Pension Trust Funds of the City of Wichita, Kansas

Comprehensive Annual Financial Report

Fiscal Year Ended December 31, 2017

WICHITA RETIREMENT SYSTEMS

Police & Fire Retirement System of Wichita, Kansas
Wichita Employees' Retirement System
Wichita Employees' Retirement System Plan 3B

www.wichita.gov

Pension Trust Funds of
the City of Wichita, Kansas

Comprehensive Annual Financial Report

For the Year Ended December 31, 2017

CITY OF
WICHITA

WICHITA RETIREMENT SYSTEMS

Police and Fire Retirement System of Wichita, Kansas

Wichita Employees' Retirement System

Wichita Employees' Retirement System Plan 3b

Prepared by the Pension Management Office

Department of Finance

455 N. Main Street, 12th floor

Wichita, Kansas 67202

(316) 268-4544

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CITY OF

WICHITA

WICHITA RETIREMENT SYSTEMS

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the year ended December 31, 2017

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WICHITA RETIREMENT SYSTEMS

COMPREHENSIVE ANNUAL FINANCIAL REPORT
For the year ended December 31, 2017

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COMPREHENSIVE ANNUAL FINANCIAL REPORT
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CITY OF
WICHITA

INTRODUCTORY SECTION

Department of Finance
Pension Management
City Hall – 12th Floor
455 North Main
Wichita, Kansas 67202

June 28, 2018

The Honorable Mayor and City Council
Police and Fire Retirement System of Wichita Board of Trustees
Wichita Employees' Retirement System Board of Trustees

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Wichita Retirement Systems (WRS or Systems); a single employer retirement system comprised of the Police and Fire Retirement System of Wichita, Kansas (PFRS), the Wichita Employees' Retirement System and the Wichita Employees' Plan 3b (WERS) for the year ended December 31, 2017. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the Systems.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Kansas statutes require an annual audit of all funds of the City by independent certified public accountants. The certified public accounting firm of Allen, Gibbs & Houlik, L.C. issued an unmodified opinion on the financial statements of the WRS for the year ended December 31, 2017. The independent auditor's report begins on page A-1 in the Financial Section of this report.

Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview and analysis of the financial statements. This transmittal letter is designed to complement the MD&A and should be read in conjunction with it.

Plan History

The WERS was established in 1948 to provide pension benefits to all civilian employees, their surviving spouses and beneficiaries. The PFRS was established in 1965 to provide pension benefits to commissioned police and fire officers, their surviving spouses and beneficiaries. All full-time employees of the City of Wichita participate in one of these two Systems unless the employee is provided an option to elect to participate in the International City Management Association.

In October 1999, the assets of the WRS were combined into a single fund for investment purposes. Then, in October 2000, assets of WERS Plan 3 were separated from the combined WERS and PFRS funds for investment, custodial and participant record keeping purposes. Finally, in January 2004, WERS Plan 3 assets were liquidated and the proceeds were reinvested with the other assets of the WRS, which resulted in a combined single fund for investment purposes.

Plan Governance

A 16-member Board of Trustees oversees the PFRS. The members include the City Manager or the City Manager's designee, the Police Chief, the Fire Chief, three fire officers and three police officers elected by PFRS members of their respective departments and seven members appointed by the City Council. A separate 16-member Board of Trustees oversees the WERS. The members include the City Manager or the City Manager's designee, the City Manager's appointee, seven members elected by WERS members and seven members appointed by the City Council. The Joint Investment Committee (JIC) is comprised of the President of each Board, two elected members from each Board, two City Council appointees from each Board and a City Manager's designee. The City Manager appoints a Pension Manager who manages staff to carry out the daily operations of the Systems.

System Funding and Financial Position

Funding is the process of setting aside resources for current and future use for the WRS defined benefit plans. The objective of the WRS is to meet funding requirements through contributions, expressed as a percent of active member payroll, which will remain approximately level from year to year and will not require significant increases in contribution rates affecting future generations of citizens in the absence of plan benefit improvements.

The annual actuarial valuations prepared by the WRS' actuary, Cavanaugh Macdonald Consulting, LLC, provide an indicator of the funded status of the Systems. As of December 31, 2017, the funded ratio of the PFRS was 95.4 percent and the funded ratio of the WERS was 94.3 percent. The funded ratio is the ratio of actuarial assets to actuarial liabilities. The actuarial liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and the actuarial value of assets at the same date is referred to as the unfunded actuarial liability (UAL), or surplus if the asset value exceeds the actuarial liability. The Systems' unfunded actuarial liability (or surplus) is amortized over a 20-year rolling period.

The funded ratios for both Systems increased by 1.4 percent. In 2017, the funded ratios increased period largely due to a favorable investment experience. The results of the actuarial valuation determine the City's contribution rate for the second calendar year following the valuation date. In 2017, employer contributions for the PFRS increased from 18.8 percent to 19.2 percent of annual covered payroll, and employer contributions for the WERS increased from 11.6 percent to 12.3 percent of annual covered payroll. Additional information regarding the financial condition and funding status of the Systems can be found in the Financial and Actuarial Sections of this report.

Investments

The WERS Board of Trustees' investment authority is found in the City of Wichita's Municipal Code, Section 2.28.090. Investment authority for the PFRS Board of Trustees is contained in Section 12 of Charter Ordinance 215.

As of December 31, 2017, the fiduciary net position was $1.32 billion, an increase of 12.8 percent over the December 31, 2016 net position of $1.17 billion. The investment return of the WRS' combined investment portfolio was 17.8% for the year ended December 31, 2017, outperforming the WRS' investment target benchmark return of 16.23% for the same period. The investment return over the past five-year period was 9.97%, outperforming the benchmark return of 9.01% and the Systems' long-term actuarial target of 7.75%.

The WERS and PFRS Boards of Trustees have established an overall strategic asset allocation policy based upon the financial needs of the joint fund and the Boards' tolerance for volatility, or risk. The Boards utilize external investment managers providing both passive and active strategies. The portfolio is broadly diversified among equities, debt securities, real estate and timber, with additional diversification achieved in equities through domestic and international allocations. With the assistance of the Systems' financial consultant, Callan Associates, Inc. and Pension Management staff, the Trustees continue to monitor the investment program and review the policy for future changes to the asset allocation, manager allocations and possible additional investment types. For more information on investment strategies and policies, safeguards on investments and a comparative analysis of investment results over time, please refer to the Investment Section of this report beginning on page B-1.

Major Initiatives and Significant Actions

Custodial Bank Request for Proposal (RFP): During 2017, an RFP for Trust and Custody Services was completed. Upon final review, Bank of New York Mellon (BNY Mellon) was awarded the contract. Effective January 1, 2018, BNY Mellon began providing custody and safekeeping, asset servicing, corporate action processing, transaction processing, income collection, accounting, GASB reporting support, proxy notification, class and corporate action support, on-line access, and cash management. WRS requires that the custodian act as the official book of record for investment activity. Also, the custodian reconciles with external managers on a monthly basis. A fourth quarter project plan timeline was created and followed to ensure a smooth transition to BNY Mellon from the previous custodian.

Actuarial Consulting Services Request for Proposal (RFP): Also during the year, an RFP for Actuarial Consulting Services was completed. The intent was to hire two firms, one to provide primary actuarial services and the other to provide secondary services. Upon final review, Cavanaugh Macdonald Consulting, LLC was awarded the primary contract and Cheiron was hired to provide secondary actuarial services. In 2018, Cavanaugh Macdonald performed an experience study and Cheiron will conduct a secondary actuarial audit for each System.

Awards

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the Wichita Retirement Systems (WRS) for its comprehensive annual financial report for the fiscal year ended December 31, 2016. This was the eighteenth consecutive year that the Systems have 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. The System believes that this current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and it will be submitted to the GFOA to determine its eligibility for another certificate.

In addition, the Wichita Retirement System also received the Public Pension Coordinating Council's (PPCC) Public Pension Standards Award for the fiscal year ended December 31, 2017 in recognition of meeting professional standards for pension plan design and administration, as set forth in the Public Pension Standards. This was the 15th consecutive year the System obtained this important award. This award is presented by the PPCC, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS) and the National Council on Teacher Retirement (NCTR). The System believes that its plan design and administration continued to meet the PPCC award criteria during 2018 and plans to apply for the Public Pension Standards Award.

Acknowledgments

This report was made possible through the combined efforts of Pension Management Staff, the Controller's Office, and the City Treasurer. We wish to express our appreciation to all members of the department as well as other City staff who assisted and contributed to its preparation.

Respectfully submitted,

Shawn Henning
Director of Finance

Pam Beim
Pension Manager

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Wichita Retirement Systems

Kansas

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2016

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2017

Presented to

Wichita Retirement Systems

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

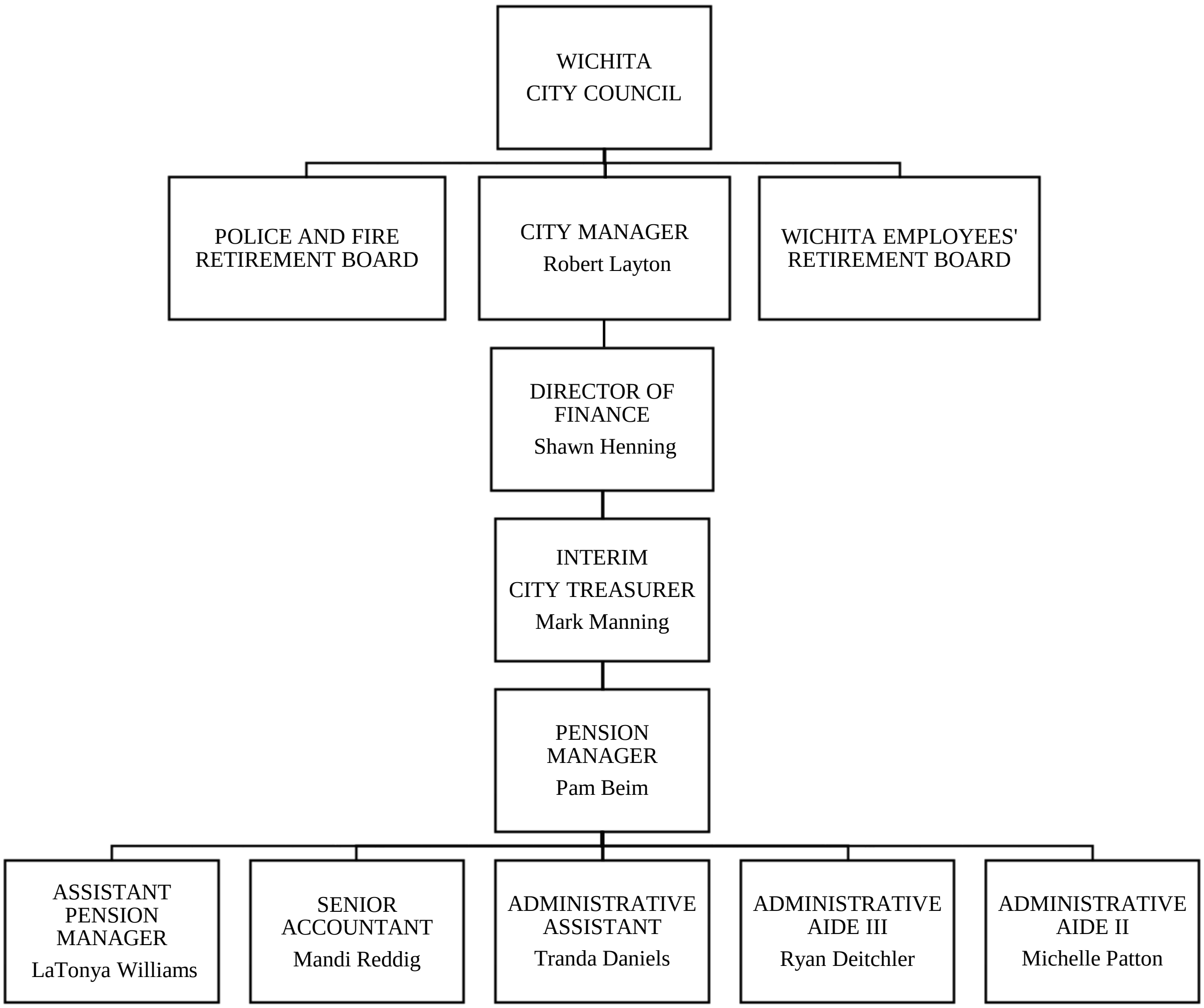
National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H Winkle

Alan H. Winkle
Program Administrator

WICHITA EMPLOYEES' RETIREMENT SYSTEM
BOARD OF TRUSTEES

POLICE AND FIRE RETIREMENT SYSTEM
BOARD OF TRUSTEES


WICHITA
CITY COUNCIL
POLICE AND FIRE
RETIREMENT BOARD
CITY MANAGER
Robert Layton
WICHITA EMPLOYEES'
RETIREMENT BOARD
DIRECTOR OF
FINANCE
Shawn Henning
INTERIM
CITY TREASURER
Mark Manning
PENSION
MANAGER
Pam Beim
ASSISTANT
PENSION
MANAGER
LaTonya Williams
SENIOR
ACCOUNTANT
Mandi Reddig
ADMINISTRATIVE
ASSISTANT
Tranda Daniels
ADMINISTRATIVE
AIDE III
Ryan Deitchler
ADMINISTRATIVE
AIDE II
Michelle Patton

ACTUARY
Cavanaugh Macdonald Consulting, LLC
3906 Raynor Pkwy, Suite 106
Bellevue, Nebraska 68123

CUSTODY INSTITUTION
State Street Bank and Trust Company
801 Pennsylvania Ave
Kansas City, MO 64105

DEFINED CONTRIBUTION PARTICIPANT ACCOUNTING
Northeast Retirement Services
12 Gill Street, Suite 2600
Woburn, Massachusetts 01801

FINANCIAL CONSULTANT
Callan Associates, Inc.
1900 16th Street, Suite 1175
Denver, Colorado 80202

INDEPENDENT AUDITORS
Allen, Gibbs & Houlik, L.C.
Epic Center, 301 N. Main Street, Suite 1700
Wichita, Kansas 67202

LEGAL SERVICES
City of Wichita, Law Department
455 N. Main, 13th Floor
Wichita, Kansas 67202

LEGAL SERVICES
Ice Miller, L.L.P.
One American Square, Suite 3100
Indianapolis, Indiana 46282

PARTICIPANT EDUCATION
NestEgg Consulting, Inc.
125 N. Market Street, Suite 1050
Wichita, Kansas 67202

A list of professional investment managers and their fees are presented on page B-9. A schedule of brokerage commissions is presented on page B-10.

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FINANCIAL SECTION

AGH CPAs & ADVISORS

INDEPENDENT AUDITOR'S REPORT

The Boards of Trustees
Wichita Retirement Systems
Wichita, Kansas

Report on the Financial Statements

We have audited the accompanying statement of fiduciary net position of the Wichita Retirement Systems of the City of Wichita, Kansas (the Systems) as of December 31, 2017, and the related statement of changes in fiduciary net position and the related notes to the financial statements, which collectively comprise the Systems' 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 and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. 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.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Systems as of December 31, 2017, and the changes in the Systems' financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Systems' 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 28, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

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

Other Matters

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

Supplementary and Other Information
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Systems' basic financial statements. The accompanying supporting schedules on pages A-35 and A-36, and the introductory, investment, actuarial and statistical sections as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting schedules on pages A-35 and A-36 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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, such information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 27, 2018 on our consideration of the Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Systems' internal control over financial reporting and compliance.

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

June 27, 2018
Wichita, Kansas

This management discussion and analysis (MD&A) provides an overview and analysis of the Wichita Retirement Systems' (WRS) financial activities and performance for the fiscal year ended December 31, 2017. The management discussion and analysis is presented in conjunction with the transmittal letter at the front of this report and the WRS' financial statements, which follow this section.

OVERVIEW OF THE FINANCIAL STATEMENTS

The two basic financial statements of the WRS are the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position which may be found on pages A-6 and A-7. The statements are prepared in conformity with accounting principles generally accepted in the United States.

The Statement of Fiduciary Net Position is presented for the pension trust funds as of December 31, 2017, with combined total comparative information as of December 31, 2016. The Statement of Fiduciary Net Position presents information on all of the Systems' assets and liabilities, with the difference between the two reported as net position restricted for pensions. The statement is a snapshot of the financial position of the Systems at the close of the fiscal year. The Statement of Changes in Fiduciary Net Position is presented for the pension trust funds for the year ended December 31, 2017, with combined total comparative information for the year ended December 31, 2016. This statement presents information showing how the Systems' net position changed during the fiscal year. Notes to the Financial Statements beginning on page A-8 provide additional information, which is not included in the statements themselves, but is essential for a full understanding of the financial statements.

Required Supplementary Information consists of schedules and related notes concerning significant actuarial information and assumptions. Beginning on page A-26, these schedules and notes emphasize the long-term nature of pension plans and show the progress of each system in accumulating sufficient assets to pay future benefits.

