3,659 5,809 14	4,004 6,038 6	3,977 6,266 5	3,536 5,801 5	4,463 7,101 7		3,693 5,929 49
Fiscal Year Ending 04/30/14 Average monthly benefit Average final compensation Number of retirees	\$3,746 \$5,747 8	4,084 6,469 7	3,845 5,931 4		4,032 5,692 1	3,449 5,656 1	4,609 7,037 8	4,079 6,298 29
Fiscal Year Ending 04/30/15 Average monthly benefit Average final compensation Number of retirees	\$4,477 \$5,760 9	3,709 5,892 6	4,079 6,316 5	3,938 6,626 4	3,412 6,063 3	4,378 5,901 2	4,647 7,222 2	4,096 6,120 31
Fiscal Year Ending 04/30/16 Average monthly benefit Average final compensation Number of retirees	\$3,315 \$5,545 6	4,481 7,026 12	3,815 6,211 3	4,209 6,856 7	4,109 6,301 5	4,776 6,679 3	4,780 7,016 10	4,288 6,650 46

<sup>\*</sup>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\***



<sup>\*</sup> Benefit amounts include \$420 supplemental benefit for eligible members

### **Cost of Living Increases**

Ten Year History

	J
Fiscal	% Increase to Monthly
Year	Base Pension
2007	3.00%
2008	3.00%
2009	3.00%
2010	3.00%
2011	0.00%
2012	3.00%
2013	3.00%
2014	3.00%
2015	2.50%
2016	2.50%

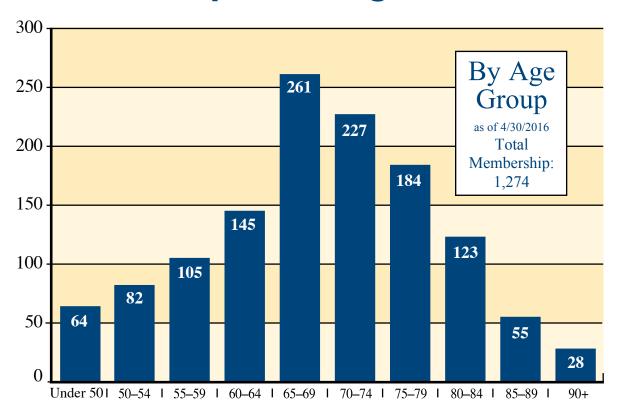
# **Supplemental Retirement Benefit**

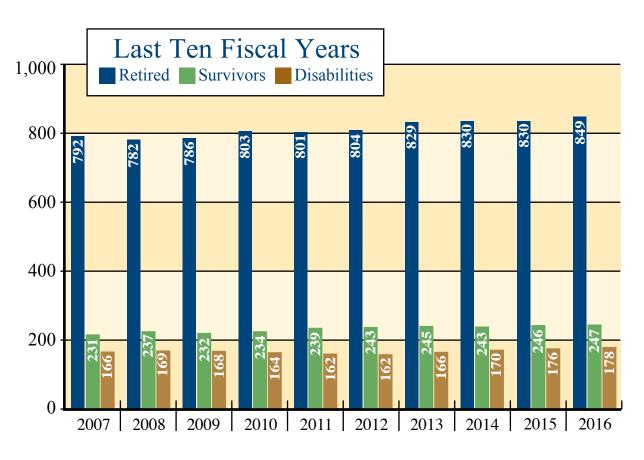
History of Increases

E' 1	Monthly	Annual
Fiscal	Benefit	Benefit
Year	Amount	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

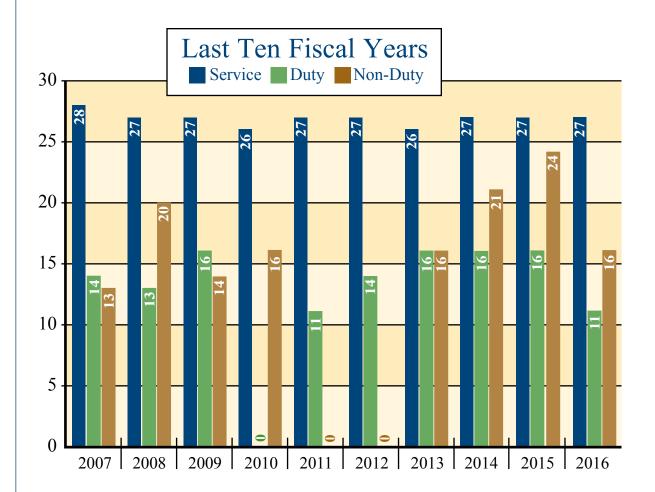
<sup>\*</sup> Benefit amounts include cost of living adjustments

# **Membership Receiving Benefits**

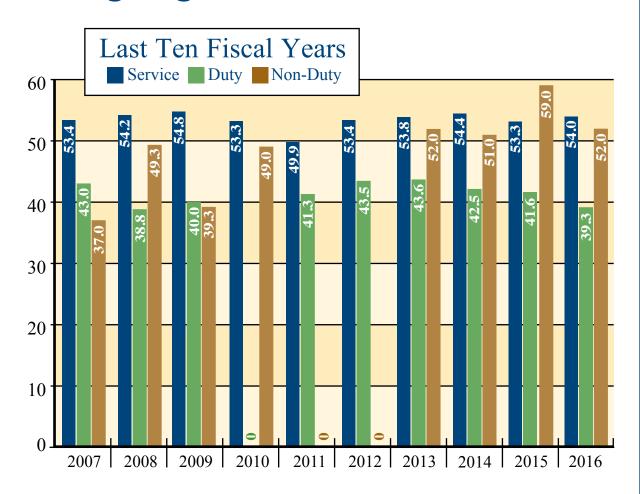




# **Average Years of Service at Retirement**



# **Average Age at Retirement**



# Average Age of Retirees as of April 30, 2016

Service	69.0
(849 retired members ranging	g in age from 47 to 97)

<b>Duty Disability</b>	60.2
(126 retired members rang	ing in age from 34 to 93)

<b>Non-Duty Disability</b>	62.5
(52 retired members ranging	in age from 44 to 86)