- The Schedules of Changes in the Employer's Net Pension Liability and Related Ratios presents detailed information about the pension liabilities for which the pension plans' assets are held and managed. The schedules are intended to assist financial statement users in understanding the magnitude of the pension liability and the degree to which net position restricted for pensions is sufficient to cover the liability for each plan.
- The Schedules of Employer Contributions show the amount of actuarially determined required contributions relative to the actual contributions made during the year. These schedules also present covered payroll and contributions as a percentage of covered payroll to provide an economic context for the amounts of contributions reported for each plan.
- The Schedule of Investment Returns shows the money-weighted rate of return on investments, net of investment expense. The money-weighted rate of return is a method for calculating investment performance on pension investments that adjusts for the changing amounts actually invested.

The Supplementary Information includes a Schedule of Administrative Expenses, a Schedule of Investment Expenses and a Schedule of Payments to Consultants Other Than Investment Advisors to show detail of the administrative and investment costs to operate the Systems.

FINANCIAL STATEMENT ANALYSIS

Fiduciary Net Position. Total fiduciary net position increased by $150.4 million during the 2017 fiscal year. This change primarily consisted of a $153.1 million increase in cash and investments, excluding securities lending investments, primarily due to the net appreciation in the fair value of investment holdings. The investment return was 17.76% for the year ended December 31, 2017. Investment returns by asset class were: domestic equity 22.29%, international equity 26.18%, fixed income 5.52%, real estate 6.84%, timber 4.23% and commodities 9.87%.

As of December 31, 2017, the Systems had no securities lending transactions in preparation for the Systems' transition to a new custodial bank in 2018.

Comparative summary financial statements for the years ended December 31, 2017 and 2016 are presented in the accompanying tables:

Summary of Fiduciary Net Position
As of December 31,

	2017	2016	Increase (Decrease)
ASSETS			
Total cash and investments	$ 1,332,070,154	$ 1,178,926,022	$ 153,144,132
Total receivables	46,556,228	49,413,481	(2,857,253)
Investment in securities lending collateral	-	49,160,155	(49,160,155)
Total assets	1,378,626,382	1,277,499,658	101,126,724
LIABILITIES			
Accounts payable and accrued expenses	1,563,126	1,860,590	(297,464)
Investement purchases pending	55,705,081	55,537,979	167,102
Securities lending obligations	-	49,160,155	(49,160,155)
Total liabilities	57,268,207	106,558,724	(49,290,517)
FIDUCIARY NET POSITION	$ 1,321,358,175	$ 1,170,940,934	$ 150,417,241

Summary of Changes in Fiduciary Net Position
For the year ended December 31,

	2017	2016	Increase (Decrease)
ADDITIONS			
Contributions	$ 32,009,765	$ 30,357,965	$ 1,651,800
Net Investement income	196,166,844	76,326,237	119,840,607
Reclassifications due to participant conversion	191,292	244,793	(53,501)
Total additions	228,367,901	106,928,995	121,438,906
DEDUCTIONS			
Pension benefits	75,425,270	73,717,987	1,707,283
Pension administration	1,197,745	1,171,366	26,379
Depreciation	-	-	-
Employee contributions refunded	1,136,353	1,593,405	(457,052)
Reclassifications due to participant conversion	191,292	244,793	(53,501)
Total deductions	77,950,660	76,727,551	1,223,109
Net Increase (decrease) in net position	150,417,241	30,201,444	120,215,797
Fiduciary net position - beginning	1,170,940,934	1,140,739,490	30,201,444
Fiduciary net position - ending	$ 1,321,358,175	$ 1,170,940,934	$ 150,417,241

Changes in Fiduciary Net Position Additions to fiduciary net position that are needed to finance Plan benefit obligations come primarily from employer and employee contributions and net earnings on investments. For the year ended December 31, 2017, total additions were $228.4 million, which is approximately a $121.5 million increase from the 2016 total additions of $106.9 million. Employer and employee contributions remained consistent with amounts reported in 2016. However, net investment income increased by $119.8 million from the prior year.

Deductions from fiduciary net position are consistent with characteristics of a mature pension system. Pension benefits increased from $73.7 million in 2016 to $75.4 million in 2017, or approximately $1.7 million or 2.3%. This amount includes DROP and Back DROP payments, which were $5.4 million or 11.8% lower than 2016 levels.

CONTACTING THE WICHITA RETIREMENT SYSTEM

This financial report is designed to provide a general overview of the WRS finances for individuals with such an interest. Additional information is provided within the Notes to the Financial Statements. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Management Office, City of Wichita, 455 N. Main St., 12th Floor Wichita, KS 67202.

WICHITA RETIREMENT SYSTEMS
STATEMENT OF FIDUCIARY NET POSITION

December 31, 2017
(with comparative totals as of December 31, 2016)

	Police and Fire Retirement System	Employees' Retirement System	Employees' Retirement Plan 3b	Totals 2017	Totals 2016
ASSETS					
Cash and temporary investments	$ 14,804	$ 57,884	$ 40	$ 72,728	$ 1,190,417
Receivables:					
Investment sales pending	21,675,978	20,907,584	33,566	42,617,128	46,549,318
Interest and dividends	1,088,037	1,026,958	5,280	2,120,275	2,175,632
Other receivables	1,017,587	786,003	15,235	1,818,825	688,531
Total receivables	23,781,602	22,720,545	54,081	46,556,228	49,413,481
Investments, at fair value:					
Government short-term investment fund	15,973,179	15,111,102	419,879	31,504,160	30,649,710
Equity					
Common stock	284,380,349	231,006,589	1,956,687	517,343,625	465,300,294
Common stock unit	540,773	441,874	4,037	986,684	705,158
Depository receipts	6,993,931	5,666,284	47,145	12,707,360	9,637,054
Limited partnership units	36,684,643	36,011,158	3,802	72,699,603	71,405,551
Mutual funds	151,345,004	125,971,693	5,466,191	282,782,888	233,843,991
Non-security asset-stock	41,440,131	40,685,709	111,573	82,237,413	60,649,590
Preferred stock	559,553	549,365	1,507	1,110,425	1,599,935
Real estate investment trust	38,493,712	39,573,352	43,691	78,110,755	66,944,920
Warrants	1,122	776	12	1,910	-
Commodities	19,338,395	18,896,907	-	38,235,302	34,799,688
Fixed income					
Auto loan receivable	1,679,583	1,609,754	-	3,289,337	2,608,369
CMO	8,322,941	8,293,232	43,106	16,659,279	17,263,134
Corporate bonds	43,373,387	43,015,901	197,019	86,586,307	86,013,188
Credit default swaps, net	(41,987)	(41,963)	(234)	(84,184)	(36,122)
FHLMC	5,763,048	5,759,636	32,186	11,554,870	9,206,886
FNMA	12,172,622	12,165,414	67,983	24,406,019	19,989,307
GNMA I	499,897	499,601	2,792	1,002,290	1,361,548
GNMA II	2,674,816	2,673,234	14,938	5,362,988	6,814,824
Government issues	29,558,725	29,018,515	93,850	58,671,090	52,530,552
Interest rate swaps, net	30,809	30,791	172	61,772	333,076
Municipals	268,238	268,079	1,498	537,815	503,694
Other asset backed	3,072,775	3,016,614	9,756	6,099,145	5,589,011
Options					
Fixed income	(6,107)	(5,854)	-	(11,961)	83,648
Foreign currency	37,835	36,263	-	74,098	(30,863)
Future	34,221	34,045	170	68,436	(30,538)
Securities lending short-term collateral investment pool	-	-	-	-	49,160,155
Total investments	703,191,595	620,288,071	8,517,760	1,331,997,426	1,226,895,760
Capital assets:					
Pension software	448,990	833,838	-	1,282,828	1,282,828
Accumulated depreciation	(448,990)	(833,838)	-	(1,282,828)	(1,282,828)
Capital assets, net of depreciation	-	-	-	-	-
Total assets	726,988,001	643,066,500	8,571,881	1,378,626,382	1,277,499,658
LIABILITIES					
Accounts payable and accrued payroll	656,507	902,680	3,939	1,563,126	1,860,590
Investment purchases pending	28,247,545	27,385,788	71,748	55,705,081	55,537,979
Securities lending obligations	-	-	-	-	49,160,155
Total liabilities	28,904,052	28,288,468	75,687	57,268,207	106,558,724
NET POSITION					
Restricted for pensions	$ 698,083,949	$ 614,778,032	$ 8,496,194	$ 1,321,358,175	$ 1,170,940,934

The accompanying notes to the finanical statements are an integral part of this statement.

WICHITA RETIREMENT SYSTEMS
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the year ended December 31, 2017
(with comparative totals for the year ended December 31, 2016)

	Police and Fire Retirement System	Employees' Retirement System	Employees' Retirement Plan 3b	Totals 2017	Totals 2016
ADDITIONS					
Contributions:					
Employer	$ 13,369,785	$ 9,642,540	$ 200,003	$ 23,212,328	$ 21,735,491
Employee	4,915,378	3,682,056	200,003	8,797,437	8,622,474
Total contributions	18,285,163	13,324,596	400,006	32,009,765	30,357,965
Investment income:					
From investing activities:					
Net appreciation in the fair value of investments	95,565,916	84,913,719	1,156,446	181,636,081	59,289,968
Interest	4,500,604	4,051,691	16,715	8,569,010	9,206,700
Dividends	6,622,334	5,876,959	26,002	12,525,295	13,348,582
Commission recapture	13,491	11,967	63	25,521	31,262
Total investing activity income	106,702,345	94,854,336	1,199,226	202,755,907	81,876,512
Less investment expense	3,589,650	3,190,615	43,608	6,823,873	6,012,144
Net income from investing activities	103,112,695	91,663,721	1,155,618	195,932,034	75,864,368
From securities lending activities:					
Securities lending income	291,671	259,065	2,278	553,014	701,305
Less securities lending expense:					
Borrower rebates	128,537	113,986	1,527	244,050	59,791
Management fees	39,150	34,827	177	74,154	179,645
Total securities lending expenses	167,687	148,813	1,704	318,204	239,436
Net income from securities lending activities	123,984	110,252	574	234,810	461,869
Total net investment income	103,236,679	91,773,973	1,156,192	196,166,844	76,326,237
Reclassifications due to participant conversion	-	-	191,292	191,292	244,793
Total additions	121,521,842	105,098,569	1,747,490	228,367,901	106,928,995
DEDUCTIONS					
Pension benefits	36,756,558	38,668,712	-	75,425,270	73,717,987
Pension administration	554,641	633,379	9,725	1,197,745	1,171,366
Employee contributions refunded	173,975	614,103	348,275	1,136,353	1,593,405
Reclassifications due to participant conversion	-	191,292	-	191,292	244,793
Total deductions	37,485,174	40,107,486	358,000	77,950,660	76,727,551
Net increase in net position	84,036,668	64,991,083	1,389,490	150,417,241	30,201,444
Net position, beginning	614,047,281	549,786,949	7,106,704	1,170,940,934	1,140,739,490
Net position, ending	$ 698,083,949	$ 614,778,032	$ 8,496,194	$ 1,321,358,175	$ 1,170,940,934

The accompanying notes to the finanical statements are an integral part of this statement.

1. Summary of Significant Accounting Policies

A. Reporting Entity

The Wichita Employees' Retirement System, the Wichita Employees' Retirement System Plan 3b and the Police and Fire Retirement System of Wichita are reported as pension trust funds of the City of Wichita, Kansas and its component units (the reporting entity). The plans consist of two single-employer defined benefit pension plans and a single-employer defined contribution plan, covering all full-time employees.

The defined benefit plans include the Wichita Employees' Retirement System (WERS) and the Police and Fire Retirement System (PFRS). A separate Board of Trustees administers each System. The single-employer defined contribution plan consists of the Wichita Employees' Retirement System Plan 3b, which is also administered by the Wichita Employees' Retirement System Board of Trustees.

The WERS Board of Trustees is comprised of 16 members, including the City Manager or the City Manager's designee, one employee appointed by the City Manager, seven members appointed by the City Council and seven employees elected by the WERS employee members. The PFRS Board of Trustees is comprised of 16 members, including the City Manager or the City Manager's designee, the Chief of the Police Department, the Chief of the Fire Department, seven members appointed by the City Council, three fire officers elected by PFRS employee members in the Fire Department or the Airport and three police officers elected by PFRS employee members in the Police Department.

B. Measurement Focus and Basis of Accounting

The Wichita Employees' Retirement System, the Wichita Employees' Retirement System Plan 3b and the Police and Fire Retirement System are reported as pension trust funds of the City of Wichita, Kansas in the City's financial statements using the economic resources measurement focus and the accrual basis of accounting. Employee and employer contributions are recognized as revenues in the period in which employee services are performed. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

C. Investments

Investments are reported at fair value. The Systems invest in real estate through real estate investment trusts, timber through limited partnerships, commodities, Treasury strips and various asset-backed securities, such as collateralized mortgage obligations and credit card trusts. Short-term investments are reported at cost plus accrued interest, which approximates fair value. Investments traded on national or international exchanges are valued at the last trade price of the day. If no close price exists, then a bid price is used. Mortgages are valued on the basis of future principal and interest payments, and are discounted at prevailing interest rates for similar investments. The fair value of real estate and timber investments are estimated using the net asset value of the shares owned in each fund. Investments that do not have an established market are reported at their estimated fair value.

D. Capital Assets

Capital assets include hardware and software. Capital assets are defined as assets with an initial individual minimum cost of $5,000. Capital assets are valued at historical cost or estimated historical cost (if actual historical cost is not available). The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the life of an asset are not capitalized. Major outlays for capital assets and improvements are capitalized as projects are constructed. Capital assets are depreciated using the straight-line method over useful lives of one to 33 years for office equipment and seven to 20 years for data processing software.

E. Management of Plan Assets

The Boards of Trustees of the Systems have contractual arrangements with independent money managers for investment of the assets of the Systems. The firms have been granted discretionary authority concerning purchases and sales of investments within guidelines established by City Ordinances and the Strategic Plan and Investment Policies adopted by the Boards of Trustees. The Boards of Trustees of the Systems also have contractual arrangements with independent firms which monitor the investment decisions of the Systems' investment managers.

F. Estimates

Preparation of financial statements in conformity with Generally Accepted Accounting Principles (GAAP) requires making estimates and assumptions that affect: (1) the reported amounts of assets and liabilities, (2) disclosures such as contingencies and (3) the reported amounts of revenues and expenses included in the financial statements. Actual results could differ from those estimates. Some of the more significant estimates include the valuation of certain investments described in the Notes to the Financial Statements and the actuarial assumptions used in calculating the total pension liability and net pension liability.

G. Prior Year Comparative Information

The basic financial statements include certain prior year comparative information that is summarized in total, but not at the level of detail required for a presentation in conformity with GAAP. Accordingly, such information should be read in conjunction with the Systems' financial statements for the year ended December 31, 2016, from which the summarized information has been derived.

2. Cash, Investments and Securities Lending

City Ordinance (49-036; Section 2.28.090) authorizes the Wichita Employees' Retirement System and City Charter Ordinance (215; Section 12) authorizes the Police and Fire Retirement System to invest trust fund assets in accordance with the prudent person rule, subject to the following limitations: (1) the proportion of funds invested in corporate preferred and common stock shall not exceed 70% and (2) the proportion of funds invested in foreign securities shall not exceed 35%. Additionally, the Systems are not permitted to invest directly or indirectly in any:

1. Real estate, except in certain pooled arrangements with the amount of such investment not to exceed 10% of the Fund;
2. Private equity, except in a commingled fund-of-funds vehicle operated by a registered investment advisor or a bank with the amount of such investment not to exceed 10% of the Fund;
3. Timber, except in a commingled fund vehicle operated by a registered investment advisor or a bank. The amount of such investment shall not exceed 10% of the Fund;
4. Mortgages secured by real estate, except insured mortgages under Titles 203, 207, 220 and 221 of the Federal Housing Act;
5. Oil and gas leases or royalties;
6. Commodities (including, but not limited to, wheat, gold, gasoline, options or financial futures); provided however, that the restriction on investments contained in this paragraph shall not apply to funds which are invested in a mutual fund, separate account or commingled fund operated by a registered investment advisor or insurance company; or
7. Letter stocks.

With the exception of the $72,728 held in the City's pooled funds, as of December 31, 2017, all of the deposits and investments of the Wichita Employees' and Police and Fire Retirement Systems are held in a joint investment fund that is invested by outside money managers and are held under a custodial agreement. The Boards of Trustees have adopted the Strategic Plan and Investment Policies which set forth in detail the asset allocation for the fund and restrictions applicable to specific investment types to mitigate risk. The policies permit investment in six asset types: domestic equities, international equities, fixed income, real estate, timber and commodities.

With the assistance of the Investment Consultant, the Joint Investment Committee (JIC) establishes the investment policies which are reviewed annually. In 2017, there were no asset allocation changes nor significant investment policy changes made during the reporting period.

The investments of the Wichita Retirement Systems (WRS) on December 31, 2017 are listed in the accompanying table.

The pension funds invest in various asset-backed securities such as collateralized mortgage obligations (CMOs) and credit card trusts to maximize yields and reduce the impact of interest rate changes. These securities are based on cash flows from principal and interest payments on the underlying assets. For example, CMOs break up the cash flows from mortgages into categories with defined risk and return characteristics called tranches. The tranches are differentiated by when the principal payments are received from the mortgage pool. Changes in interest and mortgage prepayment rates may affect the amount and timing of cash flows, which would also affect the reported estimated fair values. The pension funds utilize a combination of asset-backed securities, which vary in their degree of volatility. Although considerable variability is inherent in such estimates, management believes the estimated fair values are reasonable estimates.

Type of Investment	Fair Value
Government short-term investment fund	$ 31,504,160
Common stock	517,343,625
Common stock unit	986,684
Depository receipts	12,707,360
Limited partnership units	72,699,603
Mutual funds	282,782,888
Non-security asset-stock	82,237,413
Preferred stock	1,110,425
Real estate investment trusts	78,110,755
Warrants	1,910
Commodities	38,235,302
Auto loan receivable	3,289,337
CMO	16,659,279
Corporate bonds	86,586,307
Credit default swaps, net	(84,184)
FHLMC	11,554,870
FNMA	24,406,019
GNMA I	1,002,290
GNMA II	5,362,988
Government issues	58,671,090
Interest rate swaps, net	61,772
Municipals	537,815
Other asset-backed	6,099,145
Fixed income options	(11,961)
Foreign currency options	74,098
Future options	68,436
Total investments	$ 1,331,997,426

The pension funds also invest in real estate through real estate investment trusts (REITs).The fair values of these investments are estimated using the net asset value of the Systems' shares owned in each trust. Market conditions have had an impact on the estimated fair value of real estate investments. Restrictions on the availability of real estate financing, as well as economic uncertainties, have affected the volume of purchase and sale transactions. As a result, the estimates and assumptions used in determining the fair values of the real estate investments are inherently subject to uncertainty.

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Fair Value Measurement:

As a retirement defined benefit pension plan, the Systems hold significant amounts of investments that are measured at fair value on a recurring basis. The framework for measuring fair value provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices for identical assets in active markets that can be assessed at the measurement date (Level 1) and the lowest priority to unobservable inputs (Level 3).

The three levels of the fair value hierarchy under GASB Statement No. 72 are described as follows:

- Level 1 – Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that a government can access at the measurement date.
- 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 assets or liabilities.
- Level 3 – Unobservable inputs which are supported by little or no market activity and are significant to the fair value of the assets or liabilities.

Specific investments that are measured using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. Such investments are identified in the accompanying tables as Net Asset Value (NAV).

The plan categorizes its fair value measurements within the fair value hierarchy established by GAAP.

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The fair value measurements for the investments of the Wichita Retirement Systems (WRS) on December 31, 2017 are listed in the accompanying table.

	12/31/2017	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs
Investments by fair value level:				
Cash equivalents:				
STIF-type instruments	$ 30,244,895	$ -	$ 30,244,895	$ -
Foreign currency	1,259,265	1,259,265	-	-
Total cash equivalents	31,504,160	1,259,265	30,244,895	-
Equities:				
Common stock	517,343,625	517,343,625	-	-
Common stock unit	986,684	986,684	-	-
Commodities	38,235,302	-	38,235,302	-
Depository receipts	12,707,360	12,707,360	-	-
Limited partnership units	72,699,603	1,123,037	-	71,576,566
Mutual funds	230,266,887	1,185,564	229,081,323	-
Preferred stock	1,110,425	1,110,425	-	-
Real estate investment trusts	35,006,935	9,041,350	-	25,965,585
Warrants	1,910	1,910	-	-
Total equities	908,358,731	543,499,955	267,316,625	97,542,151
Fixed Income:				
Auto loan receivable	3,289,337	-	3,173,717	115,620
CMO	16,659,279	-	16,659,279	-
Corporate bonds	86,586,307	-	86,586,307	-
FHLMC	11,554,870	-	11,554,870	-
FNMA	24,406,019	-	24,406,019	-
GNMA I	1,002,290	-	1,002,290	-
GNMA II	5,362,988	-	5,362,988	-
Government issues	58,671,090	-	58,671,090	-
Municipals	537,815	-	537,815	-
Other asset-backed	6,099,145	-	6,099,145	-
Total fixed income	214,169,140	-	214,053,520	115,620
Total investments by fair value level	1,154,032,031	$ 544,759,220	$ 511,615,040	$ 97,657,771
Investments measured at net asset value (NAV):				
Mutual funds	52,516,001			
Non-security asset-stock	82,237,413			
Real estate investment trusts	43,103,820			
Total investments measured at NAV	177,857,234			
Investment derivative instruments:				
Credit default swaps, net	(84,184)	$ -	$ (84,184)	$ -
Interest rate swaps, net	61,772	-	61,772	-
Fixed income options	(11,961)	-	(11,961)	-
Foreign currency options	74,098	-	74,098	-
Futures options	68,436	68,436	-	-
Total investment derivative instruments	108,161	$ 68,436	$ 39,725	$ -
Total investments	$1,331,997,426			

Debt, equity and other securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Equity securities classified as Level 2 of the fair value hierarchy are traded on inactive markets or valued by reference to similar instruments using (1) marked based-factors, such as credit, liquidity and interest rate conditions, and (2) issuer-specific factors, such as creditworthiness of the issuer and likelihood of full repayment at maturity. Fixed income securities classified as Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Equity securities classified as Level 3 of the fair value hierarchy are primarily made up of timber or real estate investments. Limited partnership units and real estate investment trusts are valued based upon recent independent valuations prepared by outside appraisers. The outside appraisers utilized the cost, sales comparison and income capitalization approaches to estimate the fair value of the timber or real estate investments. The significant unobservable inputs utilized in the appraisals are primarily related to the discount rates used to discount the projected future cash flows as related to land and timber prices or mortgage loans. Fixed income securities classified as Level 3 are those in inactive markets where prices have been determined to be stale and do not meet observable Level 2 criteria.

Derivative instruments classified as Level 1 of the fair value hierarchy include forwards and options which are traded on active exchanges. Derivative instruments classified as Level 2 of the fair value hierarchy are valued using a market approach. Options contracts derive their value from underlying asset prices, indices, reference rates and other inputs or a combination of these factors. These contracts are normally valued on the basis of pricing service providers or broker dealer quotations. Depending on the product and the terms of the transaction, the value of the financial derivative instruments can be estimated by a pricing service provider using a series of techniques, including simulation pricing models. The pricing models are inputs that are observed from actively quoted markets such as issuer details, indices, spreads, interest rates, yield curves and exchange rates. For centrally cleared credit default swaps, the clearing facility requires its members to provide actionable price levels across complete term structures. These levels along with external third party prices are used to produce daily settlement prices. Centrally cleared interest rate swaps are valued using a pricing model that references the underlying rates including the overnight index swap rate and London Interbank Offered Rate (LIBOR) forward rate to produce the daily settlement price.

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Investments Measured at Net Asset Value (NAV):	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Mutual fund	$ 52,516,001	-	1st calendar day of the month	7 business days
Non-security asset-stock	82,237,413	-	15th day of the month	15 calendar days
Real estate investment trusts	43,103,820	-	Quarterly	45 days
Total investments measured at the NAV	$ 177,857,234	-		

Net Asset Value: The Wichita Retirement Systems (WRS) reports the following types of investments valued at Net Asset Value (NAV).

Mutual fund - The Systems have one fund manager that has mutual fund investments measured at the NAV. This investment is an international small cap equity strategy that seeks long-term capital appreciation by investing primarily in equity securities on non-U.S. issuers with equity market capitalizations of $2.5 billion or less at the time of purchase. Diversification percentages are maintained and measurement is done at the time of purchase.

Non-security asset-stock – This includes one fund manager with non-security asset-stock investments whose objective is to outperform the MSCI Emerging Markets Index (the “Benchmark”) by an average of 250 basis points per year (gross of fees) over a full market cycle.

Real estate investment trusts– The Systems have one fund manager that has REITs investments measured at NAV. The REITs apply a focused Sustainability & Environmental, Social and Governance (Sustainability & ESG) investment strategy designed to manage risk, increase efficiency and satisfy tenants.

Custodial Credit Risk: The custodial credit risk for deposits is the risk that in the event of a bank failure, the WRS’ deposits may not be recovered. On December 31, 2017, the WRS’ cash deposits in the amount of $72,728 were included in the City’s pooled cash and temporary investments. The WRS’ debt securities investments were registered in the name of WRS and were held in the possession of the WRS’ custodial bank, State Street. Amounts held in the City’s pooled cash and temporary investments were fully collateralized as of December 31, 2017. Additional information about the City’s pooled cash and investments is available in the City’s separately issued Comprehensive Annual Financial Report, available upon request from the Pension Management Office.

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Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Interest rate risk is managed using the modified duration methodology. Duration is a measure of fixed income cash flow using present values, weighted for cash flows as a percentage of the investment's full price. The modified duration methodology estimates the sensitivity of a bond's price to interest rate changes. The WRS manage their exposure to fair value loss arising from increasing interest rates by complying with the following policies:

1. Fixed income managers have full discretion over the issuers selected and may hold any mix of fixed income securities and cash equivalents.
2. Portfolio duration for nominal fixed income managers must not be less than 80% or more than 120% of the duration of the Barclays Capital Aggregate Bond Index (Index), unless the Joint Investment Committee prospectively grants a written exception. As of December 31, 2017, the duration of the Index was 5.98 years, which equated to a minimum and maximum range for each fixed income portfolio of 4.78 years and 7.18 years, respectively.

Investment Type	Fair Value	Percent of all Fixed Income Assets	Weighted Average Modified Duration (years)
Government securities long-term	$ 71,268,199	28.0%	9.1
Corporate debt instruments, long-term	33,731,053	13.3%	8.1
Mortgage and asset-backed securities	61,303,528	24.1%	3.4
Global fixed income	47,974,521	18.8%	7.3
Actively managed investments	214,277,301	84.2%	6.9
Government short-term investment fund	31,504,160	12.4%	-
Pooled high-yield fixed income securities	7,927,398	3.1%	3.2
Pooled international fixed income securities	825,290	0.3%	1.6
Total investment in debt securities	$ 254,534,149	100.0%	

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Credit Risk of Debt Securities: Credit risk is the risk that an issuer of an investment will not fulfill its obligations. The WRS manages exposure to investment credit risk by adhering to the following policies: (1) for active core domestic fixed income investments, at the time of purchase, bonds and preferred stocks must be rated at least "A2/A/A" or higher using the middle rating of Moody's, Standard and Poor's and Fitch after dropping the highest and lowest available ratings. When a rating from only two agencies is available, the lower ("more conservative") rating is used. When a rating from only one agency is available, that rating is used to determine credit quality; and (2) for core-plus domestic fixed income investments, the weighted average credit quality of the portfolio will not fall below "A2/A/A" or equivalent; when determining credit quality, the middle rating of Moody's, Standard and Poor's and Fitch is used after dropping the highest and lowest available ratings. When a rating from only two agencies is available, the lower ("more conservative") rating is used. When a rating from only one agency is available, that rating is used to determine credit quality. Throughout 2017, no securities were purchased that were below the established credit quality minimum in the active core portfolio and the weighted average credit quality of the active core plus portfolio did not fall below the established credit quality rating. The accompanying table shows the debt investments held by the WRS on December 31, 2017 and their respective ratings by Standard and Poor's or an equivalent nationally recognized statistical rating organization.

Quality Rating	Total Debt Securities
AAA	$ 12,763,494
AA+	85,660,515
AA	7,387,435
AA-	6,969,627
A+	10,510,438
A	14,709,325
A-	20,095,882
BBB+	18,835,138
BBB	9,275,953
BBB-	8,452,002
BB+	5,304,783
BB	3,252,784
BB-	9,660,059
B+	2,329,538
B	253,525
B-	1,404,718
CCC+	57,324
CCC	1,136,077
CCC-	274,182
CC	352,556
C	358,896
D	378,890
Not rated	3,606,848
Total credit risk debt securities	223,029,989
Government short-term investment fund*	31,504,160
Total investment in debt securities	$ 254,534,149

*While the Government Short-Term Investment Fund itself is not rated, the average quality of the holdings of the Government Short-Term Investment Fund on December 31, 2017 was A1+P1.

Credit risk for investment derivative instruments results from counterparty risk assumed by the WRS. This is essentially the risk that the counterparty to a WRS' transaction will be unable to meet its obligation. Information regarding the WRS' credit risk related to derivatives is found in the derivatives disclosures that follow.

Concentration of Credit Risk: Concentration of credit risk is the risk of loss that may be attributed to the magnitude of an entity's investment with a single issuer. The WRS' investment in debt securities had no single issuer of investments that represented 5% or more of the plan assets, with exception of investments issued or implicitly guaranteed by the U.S. government and investments in mutual funds, as delineated in the WRS' investment policy.

Rate of Return: The annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 17.4% for the year ended December 31, 2017. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

Derivatives: Investment derivative instruments are financial contracts for which the value of the contract is dependent on the values of one or more underlying asset, reference rate or financial index. They include futures contracts, swap contracts, options contracts, rights and forward foreign currency exchanges. While the WRS has no formal policy specific to investment derivatives, the WRS, through its external investment managers, held a variety of these instruments as of December 31, 2017. The WRS enters into these investment derivative instruments primarily to enhance the performance, reduce the volatility of its investment portfolio and to manage interest rate risk. The investment derivative instruments held by the WRS on and during the year ended December 31, 2017 are shown on the following page. The notional values associated with these derivative instruments are generally not recorded in the financial statements; however, the exposure amounts on these instruments are included in the fair value of investments in the Statement of Fiduciary Net Position and the total changes in fair value for the year are included as investment income (loss) in the Statement of Changes in Fiduciary Net Position.

The fair value of derivative investments is based on the exchanges when available. When an exchange is not available, estimated fair values are determined in good faith by using information from J.P. Morgan traders and other market participants, including methods and assumptions considering market conditions and risks existing at the date of the Statement of Fiduciary Net Position. Such methods and assumptions incorporate standard valuation conventions and techniques, such as discounted cash flow analysis and option pricing models. All methods utilized to estimate fair values result only in general approximations of value.

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Classification and Type	Change in Fair Value	Notional Value	Exposure/ Fair Value	Counterparty (Counterparty Rating)
Investment revenue:				
Credit default swaps written	$ 15,985	$ 3,420,000	$ 76,840	Goldman Sachs CME (BBB+)
Credit default swaps written	5,524	-	-	JPMorgan Chase Bank (A+)
Credit default swaps written	2,082	130,000	3,069	N/A
Fixed income futures long	1,033,079	36,522,814	-	N/A
Fixed income options written	19,249	(1,400,000)	(18,200)	N/A
Foreign currency options written	121,120	(3,192,386)	(10,358)	N/A
Futures options written	190,716	(153,500)	(20,184)	N/A
FX forwards	172	-	-	Brown Brothers Harriman + CO (NR)
FX forwards	354	-	-	Morgan Stanley Capital Services Inc (BBB+)
Pay fixed interest rate swaps	41,220	-	-	Bank of America CME (A-)
Rights	155	-	-	N/A
Investment loss:				N/A
Credit default swaps bought	(4,025)	-	-	Bank of America ICE (A-)
Credit default swaps bought	(17,884)	1,990,000	(164,093)	Goldman Sachs CME (BBB+)
Fixed income futures short	(274,293)	(68,255,717)	-	N/A
Fixed income options bought	(37,199)	2,700,000	6,239	N/A
Foreign currency futures long	(75)	-	-	N/A
Foreign currency futures short	(47,513)	(375,000)	-	N/A
Foreign currency options bought	(86,813)	5,970,348	84,456	N/A
Futures options bought	(234,489)	288,000	88,620	N/A
FX forwards	(59,675)	2,594,057	41,996	Bank of America, N.A. (A+)
FX forwards	(117,292)	4,231,576	(266,543)	Barclays Bank PLC Wholesale (A)
FX forwards	(6,224)	-	-	BNP Paribas SA (A)
FX forwards	(129,762)	6,521,183	7,875	Citibank N.A. (A+)
FX forwards	(1,790)	-	-	Credit Suisse International (A)
FX forwards	(738,318)	12,912,257	(179,030)	Goldman Sachs Bank USA (BBB+)
FX forwards	(35,239)	1,773,320	(7,650)	HSBC Bank USA (AA-)
FX forwards	(430,311)	9,262,204	(141,774)	JPMorgan Chase Bank (A+)
FX forwards	(131,672)	667,039	(20,719)	JPMorgan Chase Bank N.A. (A+)
FX forwards	(6)	5,050	(6)	Royal Bank of Canada UK (AA-)
FX forwards	(431,064)	-	-	UBS AG (A+)
Pay fixed interest rate swaps	-	2,434,950	-	Bank of America Intl NY United States (A-)
Pay fixed interest rate swaps	-	2,528,244	-	Bank of America LCH (A-)
Pay fixed interest rate swaps	(21,663)	3,992,604	57,644	Goldman Sachs CME (BBB+)
Receive fixed interest rate swaps	(64,982)	-	-	Bank of America CME (A-)
Receive fixed interest rate swaps	(2,713)	2,769,604	4,128	Goldman Sachs CME (BBB+)
Warrants	(454,118)	218	1,910	N/A
	$ (1,897,464)	$ 27,336,865	$ (455,780)	

Foreign Currency Risk: Currency risk arises due to foreign exchange rate fluctuations. The WRS' investment policies manage the exposure to foreign currency risk by allowing international securities investment managers to enter into forward exchange or future contracts on foreign currency provided such contracts have a maturity of less than one year. Currency contracts are only to be utilized for the settlement of securities transactions and defensive hedging of currency positions. The WRS' exposure to foreign currency risk on December 31, 2017 is presented in the accompanying table.

Currency	Cash and Cash Equivalents	Fixed Income	Equities
Argentine peso	$ 17,629	$ 1,063,418	$ -
Australian dollar	30	1,268,972	10,803,965
Brazilian real	-	1,402,631	-
Canadian dollar	21,540	1,671,718	-
Chilean peso	-	266,355	-
Danish krone	-	-	3,836,661
Euro	327,916	8,265,910	51,242,253
Hong Kong dollar	-	-	5,235,209
Hungarian forint	-	-	-
Indian rupee	-	84,921	-
Japanese yen	32,806	-	35,128,445
Mexican peso	288,503	2,389,450	-
New Zealand dollar	14,222	2,023,541	928,079
Norwegian krone	191	(3,542)	1,255,910
Polish zloty	16,404	-	-
Pound sterling	28,525	1,547,780	26,695,552
Russian ruble	20,672	549,458	-
Singapore dollar	-	-	937,231
South African rand	34,915	1,345,830	-
Swedish krona	37,345	880,814	1,571,918
Swiss franc	-	-	10,363,771
Turkish lira	5,461	425,276	-
Uruguayan peso	-	279,074	-
Yuan renminbi	25,449	358,592	-
International mutual funds (various currencies)	-	2,320,173	-
Total subject to foreign currency risk	$ 871,608	$ 26,140,371	$ 147,998,994

All forward foreign currency contracts are carried at fair value by the WRS. As of December 31, 2017, the Systems held forward currency contracts with an unrealized loss of $565,851. If held, sales of forward currency contracts are receivables and are reported as investment sales pending in the financial statements.

Securities Lending Transactions: Policies of the Board of Trustees for the Wichita Employees' Retirement and Police and Fire Retirement Systems permit the lending of securities to broker-dealers and other entities (borrowers) with a simultaneous agreement to return the collateral for the same securities in the future. The WRS' custodial bank, State Street, is the lending agent for the Systems' domestic securities for initial collateral of 102% of the fair value of the loaned securities, international equity securities for initial collateral of 105% of the fair value of such securities and the initial collateral received for loans of United Kingdom (UK) Gilts shall have a value of at least 102.5% of the fair value of such UK Gilts. Collateral may consist of cash (U.S. and foreign currency); securities issued or guaranteed by the U.S. government or its agencies or instrumentalities; irrevocable bank letters of credit issued by a person other than the securities borrower or affiliate, if determined appropriate by the agent under the securities lending programs it administers; and such other collateral as the parties may agree to in writing.

The collateral securities cannot be pledged or sold by the WRS unless the borrower defaults. The lending agent shall require additional collateral from the borrower whenever the value of loaned securities exceeds the value of the collateral in the agent's possession, so that collateral always equals or exceeds 100% of the fair value of the loaned securities. Contracts with the lending agent require them to indemnify the WRS, if the borrowers fail to return the securities (and if the collateral is inadequate to replace the securities lent) or fail to pay the WRS for income distributions by the securities' issuers while the securities are on loan.

As of December 31, 2017, the Systems had no securities lending transactions in preparation for the Systems' transition to a new custodial bank in 2018.

Other Risk Information: Recent market conditions have resulted in an unusually high degree of volatility and increased risks associated with certain investments held by the City, the Wichita Employees' Retirement System and the Police and Fire Retirement System. As a result, it is at least reasonably possible that changes in the fair values of investment securities will occur in the near term and such changes could materially affect the amounts reported in the financial statements. In addition, declines in the fair values of Systems' assets could ultimately affect the funded status of the WRS. The ultimate impact on the funded status will be determined based upon market conditions in effect when the annual valuation is performed.

3. Capital Assets

Capital asset activity for the year ended December 31, 2017 is presented in the following table (expressed in thousands of dollars).

	Beginning Balance	Increases	Decreases	Ending Balance
Pension administration hardware and software	$ 1,283	$ -	$ -	$ 1,283
Less: accumulated depreciation	(1,283)	-	-	(1,283)
Capital assets, net	$ -	$ -	$ -	$ -

4. Wichita Employees' Retirement System

Plan Description: The Wichita Employees' Retirement System (WERS) was established to provide retirement and survivor annuities, disability benefits, death benefits and other benefits for all regular full-time civilian employees of the reporting entity and their dependents. Plan 1 was established by City Ordinance on January 1, 1948 and became closed to new entrants prior to July 18, 1981. With the initiation of Plan 2, which was established by City Ordinance on July 18, 1981, all covered employees of Plan 1 were given the option of converting to the new plan. Plan 2 was closed to new entrants with the establishment of Plan 3 by City Ordinance, effective January 1, 1994.

Plan 3 was established by City Ordinance on April 9, 1993 and amended on February 8, 2000. The reporting entity's contributions and earnings for each employee are 25% vested after three years of service, 50% vested after five years and are fully vested after seven years of service. Upon completion of seven years of service, employees participating in Plan 3 automatically convert to participation in Plan 2 unless they make an irrevocable election to convert to Plan 3b, a defined contribution plan, within 90 days thereafter. Establishment of and amendments to the benefit provisions for the WERS are authorized by the City Council.

Benefits Provided: The primary benefits provided are retirement benefits. However, the System also provides ancillary benefits in the event of pre-retirement death, disability or termination of employment prior to meeting the eligibility requirements to retire.

Plan 1 members are eligible to retire at age 60 with seven years of actual service or at any age with 30 years of creditable service. Plan 2 members may retire at age 62 with seven years of actual service. Benefits for Plan 1 members are calculated using Final Average Salary (FAS), which is the member's compensation for the three highest consecutive years of service within the last 10 years, multiplied by the total years of creditable service and a factor of 2.5%, subject to a maximum of 75% of the FAS. Benefits for Plan 2 members are the same as Plan 1 except they are calculated using a factor of 2.25% instead of 2.5%. Benefits vest with seven years of actual service. The calculation is reduced with early retirement.

When a Plan 1 member has been retired for 12 months, the member receives an annual post-retirement adjustment of 3% of the original base amount of the benefit. The annual post-retirement adjustment for Plan 2 members is 2%.

As of December 31, 2017, the WERS plan membership consisted of the following:

Member Category	Plan 1	Plan 2	Plan 3	Total
Inactive employees or beneficiaries currently receiving benefits	691	725	-	1,416
Inactive employees entitled to but not yet receiving benefits	-	144	-	144
Active employees	3	891	647	1,541
Total membership	694	1,760	647	3,101

Deferred Retirement Option Plan (DROP) Provision: The benefit structure of both Plan 1 and Plan 2 include a Deferred Retirement Option Plan (DROP) provision. Members must be eligible to receive a service retirement benefit as of the DROP retirement date to participate in the DROP. The DROP period is one to 60 months. The monthly benefit amount is computed as of the DROP election date based on the final average salary and years of service as of that date. The benefit is paid into the member's notional DROP account during the deferral or DROP period. The member and City both continue to make the required contributions during the deferral period. These contributions are not credited to the member's DROP account, but are credited to general System assets to improve funding. Interest at an annual rate of 5.0%, compounded monthly, is credited to the notional DROP account. Voluntary termination of employment during the DROP period results in loss of accrued interest. When the member terminates employment, the balance of the DROP account is paid as a lump sum and future monthly benefits are paid to the member. The balance of the notional DROP accounts as of December 31, 2017 was $4,928,981.

Funding Policy: The contribution requirements of plan members and the reporting entity are established by City Ordinance and may be amended by the governing body. Members of Plan 1 and 2 are required to contribute 6.4% and 4.7% of covered salaries, respectively. Members of Plan 3 are required to contribute 4.7% of covered salaries. From its various operating funds, the City is required to contribute at an actuarially determined rate; the rate for 2017 was 12.3% of annual covered payroll for Plans 1, 2 and 3 (excluding compensation attributable to members who have made an irrevocable election to remain in the defined contribution plan after fully vesting at seven years of service). The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded liability. The City may provide for pension expenses by levying ad valorem property taxes each year in the amount necessary to meet its obligation as determined by the WERS consulting actuary. For the year ended December 31, 2017, WERS received $9,642,540 in contributions from the employer for Plans 1, 2 and 3.

Actuarial Assumptions: A summary of the actuarial assumptions and other inputs used in measuring the total pension liability are presented in the accompanying table. The actuarial assumptions used in the December 31, 2017 valuation were based on the results of the most recent experience study, which covered the five-year period ending December 31, 2013. The experience report is dated July 15, 2014.

Price inflation	3.25%
Wage inflation	4.00%
Salary increases, including wage inflation	4.25% -7.20%
Long-term rate of return, net of investment expense, including price inflation	7.75%
Pre-retirement mortality rates	based on the RP-2000 Employee Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on scale AA.
Post-retirement mortality rates	based on the RP-2000 healthy Annuitant Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on scale AA.
Disabled mortality rates	based on the RP-2000 Disabled Table for males and females, as appropriate, with adjustments for mortality improvements based on scale AA.

Actuarial Rate of Return Assumption: The long-term expected rate of return on pension plan investments is reviewed as part of the regular experience study prepared for the System. Several factors are considered in evaluating the long-term rate of return assumption, including long term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation), along with estimates of variability and correlations for each asset class. These ranges were combined to develop the long-term expected rate of return by weighting the expected future real rates of return the target asset allocation percentage and then adding expected inflation. The long-term rate of return assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years. The target asset allocation and best-estimates of geometric real rates of return (net of 2.25% inflation assumption) for each major asset class are summarized in the accompanying table.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Large cap equity	31%	4.50%
Small cap equity	8%	4.75%
International equity	26%	4.50%
Fixed Income	19%	0.75%
Real Estate	7%	3.50%
Timber	5%	3.75%
Commodities	3%	0.40%
Cash	1%	0.00%
Total	100%	

* Geometric mean, net of investment expenses.

Discount Rate: The fiduciary net position is not projected to become depleted; therefore, a Municipal Bond Index Rate was not used in the determination of the Single Equivalent Interest Rate (SEIR) for either the December 31, 2017 or the December 31, 2016 valuations. Thus, the discount rate, or the SEIR, is equal to the long-term assumed rate of return on investments, as determined in the last experience study. The discount rate used to measure the total pension liability as of the December 31, 2017 valuation is 7.90%. There was no change in the discount rate since the prior measurement date. Please note 7.75% is used in the annual funding valuation to determine the City's contribution rate. This rate is lower than the SEIR because it is net of administrative expenses.

The projection of cash flows used to determine the discount rate assumed that the employee contributions will be made at the current contribution rate and that the City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the employee rate. Projected future benefit payments for all current plan members were projected through 2116. Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Net Pension Liability of the City: The components of net pension liability as of December 31, 2017, are shown in the accompanying table. Actuarial valuation of an ongoing plan involves estimates of reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The total pension liability was determined by an actuarial valuation as of December 31, 2016. A Schedule of Changes in the Employer's Net Pension Liability and Related Ratios is presented in the required supplementary information of this report on page A-26.

Total Pension Liability (TPL)	$	625,461,450
Less: Fiduciary Net Position (FNP)		(614,778,032)
Net Pension Liability (NPL)	$	10,683,418
Ratio of FNP to TPL		98.29%

Sensitivity Analysis: The accompanying table presents the net pension liability of the City using the discount rate of 7.90%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.0% lower (6.90%) or 1.0% higher (8.90%) than the current rate.

	Rate		City's Net Pension Liability
1.0% Decrease	6.90%	$	78,133,997
Current Rate	7.90%		10,683,418
1.0% Increase	8.90%		(46,759,700)

5. Wichita Employees' Retirement System Plan 3b

The City contributes to Wichita Employees' Retirement System Plan 3b, a defined contribution pension plan, for all of its full-time civilian employees hired or rehired on or after January 1, 1994. Benefits depend solely on amounts contributed to the plan plus investment earnings.

Plan 3, established by City Ordinance on April 9, 1993 and amended on February 8, 2000, requires that both the employee and the reporting entity contribute an amount equal to 4.7% of covered salaries. The reporting entity's contributions and earnings for each employee are 25% vested after three years of service, 50% vested after five years and are fully vested after seven years of service.

The employees participating in the Plan will be converted to WERS Plan 2, a defined benefit plan, unless they make an irrevocable election to remain in the defined contribution plan within 90 days of becoming vested. If an employee converts to Plan 2, the employee's Plan 3 account balance becomes part of WERS assets available to pay future benefits of WERS defined benefit plan members. For this reason, Plan 3 members who have not made an irrevocable election to remain in the defined contribution plan are reported with the WERS defined benefit plan. Fully vested Plan 3 members who elect to remain in the defined contribution plan are referred to as Plan 3b members and are reported as a separate plan on the combining financial statements beginning on page A-6.

Fully vested employees who elect to continue participation in Plan 3b may contribute additional amounts into the plan as permitted by the rules of the Internal Revenue Code in effect at the time of the contribution. Contributions of the reporting entity and earnings forfeited by employees who leave employment before seven years of service are used to reduce the reporting entity's contribution requirements. Benefit terms, including contribution requirements, are established and may be amended by the City Council. For the year ending December 31, 2017, employee and employer contributions to Plan 3b totaled $200,003 and $200,003, respectively. As of December 31, 2017, there were 88 members covered under the defined contribution Plan 3b.

6. Police and Fire Retirement System of Wichita

Plan Description: The Police and Fire Retirement System (PFRS) consists of three plans: Plan A, Plan B and Plan C-79. The plans were established to provide retirement and survivor annuities, disability benefits, death benefits and other benefits for Police and Fire Officers of the reporting entity and their dependents. All full-time active "commissioned" Police and Fire department personnel are required to participate in the plans. Plans A and B were established by City Ordinance on January 1, 1965 and Plan C-79 was established January 1, 1979 by City Ordinance. Plan B was closed to new entrants as of January 1, 1965 and Plan A was closed to new entrants as of December 31, 1978. Establishment of and amendments to the benefit provisions for the PFRS are authorized by the City Council.

Benefits Provided: The primary benefits provided are retirement benefits. However, the System also provides ancillary benefits in the event of pre-retirement death, disability or termination of employment prior to meeting the eligibility requirements to retire.

Plan A and Plan B members are eligible to retire at 20 years of actual service regardless of age. Plan C members are eligible to retire at 30 years of creditable service regardless of age, 20 years of actual service and age 50 or 10 years of actual service and age 55. Benefits are calculated using Final Average Salary (FAS), which is the member's compensation for the three highest consecutive years of service within the last 10 years, multiplied by the total years of creditable service and a factor of 2.5%, subject to a maximum of 75% of the FAS. Benefits vest after 10 years of service.

When a member has been retired for 36 months, they will receive an annual post-retirement adjustment to their benefit of 2% of the original base amount of the benefit.

As of December 31, 2017, the PFRS defined benefit plan membership consisted of the following:

Member Category	Plan A	Plan B	Plan C-79	Total
Inactive employees or beneficiaries currently receiving benefits	439	191	370	1,000
Inactive employees entitled to, but not yet receiving benefits	-	-	33	33
Active employees	2	-	1,080	1,082
Total membership	441	191	1,483	2,115

Backward Deferred Retirement Option Plan (DROP) Provision: The benefit structure of both Plan A and Plan C-79 include a Backward Deferred Retirement Option Plan (DROP) provision. Members must be eligible to receive a service retirement benefit as of the Backward DROP retirement date. The DROP period is one to 60 months. The DROP period is the time between the Backward DROP retirement date and the date the employee terminates service. The retirement benefit is calculated as of the day prior to the Backward DROP retirement date. The employee's monthly retirement benefits (for the DROP period) plus applicable post retirement adjustments and interest at an annual rate of 5.0%, compounded monthly, is payable upon the employee's termination of service. When the member terminates employment, the balance of the DROP account is paid as a lump sum and the member begins to receive monthly retirement benefits on the month following termination of service.

Funding Policy: The contribution requirements of plan members and the reporting entity are established by City Ordinance and may be amended by the governing body. PFRS members are required to contribute 6% to 8% of covered salaries. From its various operating funds, the City is required to contribute at an actuarially determined rate; the rate for 2017 was 19.2% of annual covered payroll. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded liability. The City may provide for pension expenses by levying ad valorem property taxes each year in the amount necessary to meet its obligation as determined by the PFRS consulting actuary. For the year ended December 31, 2017, PFRS received $13,369,785 in contributions from the employer.

Actuarial Assumptions: A summary of the actuarial assumptions and other inputs used in measuring the total pension liability are presented in the table on the following page. The actuarial assumptions used in the December 31, 2017 valuation were based on the results of the most recent experience study, which covered the five-year period ending December 31, 2013. The experience report is dated July 15, 2014.

Price inflation	3.25%
Wage inflation	4.00%
Salary increases, including wage inflation	5.00%-6.75%
Long-term rate of return, net of investment expense, including price inflation	7.75%
Pre-retirement mortality rates	based on the RP-2000 Employee Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on scale AA.
Post-retirement mortality rates	based on the RP-2000 healthy Annuitant Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on scale AA.
Disabled mortality rates	based on the RP-2000 Disabled Table for males and females, as appropriate, with adjustments for mortality improvements based on scale AA.

Actuarial Rate of Return Assumption and Discount Rate: Information about the actuarial rate of return assumption and the discount rate is disclosed in Note 4 - Wichita Employees' Retirement System. Because the assets of the plans are pooled for investment purposes, the assumptions for the Police and Fire Retirement System are identical to those of the Wichita Employees' Retirement System.

Net Pension Liability of the City: The components of net pension liability as of December 31, 2017, are shown in the accompanying table. Actuarial valuation of an ongoing plan involves estimates of reported amounts and assumptions about the probability of occurrence of events far into the future. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The total pension liability was determined by an actuarial valuation as of December 31, 2017. A Schedule of Changes in the Employer's Net Pension Liability and Related Ratios is presented in the required supplementary information of this report on page A-28.

Total Pension Liability (TPL)	$	698,423,311
Less: Fiduciary Net Position (FNP)		(698,083,949)
Net Pension Liability (NPL)	$	339,362
Ratio of FNP to TPL		99.95%

Sensitivity Analysis: The accompanying table presents the net pension liability of the City using the discount rate of 7.90%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.0% lower (6.90%) or 1.0% higher (8.90%) than the current rate.

	Rate		City's Net Pension Liability
1.0% Decrease	6.90%	$	84,121,335
Current Rate	7.90%		339,362
1.0% Increase	8.90%		(69,461,825)

7. Insurance

The WRS participate in the City of Wichita's self insurance fund programs for workers' compensation, group life insurance, employee liability, property damage, auto liability and general liability. There were no settlements in excess of insurance coverage in any of the three most recent fiscal years. Additional information, including a general description of each program, can be found in the Comprehensive Annual Financial Report issued by the City of Wichita.

WICHITA RETIREMENT SYSTEMS

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS
WICHITA EMPLOYEES' RETIREMENT SYSTEM

For the years ended December 31, 2014 through December 31, 2017 [1]

	2017	2016	2015
TOTAL PENSION LIABILITY			
Service cost	$ 10,049,029	$ 9,679,684	$ 9,644,456
Interest	46,669,189	45,634,881	44,305,832
Benefit term changes	-	-	-
Differences between expected and actual experience	(1,893,808)	(2,791,029)	(656,102)
Assumption changes	-	-	(8,877,507)
Reclassification due to conversion of members to Plan 3b	(191,292)	(244,793)	(465,171)
Benefit payments, including member refunds	(39,282,815)	(39,144,783)	(37,089,403)
Net change in total pension liability	15,350,303	13,133,960	6,862,105
Total pension liability - beginning	610,111,147	596,977,187	590,115,082
Total pension liability - ending (a)	625,461,450	610,111,147	596,977,187
PLAN FIDUCIARY NET POSITION			
Employer contributions	9,642,540	8,946,064	9,031,463
Employee contributions	3,682,056	3,642,007	3,574,026
Reclassification due to conversion of members to Plan 3b	(191,292)	(244,793)	(465,171)
Net investment income	91,773,973	35,956,780	13,380
Benefit payments, including member refunds	(39,282,815)	(39,144,783)	(37,089,403)
Administrative expenses	(633,379)	(615,829)	(624,085)
Net change in plan fiduciary net position	64,991,083	8,539,446	(25,559,790)
Plan fiduciary net position - beginning	549,786,949	541,247,503	566,807,293
Plan fiduciary net position - ending (b)	614,778,032	549,786,949	541,247,503
Net pension liability - ending (a) - (b)	$ 10,683,418	$ 60,324,198	$ 55,729,684
Plan fiduciary net position as a percentage of the total pension liability	98.29%	90.11%	90.66%
Covered payroll	78,394,634	77,121,241	74,028,385
Employer's net pension liability as a percentage of covered payroll	13.63%	78.22%	75.28%

2014
$ 9,278,998
43,680,283
-
(3,427,255)
(3,550,489)
(571,242)
(37,681,042)
7,729,253
582,385,829
590,115,082
9,423,640
3,394,544
(571,242)
28,659,491
(37,681,042)
(621,460)
2,603,931
564,203,362
566,807,293
$ 23,307,789
96.05%
71,391,212
32.65%

NOTES TO SCHEDULE

Benefit changes:

There have been no changes to the plan provisions in the last ten years.

Changes in actuarial assumptions:

December 31, 2015 valuation

- There were no changes to the assumptions used for the funding valuation, even though, the Single Equivalent Interest Rate (SEIR) at the measurement date was changed for GASB 67 valuation.

December 31, 2014 valuation

- Decrease in the price inflation rate from 3.50% to 3.25%.
- Modify Plan 2 retirement assumption to partially reflect experience. The changes increased rates at some ages and decreased them at others.
- Eliminate the disability assumption.
- Change the termination of employment assumption to a pure service-based assumption.
- Reduce the sick leave load from 4.0% to 2.5%.
- A 20% corridor was added to the actuarial value of assets calculation.

December 31, 2009 valuation

- Decrease in the price inflation rate from 4.0% to 3.5%.
- Decrease in the general wage growth assumption from 4.5% to 4.0%.
- Modification of the retirement rates for both Plans 1 and 2 to better reflect actual experience. The changes increased rates at some ages and decreased them at others.
- Increase in the rates of termination of employment for ages under 32 for the ultimate assumption.
- Lower assumption for indexation of benefits for terminated vested members from 4.5% to 4.0% to be consistent with the general wage growth assumption.
- Non-disabled mortality tables were updated to reflect an additional year of mortality improvements.

[1] Schedule is intended to show a 10-year trend. Additional years will be reported as available.

WICHITA RETIREMENT SYSTEMS

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS
POLICE AND FIRE RETIREMENT SYSTEM

For the years ended December 31, 2014 through December 31, 2017 [1]

	2017	2016	2015
TOTAL PENSION LIABILITY			
Service cost	$ 15,178,226	$ 14,772,379	$ 14,981,100
Interest	51,532,754	49,519,284	47,600,166
Benefit term changes	-	-	-
Differences between expected and actual experience	(1,784,785)	(2,576,401)	(3,259,180)
Assumption changes	-	-	(10,871,013)
Benefit payments, including member refunds	(36,930,533)	(35,552,267)	(36,090,820)
Net change in total pension liability	27,995,662	26,162,995	12,360,253
Total pension liability - beginning	670,427,649	644,264,654	631,904,401
Total pension liability - ending (a)	698,423,311	670,427,649	644,264,654
PLAN FIDUCIARY NET POSITION			
Employer contributions	13,369,785	12,585,895	13,964,379
Employee contributions	4,915,378	4,776,958	4,603,331
Net investment income	103,236,679	39,901,640	(163,702)
Benefit payments, including member refunds	(36,930,533)	(35,552,267)	(36,090,820)
Administrative expenses	(554,641)	(548,171)	(521,018)
Net change in plan fiduciary net position	84,036,668	21,164,055	(18,207,830)
Plan fiduciary net position - beginning	614,047,281	592,883,226	611,091,056
Plan fiduciary net position - ending (b)	698,083,949	614,047,281	592,883,226
Net pension liability - ending (a) - (b)	$ 339,362	$ 56,380,368	$ 51,381,428
Plan fiduciary net position as a percentage of the total pension liability	99.95%	91.59%	92.02%
Covered payroll	69,634,297	66,946,250	65,560,465
Employer's net pension liability as a percentage of covered payroll	0.49%	84.22%	78.37%

2014
$ 15,894,290
46,490,734
-
(12,040,126)
226,376
(36,415,156)
14,156,118
617,748,283
631,904,401
14,464,181
4,529,895
30,596,067
(36,415,156)
(542,207)
12,632,780
598,458,276
611,091,056
$ 20,813,345
96.71%
64,572,237
32.23%

NOTES TO SCHEDULE

Benefit changes:

There have been no changes to the plan provisions in the last ten years.

Changes in actuarial assumptions:

December 31, 2015 valuation

- There were no changes to the assumptions used for the funding valuation, even though, the Single Equivalent Interest Rate (SEIR) at the measurement date was changed for GASB 67 valuation.

December 31, 2014 valuation

- Decrease in the price inflation rate from 3.50% to 3.25%.
- Modify Plan C retirement assumption to partially reflect experience. Created separate rates for less than or more than 30 years of service.
- Lower assumed disability rates.
- Change the termination of employment assumption to a pure service-based assumption.
- Modify the probability of electing a refund to partially reflect actual, observed experience.
- Reduce the sick leave load from 4.0% to 3.0%.
- A 20% corridor was added to the actuarial value of assets calculation.

December 31, 2009 valuation

- Decrease in the price inflation rate from 4.0% to 3.5%.
- Decrease in the general wage growth assumption from 4.5% to 4.0%.
- Lower the retirement rates for Plan A and extend them to 35 years of service.
- Lower the retirement rates for Plan C members at ages before 53 and ages 58-60 and increase rates at ages 56 and 57.
- Increase the rates of termination of employment for ages under 44 and decrease rates at ages over 44.
- Lower assumption for indexation of benefits for terminated vested members from 4.5% to 4.0% to be consistent with the general wage growth assumption.

[1] Schedule is intended to show a 10-year trend. Additional years will be reported as available.

WICHITA RETIREMENT SYSTEMS

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
WICHITA EMPLOYEES' RETIREMENT SYSTEM

For the years ended December 31, 2008 through December 31, 2017
(dollars expressed in thousands)

	2017	2016	2015	2014	2013
Actuarially determined employer contributions	$ 9,643	$ 8,946	$ 9,031	$ 9,424	$ 8,940
Actual employer contributions	9,643	8,946	9,031	9,424	8,940
Annual contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 78,395	$ 77,121	$ 74,028	$ 71,391	$ 70,953
Contributions as a percentage of covered payroll	12.30%	11.60%	12.20%	13.20%	12.60%

NOTES TO SCHEDULE

The system is funded with fixed contribution rates for members and actuarially determined amounts for the City of Wichita. The Actuarially Determined Employer Contributions in the Schedule of Employer Contributions are calculated as of December 31, two years prior to the end of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions were used to determine the Actuarially Determined Contribution reported as of December 31, 2017.

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	Rolling 20 years
Asset valuation method	Expected Value + 25% of (Fair Value - Expected Value)
Price inflation	3.25%
Salary increases, including wage inflation	4.25% - 7.20%
Long-term rate of return, net of investment expense and including inflation	7.75%

2012		2011		2010		2009		2008	
$	7,503	$	7,695	$	6,689	$	3,887	$	3,834
	7,503		7,695		6,689		3,887		3,834
$	-	$	-	$	-	$	-	$	-
$	70,783	$	75,444	$	79,636	$	82,704	$	81,580
	10.60%		10.20%		8.40%		4.70%		4.70%

WICHITA RETIREMENT SYSTEMS

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER CONTRIBUTIONS
POLICE AND FIRE RETIREMENT SYSTEM

For the years ended December 31, 2008 through December 31, 2017
(dollars expressed in thousands)

	2017	2016	2015	2014	2013
Actuarially determined employer contributions	$ 13,370	$ 12,586	$ 13,964	$ 14,464	$ 14,890
Actual employer contributions	13,370	12,586	13,964	14,464	14,890
Annual contribution deficiency (excess)	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 69,634	$ 66,946	$ 65,560	$ 64,572	$ 65,306
Contributions as a percentage of covered payroll	19.20%	18.80%	21.30%	22.40%	22.80%

NOTES TO SCHEDULE

The system is funded with fixed contribution rates for members and actuarially determined amounts for the City of Wichita. The Actuarially Determined Employer Contributions in the Schedule of Employer Contributions are calculated as of December 31, two years prior to the end of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions were used to determine the Actuarially Determined Contribution reported as of December 31, 2017.

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, open
Remaining amortization period	Rolling 20 years
Asset valuation method	Expected Value + 25% of (Fair Value - Expected Value)
Price inflation	3.25%
Salary increases, including wage inflation	5.00% - 6.75%
Long-term rate of return, net of investment expense and including inflation	7.75%

2012	2011	2010	2009	2008
$ 14,113	$ 13,807	$ 13,120	$ 11,035	$ 10,549
14,113	13,807	13,120	11,035	10,549
$ -	$ -	$ -	$ -	$ -
$ 64,150	$ 62,759	$ 63,077	$ 63,055	$ 60,282
22.00%	22.00%	20.80%	17.50%	17.50%

WICHITA RETIREMENT SYSTEMS

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT RETURNS

For the years ended December 31, 2014 through December 31, 2017[1]

	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses	17.40 %	7.16 %	0.63 %	5.18 %

[1] Schedule is intended to show a 10-year trend. Additional years will be reported as available.

WICHITA RETIREMENT SYSTEMS

SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES

For the year ended December 31, 2017
(with comparative totals for the year ended December 31, 2016)

	Police and Fire Retirement System	Employees' Retirement System	Employees' Retirement Plan 3b	Totals 2017	Totals 2016
Personnel services:					
Wages	$ 272,259	$ 272,259	$ -	$ 544,518	$ 561,722
Benefits	62,334	62,334	-	124,668	120,364
Total personnel services	334,593	334,593	-	669,186	682,086
Contractual services:					
Telephone	1,554	1,554	-	3,108	3,028
Postage	2,221	2,210	-	4,431	3,349
Transportation and travel	5,904	8,142	-	14,046	13,317
Data center charges	5,674	5,674	-	11,348	11,958
City adminstrative fees	26,466	26,466	-	52,932	47,338
Actuarial fees	39,463	41,463	-	80,926	68,030
Audit fees	8,084	8,084	-	16,168	16,210
Studies and consultants	3,559	7,381	-	10,940	44,299
Legal services	12,987	11,301	1,334	25,622	19,013
Advertising	63	97	-	160	131
Periodicals and manuals	133	133	-	266	362
Membership dues	450	2,160	-	2,610	2,675
Printing and photocopying	9,005	6,495	-	15,500	11,196
Plan 3 participant administration	-	23,673	8,327	32,000	32,219
Pension software expense	67,145	106,384	-	173,529	139,743
Depreciation	-	-	-	-	-
Custody transactions	22,004	30,539	-	52,543	71,154
Other	657	2,376	64	3,097	2,452
Total contractual services	205,369	284,132	9,725	499,226	486,474
Commodities:					
Office equipment and supplies	1,009	1,009	-	2,018	2,158
Data processing equipment	12,994	12,994	-	25,988	-
Other	676	651	-	1,327	648
Total commodities	14,679	14,654	-	29,333	2,806
Total administrative expenses	$ 554,641	$ 633,379	$ 9,725	$ 1,197,745	$ 1,171,366

WICHITA RETIREMENT SYSTEMS

SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT EXPENSES

For the year ended December 31, 2017
(with comparative totals for the year ended December 31, 2016)

	Police and Fire Retirement System	Employees' Retirement System	Employees' Retirement Plan 3b	Totals 2017	Totals 2016
Investment expenses:					
Financial consulting	$ 120,988	$ 123,434	$ 30,674	$ 275,096	$ 256,438
Custodial bank	141,830	125,821	-	267,651	157,875
Investment management fees	3,326,832	2,941,360	12,934	6,281,126	5,597,831
Total investment expenses	$ 3,589,650	$ 3,190,615	$ 43,608	$ 6,823,873	$ 6,012,144

SCHEDULE OF PAYMENTS MADE TO CONSULTANTS OTHER THAN INVESTMENT ADVISORS

For the year ended December 31, 2017
(with comparative totals for the year ended December 31, 2016)

	Police and Fire Retirement System	Employees' Retirement System	Employees' Retirement Plan 3b	Totals 2017	Totals 2016
Ice Miller LLP					
(legal services)	$ 12,987	$ 11,301	$ 1,334	$ 25,622	$ 19,013
Cavanaugh Macdonald Consulting					
(actuarial services)	39,463	41,463	-	80,926	68,030
Allen, Gibbs & Houlik, L.C.					
(auditing services)	8,084	8,084	-	16,168	16,210
Northeast Retirement Services					
(participant accounting)	-	23,673	8,327	32,000	32,219
Total payments	$ 60,534	$ 84,521	$ 9,661	$ 154,716	$ 135,472

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

The Boards of Trustees
Wichita Retirement Systems
Wichita, Kansas

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Wichita Retirement Systems of the City of Wichita, Kansas (Systems), which comprise the statement of fiduciary net position as of December 31, 2017, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June 27, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Systems' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Systems' internal control. Accordingly, we do not express an opinion on the effectiveness of the Systems' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses, as defined above. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Systems' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

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

June 27, 2018
Wichita, Kansas

INVESTMENT SECTION

Callan

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May 22, 2018

The Wichita Retirement Systems
Wichita Employees' Retirement System and Police & Fire Retirement System of Wichita
455 North Main Street, 12th Floor
Wichita, KS 67202

RE: Report on 2017 Investment Activities

Dear Board Members:

The City of Wichita created the Wichita Retirement Systems in order to make investments for the sole interest of the participants and beneficiaries of the Retirement Fund. Accordingly, the assets of the Fund are invested with these investment objectives: (1) to fulfill current benefit obligations; (2) to maximize return within reasonable and prudent levels of risk; and (3) to maintain sufficient liquidity to meet benefit payment obligations when due.

Trust Fund assets are to be invested with the care, skill, and diligence that a prudent person acting in a like capacity would undertake. The Boards acknowledge that they have the objective of controlling the costs involved with administering and managing the investments of the Fund.

The Boards, with information provided by their Financial Consultant, closely monitor the Fund's asset mix to assure compliance with the adopted Investment Policy Statement and appropriate City ordinances that regulate the investment process.

On an ongoing basis, the Boards implement a performance measurement and evaluation process that examines rates of return for the Trust Fund in total, the major asset classes, and individual managers. The Boards compare returns to broad market indices and relevant "peer groups" of investment managers with similar investment styles. All returns are time-weighted rates of return calculated by the Fund's Financial Consultant on the basis of fair value and cash flow data provided by the Fund's custodian bank.

Calendar year 2017 was marked by record low volatility and more record highs across global stock markets. The VIX Index, a widely used measure of expected stock market volatility, fell more than 20% in 2017, reaching an all-time low in November. As economies overseas gained traction through the year, the U.S. dollar depreciated roughly 10% versus developed market currencies, most notably the euro, after hitting a 14-year high at the outset of 2017. The year closed with the rushed passage of the largest tax reform bill in 30 years, lending further support to stocks given the significant cut in corporate tax rates.

The S&P 500 Index gained 6.6% in the fourth quarter of 2017. The index's 21.8% gain for calendar year 2017 was its best since 2013. The Index hit 62 record highs during the year and had only eight days of price fluctuation greater than 1%, the lowest number of such days since

1964. The S&P 500 Price Index has nearly tripled (+295%) since its Global Financial Crisis low in March 2009. Overseas, the MSCI EAFE Index returned 4.2% in the fourth quarter of 2017 and 25.0% for the calendar year. Annual gains were broad-based and further bolstered by a weakening U.S. dollar.

As expected, the Fed hiked the Fed Funds target by 25 basis points at its December meeting to 1.25% – 1.50%, the third increase of 25 basis points during the year. At the end of 2017 the market had priced in three additional rate hikes in 2018. President Trump nominated Jerome Powell to become the next Fed Chair, replacing Janet Yellen, whose term expires February 2018. Broad fixed income markets, as measured by the Bloomberg Aggregate Index, returned 2.2% for the year. The private real estate market, as measured by the NCREIF Property Index, continued its impressive upward trajectory and gained 7.0% during the year. The NCREIF Timberland Index returned 3.6% while the Bloomberg Commodity Index slowed after an impressive 2016, returning 1.7%.

As noted in the Schedule of Investment Results, the Fund generated a total return of 17.8% for the year ended December 31, 2017, which outperformed the 16.2% return of the Fund's target benchmark. In aggregate, active management added value during the year, particularly in large cap equities.

Yours truly,

Paul Erlendson
Senior Vice President
Callan LLC

Gordon Weightman, CFA
Senior Vice President
Callan LLC

Investment Policy Summary

Strategic Plan: Assets of the Wichita Employees' and Police and Fire Retirement Systems (Fund) are invested in a diversified mix of domestic and international equities, domestic and international fixed income securities, real estate, timber, commodities and cash equivalents. The Fund is overseen by the Joint Investment Committee (JIC), comprised of the President of each Board, two elected members from each Board, two City Council appointees from each Board and a City Manager's designee.

Investment Policies: The duties of the Boards include, but are not limited to, approving the Asset Allocation Plan and Investment Policy contained in the Strategic Plan, annual performance review of the investment portfolio and the hiring of a common financial consultant and actuary.

The duties of the JIC include, but are not limited to, making recommendations to the Boards on the Asset Allocation Plan and Investment Policy and the hiring of a common financial consultant and actuary; quarterly performance review of the investment portfolio; and retention and termination of the Fund's investment managers and the custodial bank.

The assets of the Fund are managed solely in the interest of each System's participants and beneficiaries. Fund assets are allocated to professional investment managers who are given full investment discretion with respect to assets under their management, subject to mandated investment guidelines. The following minimum standards are set for investment managers:

1. The investment firm must have $500 million or more under management;
2. The investment management firm must have five years of performance history;
3. The Fund's portfolio with the investment manager shall not constitute more than 10% of the investment manager's total portfolio.

Investment Objectives: The goal of the Fund is to ensure sufficient resources to meet or exceed benefit obligations. The related investment objectives are, first, to preserve and, second, to increase the capital value of the Fund. In pursuing these objectives, the Boards will endeavor to earn the maximum total return on assets consistent with maintaining a prudent level of risk. In investing and reinvesting monies in the Fund, there shall be exercised the judgment and care under the circumstances then prevailing which people of prudence, discretion and intelligence exercise in the management of their own affairs.

Total Fund returns are compared to a blended target index composed of market indexes weighted to the applicable asset class median. As of December 31, 2017, the blended target consisted of the following:

Asset Class	Target Allocation	Relevant Index
Large cap equity	31%	Russell 1000 Index
Small cap equity	8%	Russell 2000 Index
International Equity	26%	Morgan Stanley Capital International, All Country World ex-U.S. Index.
Fixed Income	19%	Bloomberg/Barclays Aggregate Bond Index
Real Estate	7%	National Council of Real Estate Investment Fiduciaries (NCREIF) Total Property Index
Timber	5%	National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland Index
Commodities	3%	Bloomberg Commodity Index
Cash	1%	3 month Treasury Bill Index
Total	100%	

The Boards expect the Fund's overall returns to be less volatile than the relevant market indices. The Fund's long-term objective is to achieve an annualized rate of return that is 4.5% higher than the Consumer Price Index of All Urban Consumers (CPI-U).

Each equity and fixed income manager's total fund return on a time-weighted basis is compared to a universe of managers employing a similar investment style. Performance relative to a manager's style group is expected to be above median over rolling five year periods. Over the long term, (ie. a market cyle or periods greater than five years), each manager's performance will also be compared to a relevant market index.

Investment Performance

The accompanying chart illustrates annual portfolio investment performance compared to the benchmark and changes in the Fund's net position based on asset class allocations at year-end. Positive returns, beginning in 2003 and continuing through 2007, are responsible for increasing the Fund's net position. After a volatile investment environment in 2008, returns in 2009 through 2013 helped stabilize the fund. The 2017 Fund return of 17.76% outperformed the benchmark return of 16.23%. The Fund's net position increased by $150.4 million, or 12.8%.

Investment Return and Fund Net Position

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net Position	744	870	952	923	1,011	1,169	1,184	1,141	1,171	1,321
System Return	-28.1%	22.0%	13.6%	0.8%	13.8%	20.2%	5.6%	0.2%	7.3%	17.8%
Benckmark Return	-26.0%	19.8%	12.7%	2.0%	12.6%	16.2%	5.8%	-0.7%	8.5%	16.2%

The accompanying table illustrates Fund performance compared with plan target and relevant index comparisons.

	Annualized Returns [1]			
	1 year	3 years	5 years	7 years
Total portfolio:				
Fund performance[2]	17.76%	8.21%	9.97%	9.14%
Fund target performance[3]	16.23%	7.77%	9.01%	8.17%
Domestic equities:				
Domestic equity	22.29%	10.95%	15.40%	13.52%
Large-cap equity	23.95%	11.51%	15.94%	13.86%
Small-cap equity	16.34%	9.06%	13.61%	12.28%
International equities	26.18%	9.09%	8.12%	6.60%
Fixed income:				
Fixed income	5.52%	3.13%	2.82%	4.17%
Nominal fixed income	5.52%	3.24%	3.14%	4.41%
Real estate	6.84%	9.67%	11.33%	13.55%
Timber	4.23%	4.21%	5.45%	-
Commodities	9.87%	-1.89%	-	-
Cash	0.70%	0.28%	0.17%	0.13%

[1] Performance returns are calculated using a time-weighted return on market values.

[2] Performance is gross of fees. Timber and TIPS were funded after January 2011. Commodities were funded in 2014.

[3] Fund taget performance is as follows:

(a) From 04/01/04 until 12/31/06; 38% S&P 500 Index; 9% Russell 2000 Index; 20% Morgan Stanley Capital International All Country World (ex-U.S.) Index; 28% Barclays Capital Aggregate Bond Index; 5% NCREIF Total Property Index.

(b) From 01/01/07 until 12/31/2010; 38% S&P 500 Index; 9% Russell 2000 Index; 20% Morgan Stanley Capital International EAFE Index; 28% Barclays Capital Aggregate Bond Index; 5% NCREIF Total Property Index.

(c) From 01/01/11 until 09/30/2011; 32% Russell 1000 Index; 9% Russell 2000 Index; 20% Morgan Stanley Capital International All Country World (ex-U.S.) Index; 28% Barclays Captial Aggregate Bond Index; 5% NCREIF Total Property Index.

(d) From 10/01/11 until present; 32% Russell 1000 Index; 8% Russell 2000 Index; 22% Morgan Stanley Capital International All Country World (ex-U.S.) Index; 22% Barclays Capital Aggregate Bond Index; 5% NCREIF Total Property Index; 5% NCREIF Timberland Index; 3% Barclays Capital U.S. TIPS Index; 3% Dow Jones-UBS Commodity Index.

(e) From 10/01/16 until present; 31% Russell 1000 Index; 8% Russell 2000 Index; 26% Morgan Stanley Capital International All Country World (ex-U.S.) Index; 19% Bloomberg/Barclays Aggregate Index; 7% NCREIF Total Property Index; 5% NCREIF Timberland Index; 3% Bloomberg Commodity Trust Index; 1% 3-month Treasury Bill.

Asset Allocation

The Wichita Employees' and the Police and Fire Retirement Boards believe that a diversified portfolio aids in the preservation of investment principal. Growth with limited risk is the Fund's objective. The Boards established the Joint Investment Committee (JIC) to manage the assets of both Systems. Asset allocation, in conjunction with investment manager selection, has a significant impact on investment performance. The JIC is responsible for recommending an Asset Allocation Plan developed with the assistance of Callan Associates, Inc., the Boards' financial consultant.

The Boards review the adopted Asset Allocation Plan at least every three years. In 2016, the JIC conducted an Asset-Liability Study to determine whether asset classes should be added, removed, or changed from the existing asset mix. The Boards' financial consultant assisted with asset modeling to define appropriate capital market and liability assumptions to create asset mix alternatives that help simulate financial conditions, define risk tolerance, and identify the appropriate target mix for the portfolio. After a thorough review, the JIC made the following asset allocation changes: (1) eliminated the 3% allocation in the Treasury Inflation Protected Securities (TIPS) fund; (2) reduced domestic equity exposure by 1%; (3) reduced fixed income exposure by 3%; (4) increased the cash position by 1%; (5) increased international equities by 4%; and (6) increased the real estate allocation by 2% in the portfolio. The implementation of the changes began in September 2016 and was completed as of December 31, 2017.

The Boards' commitment to the adopted Asset Allocation Plan, which ensures a diversified portfolio, is especially important to minimize the Fund's exposure to market volatility and to help preserve sufficient funding for future generations. As of December 31, 2017, 68.7% of the Fund's assets were invested in equities, 16.9% in fixed income, 6.5% in real estate, 4.2% in timber, 2.9% in commodities and 0.8% in cash. The accompanying table displays the Fund's target and actual asset allocations on December 31, 2017.

	Asset Allocation			
Asset Class	**Minimum[1]**	**Target**	**Maximum[1]**	**Actual**
Domestic equity:				
Large/mid-cap	17.50%	20.80%	24.00%	22.21%
Large-cap passive	8.50%	10.40%	11.50%	9.22%
Small-cap	7.00%	7.80%	9.50%	8.32%
Total domestic equity	33.00%	39.00%	45.00%	39.75%
Fixed income:				
Active core	6.50%	7.60%	8.50%	6.51%
Active core plus	6.50%	7.60%	8.50%	6.57%
Global	3.00%	3.80%	5.00%	3.77%
Total fixed income	16.00%	19.00%	22.00%	16.85%
International equity:				
Active core	9.00%	10.40%	12.00%	11.57%
Passive core	5.50%	6.50%	7.50%	7.15%
Small-cap	3.00%	3.90%	4.50%	3.99%
Emerging markets	4.50%	5.20%	6.00%	6.24%
Total international equity	22.00%	26.00%	30.00%	28.95%
Real estate:				
Core	5.00%	7.00%	9.00%	6.54%
Timber	3.00%	5.00%	7.00%	4.21%
Commodities	2.50%	3.00%	4.00%	2.90%
Cash	0.00%	1.00%	5.00%	0.80%

[1] Because the styles within each asset class are more restrictive than the overall asset class, the min/max ranges for the styles within each asset class may not total the min/max for the overall asset class.

Investment Holdings

The Fund's top ten largest equity holdings by fair value and top ten largest fixed income holdings by fair value as of December 31, 2017 are summarized in the accompanying tables. A complete listing of the portfolio of investments is available from the Pension Management Office upon request.

Ten Largest Equity Holdings
As of December 31, 2017

Holding	Fair Value	Number of Shares	Percent of Total Portfolio
Amazon.com, Inc.	$ 8,974,513	7,674	0.67%
Microsoft Corporation	8,317,567	97,236	0.62
Apple, Inc.	7,529,212	44,491	0.57
Facebook, Inc. A	7,488,257	42,436	0.56
Alphabet, Inc. Class C	7,468,157	7,137	0.56
VISA Inc. Class A	5,675,117	49,773	0.43
United Health Group, Inc.	4,267,003	19,355	0.32
Bank of America Corp.	4,218,821	142,914	0.32
Broadcom Ltd	4,032,816	15,698	0.30
Honeywell International, Inc.	3,987,053	25,998	0.30
Total	$ 61,958,516	452,712	4.65%

Ten Largest Fixed Income Holdings
As of December 31, 2017

Holding	Fair Value	Number of Shares	Percent of Total Portfolio
US Treasury Bond	$ 6,848,005	6,370,000	0.51%
US Treasury Note	4,694,068	4,574,000	0.35
US Treasury Bond	4,492,030	3,770,000	0.34
US Treasury Note	3,890,813	3,925,000	0.29
US Treasury Note	3,013,668	3,030,000	0.23
FNMA Pool BH2594	2,145,320	2,088,268	0.16
FNMA TBA 30 YR 3.5	2,053,440	2,000,000	0.15
FNMA Pool AZ4750	2,005,925	1,947,198	0.15
FHLMC Pool Q45872	1,977,977	1,975,547	0.15
FNMA Pool AQ9292	1,764,046	1,708,850	0.13
Total	$ 32,885,292	31,388,863	2.46%

The tables presented on the following pages provide additional information about portfolio investments, including fair value of investment assets by type of investment, assets under management and related investment management fees by manager and brokerage commissions earned for the year ended December 31, 2017.

Investment Summary by Type of Investment
as of December 31, 2017

Type of Investment	Fair Value	% of Total Portfolio
Government short-term investment fund	$ 31,504,160	2.37%
Equity:		
Common stock	517,343,625	38.84
Common stock unit	986,684	0.07
Depository receipts	12,707,360	0.95
Limited partnership units	1,123,037	0.08
Mutual funds	282,782,888	21.23
Non-security asset-stock	82,237,413	6.17
Preferred stock	1,110,425	0.08
Real estate investment trust	9,041,351	0.68
Warrants	1,910	0.00
Commodities	38,235,302	2.87
Total equities	945,569,995	70.99
Fixed income:		
Auto loan receivable	3,289,337	0.25
CMO	16,659,279	1.25
Corporate bonds	86,586,307	6.50
Credit default swap	(84,184)	-0.01
FHLMC	11,554,870	0.87
FNMA	24,406,019	1.83
GNMA I	1,002,290	0.08
GNMA II	5,362,988	0.40
Government issues	58,671,090	4.4
Interest rate swap	61,772	0.00
Municipals	537,815	0.04
Other asset backed	6,099,145	0.46
Total fixed income	214,146,728	16.08
Real Estate	85,239,165	6.40
Timber	55,406,805	4.16
Options:		
Fixed income	(11,961)	0.00
Foreign currency	74,098	0.01
Future	68,436	0.01
Total options	130,573	0.01
Total Investments	$ 1,331,997,426	100.00%

Investment Assets Under Management and Related Management Fees

As of and for the year ended December 31, 2017

Asset Category/Investment Manager	Management Fees	Fair Value
Fixed income:		
Richmond Capital Management, Inc.	$ 176,997	$ 83,848,741
Western Asset Management Co.	253,601	91,206,727
SSGA[1] Government Short-Term Investment Fund	-	31,149,878
Standish Mellon Asset Management	170,785	47,974,521
Total fixed income	601,383	254,179,867
Domestic equity:		
Barrow, Hanley, Mewhinney & Strauss, Inc.	657,100	141,950,258
Boston Partners Asset Management	460,120	51,978,436
Fred Alger Management, Inc.	638,875	147,827,284
Peregrine Capital Management	479,834	53,743,080
Voya Investment Management Co.	-	1,910
SSGA[1] S&P 500 Flagship Fund	39,196	121,460,798
Total domestic equity	2,275,125	516,961,766
International equity:		
Fidelity Investment Asset Mgmt	664,942	147,998,987
SSGA MSCI World-Ex-U.S. Index	61,618	94,106,780
Brandes Investment Partners	472,112	52,516,002
AQR Emerging Markets Index Fund	578,773	82,237,413
Total international equity	1,777,445	376,859,182
Real estate:		
RREEF America REIT II	429,935	43,103,819
RREEF America REIT III	2,278	-
UBS Trumbull Property Fund	405,373	42,135,346
Total real estate	837,586	85,239,165
Timber:		
Molpus Woodlands Fund III	260,455	25,965,585
Molpus Woodlands Fund IV	263,790	29,441,220
Total timber	524,245	55,406,805
Commodities:		
Wellington	265,342	38,235,302
Defined contribution pooled funds:		
SSGA[1] Target Date Funds	-	4,761,057
SSGA[1] Cash Series Prime Fund CL C	-	354,282
Total defined contribution pooled funds	-	5,115,339
Total	$ 6,281,126	$ 1,331,997,426

[1]State Street Global Advisors

Schedule of Brokerage Commissions

For the year ended December 31, 2017

Brokerage Firm	Total Commissions	Number of Shares	Commission Per Share	Percent of Total
Goldman Sachs + Company	$ 25,123	9,167	$ 2.74059	7.55%
JP Morgan Securities LLC	20,021	721,810	0.02774	6.01
Weeden + Co.	18,188	576,715	0.03154	5.46
Cowen And Company, LLC	17,232	535,203	0.03220	5.18
Citigroup Global Markets Ltd	12,377	896,626	0.01380	3.72
Convergex LLC	12,368	409,629	0.03019	3.72
Merrill Lynch Pierce Fenner + Smith Inc	9,703	321,235	0.03021	2.91
Morgan Stanley And Co. International	9,192	542,297	0.01695	2.76
Goldman Sachs International	8,738	318,848	0.02741	2.62
Merrill Lynch International	7,266	296,299	0.02452	2.18
Goldman Sachs + Co	7,144	217,362	0.03287	2.15
Citation Group	7,070	196,374	0.03600	2.12
Deutsche Bank Ag London	6,352	274,968	0.02310	1.91
BTIG, LLC	6,249	174,266	0.03586	1.88
Jonestrading Institutional Services Llc	5,864	176,242	0.03327	1.76
Exane S.A.	5,846	130,484	0.04480	1.76
Sanford C Bernstein Co LLC	5,804	222,401	0.02610	1.74
Instinet	5,251	314,519	0.01670	1.58
JP Morgan Securities PLC	5,200	456,345	0.01140	1.56
Instinet U.K. Ltd	5,047	465,907	0.01083	1.52
Wells Fargo Securities, LLC	5,010	133,648	0.03749	1.51
Liquidnet Inc	4,771	224,070	0.02129	1.43
UBS Securities Llc	4,710	154,927	0.03040	1.41
Morgan Stanley Co Inc	4,541	169,324	0.02682	1.36
Jefferies + Company Inc	4,508	161,987	0.02783	1.35
Credit Suisse Securities (USA) LLC	4,336	212,578	0.02040	1.30
Robert W. Baird Co Inc	4,136	110,362	0.03748	1.24
Cs First Boston (Hong Kong) Ltd	3,524	254,710	0.01384	1.06
Janney Montgomery, Scott Inc	3,396	94,360	0.03599	1.02
UBS Limited	3,355	380,196	0.00882	1.01
Other firms (Includes 176 brokerage firms, each contributing less than 1% of total	90,619	6,028,852	0.01503	27.22
Total brokerage commissions	$ 332,941	15,181,711	$ 0.02193	100.00%

ACTUARIAL SECTION

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June 6, 2018

The Retirement Boards
Wichita Employees' Retirement System and
Police and Fire Retirement System of Wichita, Kansas
455 North Main Street, 12th Floor
Wichita, Kansas 67202

RE: Certification of December 31, 2017 Actuarial Valuations

Dear Board Members:

We certify that the information included herein and contained in the 2017 Actuarial Valuation Reports is accurate and fairly presents the actuarial position of the Wichita Employees' Retirement System (WER) and the Police and Fire Retirement System of Wichita, Kansas (WPF) as of December 31, 2017.

All calculations have been made in conformity with generally recognized and accepted actuarial principles and practices, and with applicable Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented comply with the requirements of the City ordinances, where applicable, the Internal Revenue Code, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries who are experienced in performing valuations for public retirement systems. They are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Actuarial Valuations

The primary purpose of the actuarial valuation is to determine the City's contribution rate to fund each System on an actuarial basis, to describe the current financial condition of the Systems, and to analyze changes in the Systems' financial condition.

Actuarial computations, based on the actuarial valuation performed as of December 31, 2017, were also prepared for purposes of fulfilling financial accounting requirements for the Systems under Governmental Accounting Standards Board Number 67 (GASB 67). The assumptions used in the funding valuations were also used for GASB 67 reporting, with the exception of the discount rate which is based on the Systems' long-term rate of return. The actuarial valuation uses an investment return assumption of 7.75%, which is net of administrative expenses. The GASB 67 calculations use a discount rate of 7.90% which is the long-term expected rate of return prior to adjustment for administrative expenses.

Financing Objective of the Systems

The funding objective of each Retirement System is to establish and receive contributions which:

- when expressed as percents of active member payroll, will remain approximately level from generation to generation of Wichita citizens, and

- when combined with present assets and future investment returns will be sufficient to meet the financial obligations of the Systems to present and future retirees and beneficiaries.

The financial objective is addressed within the annual actuarial valuations. The valuation process develops contribution rates that are sufficient to fund the plan's current normal cost (i.e. the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial liabilities as level percents of active member payroll in future years. The most recent annual actuarial valuations were completed based upon membership data, asset data and plan provisions as of December 31, 2017. For both the Wichita Employees' Retirement System and the Police and Fire Retirement System of Wichita, Kansas, actuarial liabilities exceeded valuation assets. This difference, called the unfunded actuarial liability, was $36.1 million for the Wichita Employees' Retirement System and $32.4 million for the Police and Fire Retirement System of Wichita, Kansas. The unfunded actuarial liability is amortized as a level percent of payroll over an open 20-year period in both Systems.

An asset smoothing method is used in the valuation process so actual investment experience is recognized over a period of time. On a market value basis, the rate of return on assets in 2017 was 17.0% for both Systems. As a result of the use of an asset smoothing method, the rate of return on the actuarial value of assets for 2017 was 8.7% for WER and 8.8% for WPF, both higher than the assumed rate of 7.75% which generated an experience gain on assets. There was an experience gain of $2.8 million on liabilities from all sources during 2017 for the Wichita Employees' Retirement System and an experience gain of $1.8 million on liabilities for the Police and Fire Retirement System of Wichita, Kansas. The market value of assets exceeds the actuarial value of assets by 3% for both the Wichita Employees' Retirement System and the Police and Fire Retirement System of Wichita, Kansas. If investment returns over the next few years are at or above the assumed rate of return of 7.75%, the deferred investment gain will be recognized and contribution rates can be expected to decrease.

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On the basis of the 2017 valuations, it is our opinion that the Retirement Systems are meeting their basic financial objectives and continue to be in sound condition in accordance with the actuarial principles of the level percent of payroll financing.

Benefit Provisions

The benefit provisions used in the actuarial valuations are described on pages 45 to 48 of each of the valuation reports for the Wichita Employees' Retirement System and the Police and Fire Retirement System of Wichita, Kansas.

Data

In preparing the December 31, 2017 actuarial valuations, we have relied upon member and asset data provided by the Pension Manager. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and for consistency with prior years' data. If the underlying data or information is inaccurate or incomplete, our calculations may need to be revised.

Actuarial Methods and Assumptions

Funding valuations and GASB 67 calculations are prepared for each System annually, as of December 31 of each year, the last day of the System's plan and fiscal year.

The actuarial methods and assumptions used in the valuations have been selected by the Board of Trustees of the Systems based upon the analysis and advice of the actuary and other professionals. These assumptions and methods may be found on pages 49 to 54 of the Wichita Employees' Retirement System valuation report and pages 49 to 53 for the Police and Fire Retirement System of Wichita, Kansas valuation report. The assumptions are based on a study of actuarial experience for the five years ending December 31, 2013 that was completed in 2014. The Board of Trustees has sole authority to determine the actuarial assumptions used for the plan.

The actuarial assumptions and methods used in the valuations meet the parameters set by Actuarial Standards of Practice (ASOPs), 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 (GASB). In our opinion, the actuarial assumptions used are appropriate for purposes of the funding valuation and for GASB 67 purposes, are individually reasonable, are related to the experience of the Systems, and offer the best estimate of anticipated experience. Nevertheless, the emerging costs will vary from those presented in the valuation reports to the extent actual experience differs from that projected by the actuarial assumptions.

The actuary prepared the following supporting schedules that are included in the Comprehensive Annual Financial Report. The items in the Actuarial Section can be found in the valuation report while the items in the Financial Statements Section can be found in the GASB 67 report.

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Actuarial Section

Summary of Actuarial Methods and Assumptions
Schedule of Active Member Valuation Data
Retirants and Beneficiaries Added To and Removed From Rolls
Solvency Test
Derivation of System Experience Gain/(Loss)
Schedule of Funding Progress

Financial Statements Section

Calculation of the Total Pension Liability and Net Pension Liability
Sensitivity Analysis of the Net Pension Liability
Schedule of Employer Contributions
Schedule of Changes in the Employers' Net Pension Liability

Retirement System staff prepared the schedules shown in the Statistical Section of the report, based in part upon the material prepared by the actuary.

I, Patrice A. Beckham, FSA, am a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Brent A. Banister, FSA, am a Member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Patrice Beckham

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

Brent A. Banister

Brent A. Banister, PhD, FSA, EA, FCA, MAAA
Chief Actuary

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1. Wichita Employees' Retirement System

Provisions of the plan are outlined in the financial section of this report beginning on page A-20. The Plans prepare two actuarial valuations - one for funding purposes and one for accounting and financial reporting purposes under Governmental Accounting Standards Board Statement 67, *Financial Reporting for Pension Plans - an Amendment of GASB Statement No. 25*. With the exception of the discount rate used, the actuarial cost methods and assumptions used for financial reporting purposes are consistent with those utilized for funding purposes.

A. Actuarial Cost Method

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the Entry Age Normal actuarial cost method and has the following characteristics:

- The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement, and

- Each annual normal cost is a constant percentage of the member's year-by-year projected covered compensation.

The Entry Age Normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's assumed pensionable compensation rates between the entry age of the member and the assumed exit age.

The portion of the actuarial present value of retirement system benefits allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial liability. Deducting actuarial assets from the actuarial liability determines the unfunded actuarial liability (or surplus). The Wichita Employees' Retirement System (WERS) had an unfunded actuarial liability of $36.1 million as of December 31, 2017.

B. Actuarial Assumptions Used for Valuations

System contribution requirements and actuarial present values are calculated by applying experience assumptions to the benefit provisions and participant information of the Retirement System using the actuarial cost method. These assumptions were proposed by the Fund's actuary following the completion of an experience study covering the period January 1, 2009 through December 31, 2013, and adopted by the Board on September 17, 2014. An experience study is performed every five years.

The actuarial valuation of assets is based upon the "Expected Value plus 25%" method, which levels the effects of fair value fluctuations by recognizing 25% of the difference between the expected actuarial value and the fair value of assets. The Board first adopted this methodology for the December 31, 2002 valuation. Actuarial gains and losses reduce or increase the unfunded actuarial liability or surplus, which is amortized over a rolling 20-year amortization period.

<u>Long-Term Rate of Return</u>: The investment return rate, net of investment expenses and administrative expenses, used for the actuarial valuation performed for funding purposes is 7.75% per year, compounded annually. This rate consists of 3.25% in recognition of long-term price inflation and 4.50% in recognition of a real rate of return over price inflation. This assumption, used to equate the value of payments due at different points in time, was adopted by the Board and was first used for the December 31, 1981 valuation, although the allocation between inflation and real return has changed periodically, most recently in 2014.

The 7.90% rate of return used for accounting purposes is based on the same underlying data as the rate used for funding purposes. However, the rate used for accounting purposes represents investment return, net of investment expenses. Administrative expenses are accounted for separately, consistent with the requirements of GASB Statement No. 67.

Salary Projections: These assumptions are used to project current salaries to determine average annual compensation. They consist of the same inflation component used for the investment return assumption, a component reflecting productivity and the competition from other employers for personnel, and a years-of-service component to reflect promotion and longevity increments.

Salary increases are assumed to occur mid-year. The salary increase assumptions are expected to produce 4.00% annual increases in active member payroll (the inflation and productivity base rate), given a constant active member group size. This is the same payroll growth assumption used to amortize the unfunded actuarial liability. The rate of return over assumed wage growth is 3.75% per year. These assumptions were first used for the December 31, 2014 valuation. Assumptions about annual rates of salary increases are summarized in the accompanying table.

Years of Service	Inflation Component	Productivity Component	Merit and Longevity	Total
1	3.25%	0.75%	3.20%	7.20%
2	3.25	0.75	3.00	7.00
3	3.25	0.75	2.80	6.80
4	3.25	0.75	2.60	6.60
5	3.25	0.75	2.40	6.40
6	3.25	0.75	2.20	6.20
7	3.25	0.75	2.00	6.00
8	3.25	0.75	1.80	5.80
9	3.25	0.75	1.70	5.70
10	3.25	0.75	1.60	5.60
11	3.25	0.75	1.50	5.50
12	3.25	0.75	1.40	5.40
13	3.25	0.75	1.30	5.30
14	3.25	0.75	1.20	5.20
15	3.25	0.75	1.06	5.06
16	3.25	0.75	0.92	4.92
17	3.25	0.75	0.78	4.78
18	3.25	0.75	0.64	4.64
19	3.25	0.75	0.50	4.50
20	3.25	0.75	0.50	4.50
21	3.25	0.75	0.50	4.50
22	3.25	0.75	0.50	4.50
23	3.25	0.75	0.50	4.50
24	3.25	0.75	0.50	4.50
25	3.25	0.75	0.50	4.50
>25	3.25	0.75	0.25	4.25

Annual Post-Retirement Benefit Increases: Retirees in Plan 1 are entitled to annual post-retirement benefit increases of 3% of their original benefit after 12 months of retirement. Retirees in Plan 2 are entitled to annual post-retirement benefit increases of 2% of their original benefit after 12 months of retirement. Post-retirement benefit increases are not compounded.

Rates of Retirement and Deferred Retirement Option Plan (DROP) Elections: The rates displayed in the accompanying table are used to measure the probability of eligible members retiring under either the regular retirement provisions or the Deferred Retirement Option Plan. In addition, the following assumptions apply to members in this category:

• Plan 2: 70% of members with 33.33 or more years of service that are at least age 62 were assumed to elect the DROP with an average DROP period of 36 months.

• All members of the retirement system were assumed to retire on or before age 70. Deferred vested members are assumed to retire at age 62. This assumption was first used in the December 31, 2014 actuarial valuation.

Marriage: Seventy percent of non-retired members were assumed to be married for purposes of death benefits. In each case, the male was assumed to be three years older than the female.

Rates of Retirement

Retirement Age	Plan 1	Plan 2
55	15%	3%
56	15	3
57	15	3
58	15	3
59	15	3
60	40	3
61	40	20
62	20	40
63	20	25
64	20	25
65	100	50
66	N/A	35
67	N/A	20
68	N/A	20
69	N/A	20
70	N/A	100

Sick Leave: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits. The calculated normal retirement benefits were increased by 2.5% to account for the inclusion of unused sick leave in the calculation of service credit. This assumption was last revised with the December 31, 2014 valuation.

Forfeiture of Vested Benefits: A percentage of the actuarial present value of vested termination benefits is assumed to be forfeited by a withdrawal of accumulated contributions. This percentage is applied individually based on years of service. The data in the accompanying table was first used for the December 31, 2004 actuarial valuation.

Years of Service	Percent Forfeiting
Less than 15	60%
15 - 19	40
20 - 24	20
25 or more	-

Plan 3 Transfer: Plan 3 (defined contribution plan) members are assumed to elect Plan 2 if they acquire seven years of service. An actuarial reserve is held for the difference between the fair and actuarial value of assets. This assumption was last revised for the December 31, 2004 valuation.

Mortality Assumptions: This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement. As summarized in the following table, the RP-2000 tables are used, with generational mortality. This table was first used for the December 31, 2004 actuarial valuation.

Pre-retirement mortality rates	based on the RP-2000 Employee Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on Scale AA.
Post-retirement mortality rates	based on the RP-2000 Healthy Annuitant Table (ages set forward 2 years for males, 0 for females) with adjustments for mortality improvements based on Scale AA.
Disabled mortality rates	based on the RP-2000 Disabled Table for males and females, as appropriate, with adjustments for mortality improvements based on Scale AA.

Rates of Separation from Active Membership: This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire. Annual probabilities of terminating are summarized in the accompanying table. This assumption was last revised for the December 31, 2014 valuation.

Years of Service	Annual Probability of Termination
0	13.00 %
1	13.00
2	11.00
3	9.00
4	8.00
5	7.00
6	6.00
7	5.00
8-12	4.50
13	4.00
14	3.50
15	3.00
16	2.75
17	2.50
18	2.50
19	2.25
20 or more	2.00

Vested Deferred Pensions: Amounts are assumed to increase during the deferral period to 4.0% per year, compounded annually. This assumption was first used in the December 31, 2009 valuation.

C. Actuarial Tables

Several tables are presented on the following pages to provide information about active members of the Wichita Employees' Retirement System, as well as retirees and beneficiaries. These tables also present information about the solvency of the plan, system experience and funding progress.

Active Member Valuation Data

Valuation Date	Number of Members: Plan 1	Plan 2	Plan 3[1]	Total	Annual Covered Payroll (in thousands)	Average Annual Pay	Percentage Change in Average Annual Pay
12/31/2008	92	958	852	1,902	$ 81,580	$ 42,892	3.4 %
12/31/2009	80	998	740	1,818	82,704	45,492	6.1
12/31/2010	61	993	661	1,715	79,636	46,435	2.1
12/31/2011	31	916	611	1,558	75,444	48,424	4.3
12/31/2012	26	950	527	1,503	70,783	47,094	(2.7)
12/31/2013	15	957	517	1,489	70,952	49,068	4.2
12/31/2014	8	989	520	1,517	71,391	47,061	(4.1)
12/31/2015	5	988	539	1,532	74,028	48,321	2.7
12/31/2016	3	952	617	1,572	77,121	49,059	1.5
12/31/2017	3	891	647	1,541	78,395	50,873	3.7

[1] Plan 3 totals do not include Plan 3b members, who have made an irrevocable election to remain in the defined contribution plan.

Retirants and Beneficiaries Added to and Removed from Rolls

Valuation Date	Added to Rolls No.	Added to Rolls Annual Pensions[1]	Rolls No.	Rolls Annual Pensions[1]	Year-End Rolls No.	Year-End Rolls Annual Pensions[1]	Average Pension	Percentage Change in Avg Annual Pensions
12/31/2008	79	$ 1,879,045	44	$ 693,343	1,167	$ 27,520,308	$ 23,582	3.6 %
12/31/2009	66	1,338,875	52	708,830	1,181	28,730,505	24,327	3.2
12/31/2010	71	1,847,020	59	949,872	1,193	29,855,835	25,026	2.9
12/31/2011	164	4,305,336	47	824,103	1,310	32,885,454	25,103	0.3
12/31/2012	50	1,010,373	58	1,036,870	1,302	31,730,663	24,371	2.9
12/31/2013	72	1,676,296	47	744,036	1,327	33,294,857	25,090	3.0
12/31/2014	68	1,549,070	54	927,726	1,341	34,427,388	25,673	2.3
12/31/2015	90	1,830,381	51	1,132,754	1,380	35,726,088	25,888	0.8
12/31/2016	78	1,730,868	65	1,194,869	1,393	36,931,056	26,512	2.4
12/31/2017	71	1,678,547	48	1,153,410	1,416	38,125,080	26,924	1.6

[1] Values are estimated based upon annualized pension amounts.

Solvency Test

Valuation Date	Aggregate Actuarial Liability For: (1) Active Member Contributions	(2) Retirants and Beneficiaries[1]	(3) Active Members (Employer Financed)	Reported Valuation Assets	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
12/31/2008	$ 46,541,280	$ 272,176,420	$ 193,655,822	$ 512,583,345	100 %	100 %	100.2 %
12/31/2009	49,152,328	279,396,973	200,722,170	509,493,888	100	100	90.1
12/31/2010	50,473,365	293,227,477	196,734,871	516,307,845	100	100	87.7
12/31/2011	45,440,569	349,202,490	160,530,664	513,298,382	100	100	73.9
12/31/2012	49,519,050	347,350,296	174,936,109	520,320,051	100	100	70.6
12/31/2013	50,337,976	362,224,034	169,823,819	542,157,342	100	100	76.3
12/31/2014	51,408,059	369,926,908	168,780,115	560,031,764	100	100	82.2
12/31/2015	51,609,961	378,186,127	176,058,606	568,464,178	100	100	78.8
12/31/2016	53,857,062	385,231,766	181,400,097	575,971,337	100	100	75.6
12/31/2017	55,050,806	395,107,729	184,748,720	598,793,422	100	100	80.5

[1] Includes vested and nonvested terminated members.

System Experience: For the year ended December 31, 2016, the Wichita Employees' Retirement System experienced an actuarial gain of $8.1 million. The loss for the 2017 plan year reflects the combined impact of an actuarial net gain of $5.3 million on the actuarial value of plan assets and an actuarial gain of $2.8 million on liabilities. Information about the factors that contributed to the actuarial loss is presented in the following table.

	Increase (Decrease)		
	Actuarial Liability (a)	Actuarial Value of Assets (b)	Unfunded Actuarial Liability (a) - (b)
Balances as of December 31, 2016	$ 620,218,925	$ 575,971,337	$ 44,247,588
Changes for the year:			
Normal cost	9,632,102	-	9,632,102
Plan 3 members transferring to Plan 3b	(191,292)	(191,292)	-
Contributions	-	13,324,596	(13,324,596)
Benefit payments	(39,282,815)	(39,282,815)	-
Interest	47,312,373	43,643,392	3,668,981
Expected actuarial value at December 31, 2017	637,689,293	593,465,218	44,224,075
Actual actuarial value as of December 31, 2017	634,907,255	598,793,422	36,113,833
Actuarial gain (loss)	$ 2,782,038	$ 5,328,204	$ 8,110,242

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AL) (b)	Unfunded AL (UAL) (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	UAL as a Percentage of Active Member Covered Payroll [(b)-(a)]/(c)
12/31/2008	$ 512,853	$ 512,374	$ (479)	100.1%	$ 81,580	(0.6)%
12/31/2009	509,494	529,271	19,777	96.3	82,704	23.9
12/31/2010	516,308	540,436	24,128	95.5	79,636	30.3
12/31/2011	513,298	555,174	41,876	92.5	75,444	55.5
12/31/2012	520,320	571,805	51,485	91.0	70,783	72.7
12/31/2013	542,157	582,386	40,229	93.1	70,953	56.7
12/31/2014	560,032	590,115	30,083	94.9	71,391	42.1
12/31/2015	568,464	605,855	37,391	93.8	74,028	50.5
12/31/2016	575,971	620,219	44,248	92.9	77,121	57.4
12/31/2017	598,793	634,907	36,114	94.3	78,395	46.1

A schedule of Employer Contributions, including a comparison of actuarially determined contributions to actual contributions made, is presented as Required Supplementary Information on page A-30 in the Financial Section of this report.

D. Summary of Benefit Provisions

Plan 1 is a closed plan, which is applicable to members employed prior to July 18, 1981 who did not elect to be converted to Plan 2. Plan 2 is applicable to members employed prior to July 18, 1981 who elected to be covered by Plan 2, those employed or re-employed on or after July 18, 1981 and before January 1, 1994, and Plan 3 members who, upon vesting, elect to become members of Plan 2. A summary of benefit provisions applicable to the plans is presented below. A more detailed description of Plan provisions is available upon request from the Pension Management Office.

Contributions:

- *Employee contributions:*

  Plan 1: 6.4% of base salary, longevity and overtime pay.

  Plan 2 and Plan 3: 4.7% of base salary and longevity pay (effective February 19, 2000).

- *Employer contributions:*

  Actuarially determined amounts which, together with employee contributions and investment earnings, fund the obligations of the System in accordance with accepted actuarial principles.

Unused sick leave: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits.

Normal Retirement:

- *Eligibility:*

  Plan 1: Age 60 with seven or more years of service, or any age with 30 or more years of service.

  Plan 2: Age 62 with seven or more years of service.

- *Benefit:*

  Plan 1: Years of service times 2.5% of final average salary, to a maximum of 75%.

  Plan 2: Years of service times 2.25% of final average salary, to a maximum of 75%.

- *Final Average Salary:* Average for the three consecutive years within the last 10 years of service that produce the highest average salary.

Early Retirement:

- *Eligibility:* Age 55 with seven or more years of service.

- *Benefit:* An amount computed as for normal retirement, but reduced for each month retirement precedes age 60 under Plan 1 and age 62 under Plan 2. The amount of reduction per month of early retirement is computed as follows:

  Plan 1: A service-graduated percentage for each month retirement precedes age 60. The percentage is .05 of 1% if service is 29 years but less than 30 years, increasing by .05 of 1% for each additional year service is less than 30 years, to a maximum of .50 of 1% if service is less than 21 years.

  Plan 2: An age-graduated percentage for each month retirement precedes age 62. The percentage is 0.6% for each month that the member's age precedes age 62, up to a maximum of 50.4% at age 55.

Service-Connected Disability:

- *Eligibility:* All Plans: No age or service requirement. Disability must be permanent and total, and precludes performance of any duties for a City position commensurate with the employee's training, experience, and education.
- *Benefit:*

  Plan 1: 60% of final rate of salary.

  Plan 2: 50% of final rate of salary.

Non-Service Connected Disability:

- *Eligibility:* Seven or more years of service and under age 60, Plan 1, or age 62, Plan 2. Disability must be permanent and total and preclude performance of any duties for a City position commensurate with the employee's training, experience and education.
- *Benefit:*

  Plan 1: 30% of final average salary plus 1% of final average salary for each year of service in excess of seven years, to a maximum of 50%.

  Plan 2: 25% of final rate of salary.

Deferred Retirement Option Plan (DROP):

- *Eligibility:* Must be eligible for retirement and elect to participate in the DROP for 1 to 60 months.
- *Benefit:* Benefit computed based on years of service and final average salary as of DROP election date, which is paid into member's notional DROP account during the deferral period. Member continues to make required employee contributions during the deferral period. Interest at an annual rate of 5% is credited to the notional DROP account. Voluntary termination of employment during the DROP period results in a loss of accrued interest. Balance of DROP account is payable within 90 days of actual termination of employment.

Deferred Retirement:

- *Eligibility:*

  Plan 1: Termination of service with 7 or more years of service and under age 60.

  Plan 2: Termination of service with 7 or more years of service and under age 62.
- *Benefit:* Deferred pensioner may apply for a reduced retirement benefit upon meeting the applicable age requirement for early retirement (55 years) or an unreduced pension upon meeting the applicable age requirement for normal retirement (60 years, Plan 1 or 62 years, Plan 2). A refund of employee contributions, plus 5% annual interest, may be elected in lieu of a retirement benefit. Retirement benefit is computed as for normal retirement. Deferred pensions are adjusted during the deferral period based on changes in the National Average Earnings Index, up to 5.5% annually.

Pre-Retirement Survivor Benefits (surviving spouse and minor child):

- *Eligibility:* Death of employee with seven or more years of credited service.
- *Benefit:* 50% of the benefit earned by the deceased employee at the time of death, plus 10% of the deceased employee's final average salary for each minor child under age 18, to a maximum of 75% of final average salary. If no surviving spouse, benefit is 20% of final average salary on account of each child to a maximum of 60% of final average salary; terminates when child reaches age 18.

Pre-Retirement Survivor Benefits (designated beneficiary): When no spouse or minor child is eligible for a survivor's benefit, the retiree may designate a beneficiary.

- *Eligibility:* Death of employee with seven or more years of credited service.
- *Benefit:* Accumulated contributions plus 5% annual interest, and one month's salary for each full year of service, not to exceed six months of salary.

Post-Retirement Survivor Benefits (surviving spouse and minor child):

- *Eligibility:* Spouse must have been married to retired employee for one year or more at time of death if retired after January 1, 2000. If retired prior to January 1, 2000, must have been married to retired employee at retirement. A minor child must be under age 18.
- *Benefit:* 50% of benefit paid to retiree at time of death, plus 10% of retiree's final average salary for each minor child under age 18, to a maximum of 75% of final average salary. If no surviving spouse, benefit is 20% of final average salary on account of each child to a maximum of 60% of final average salary; terminates when child reaches age 18. Plan 1 also includes a $1,500 funeral benefit.

Post-Retirement Survivor Benefits (designated beneficiary): When no spouse or minor child is eligible for a survivor's benefit, the retiree may designate a beneficiary.

- *Benefit:* Final partial benefit due retiree through date of death plus balance, if any, of contributions and interest. Plan 1 also includes a $1,500 funeral benefit.

Refund of Contributions:

- *Eligibility:* Termination of employment without eligibility for any other benefit.
- *Benefit:* Accumulated contributions at the time of termination, plus 5% annual interest.

2. Wichita Employees' Retirement System Plan 3 and Plan 3b

The City contributes to Wichita Employees' Retirement System Plan 3, a defined contribution pension plan, for all of its full-time civilian employees hired or rehired on or after January 1, 1994. Provisions of the plan are outlined in the financial section of this report beginning on page A-23.

A. Summary of Benefit Provisions

Because Plan 3 and Plan 3b are defined contribution plans, members of those plans are only entitled to certain limited retirement benefits as described below. In the event that a Plan 3 or Plan 3b member is granted either of these benefits, the member will be required to forfeit the balance of contributions and earnings in his or her participant account.

Service-Connected Disability:

- *Eligibility:* No age or service requirement. Disability must be permanent and total and preclude the performance of any duties for a City position commensurate with the employee's training, experience and education.
- *Benefit:* 50% of final rate of salary; or distribution of vested Plan 3 account.

Non-Service Connected Disability:

- *Eligibility:* Seven or more years of service and under age 62. Disability must be permanent and total and preclude the performance of any duties for a City position commensurate with the employee's training, experience and education.
- *Benefit:* 25% of final rate of salary; or distribution of vested Plan 3 account.

3. Police and Fire Retirement System of Wichita, Kansas

Provisions of the plan are outlined in the Financial Section of this report beginning on page A-24. The Plans prepare two actuarial valuations - one for funding purposes and one for accounting and financial reporting purposes under Governmental Accounting Standards Board Statement No. 67, *Financial Reporting for Pension Plans - an Amendment of GASB Statement No. 25*. With the exception of the discount rate used, the actuarial cost methods and assumptions used for financial reporting purposes are consistent with those utilized for funding purposes.

A. Actuarial Cost Method

The actuarial cost method is a procedure for allocating the actuarial present value of pension plan benefits and expenses to time periods. The method used for the valuation is known as the Entry Age Normal actuarial cost method and has the following characteristics:

- The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement, and
- Each annual normal cost is a constant percentage of the member's year-by-year projected covered compensation.

The Entry Age Normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's assumed pensionable compensation rates between the entry age of the member and the assumed exit age.

The portion of the actuarial present value of retirement system benefits allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial liability. Deducting actuarial assets from the actuarial liability determines the unfunded actuarial liability (or surplus). The Police and Fire Retirement System (PFRS) had an unfunded actuarial liability of $32.4 million as of December 31, 2017.

B. Actuarial Assumptions Used for Valuations

System contribution requirements and actuarial present values are calculated by applying experience assumptions to the benefit provisions and participant information of the Retirement System, using the actuarial cost method. These assumptions were proposed by the Fund's actuary following the completion of an experience study covering the period January 1, 2009 through December 31, 2013, and adopted by the Board on September 17, 2014. An experience study is performed every five years.

The actuarial valuation of assets is based upon the "Expected Value plus 25%" method, which levels the effects of fair value fluctuations by recognizing 25% of the difference between the expected actuarial value and the fair value of assets. The Board first adopted this methodology for the December 31, 2002 valuation. Actuarial gains and losses reduce or increase the unfunded actuarial liability or surplus, which is amortized over a rolling 20-year amortization period.

<u>Long-Term Rate of Return</u>: The investment return rate, net of investment expenses and administrative expenses, used for the actuarial valuation performed for funding purposes is 7.75% per year, compounded annually. This rate consists of 3.25% in recognition of long-term price inflation and 4.50% in recognition of a real rate of return over price inflation. This assumption, used to equate the value of payments due at different points in time, was adopted by the Board and was first used for the December 31, 1981 valuation, although the allocation between inflation and real return has changed periodically, most recently in 2014.

The 7.90% rate of return used for accounting purposes is based on the same underlying data as the rate used for funding purposes. However, the rate used for accounting purposes represents investment return, net of investment expenses. Administrative expenses are accounted for separately, consistent with the requirements of GASB Statement No. 67.

Salary Projections: These assumptions are used to project current salaries to determine average annual compensation. They consist of the same inflation component used for the investment return assumption, a component reflecting productivity and the competition from other employers for personnel and a years-of-service component to reflect promotion and longevity increments.

Salary increases are assumed to occur mid-year. The salary increase assumptions are expected to produce 4.00% annual increases in active member payroll (the inflation and productivity base rate), given a constant active member group size. This is the same payroll growth assumption used to amortize the unfunded actuarial liability. The rate of return over assumed wage growth is 3.75% per year. This assumptions was first used for the December 31, 2014 valuation. Assumptions about annual rates of salary increases are summarized in the accompanying table.

Years of Service	Inflation Component	Productivity Component	Merit and Longevity	Total
1	3.25 %	0.75 %	2.75 %	6.75 %
5	3.25	0.75	2.75	6.75
10	3.25	0.75	2.75	6.75
15	3.25	0.75	2.75	6.75
20	3.25	0.75	1.00	5.00
25	3.25	0.75	1.00	5.00
30	3.25	0.75	1.00	5.00

Annual Post-Retirement Benefit Increases: Retirees in the Police and Fire Retirement System are entitled to annual post-retirement benefit increases of 2% of their original benefit after 36 months of retirement. Post-retirement benefit increases are not compounded.

Rates of Retirement and Backward Deferred Retirement Option Plan (Back DROP) Elections: The rates displayed in the accompanying table are used to measure the probability of eligible members retiring under either the regular retirement provisions or the Backward Deferred Retirement Option Plan. It is assumed that members who retire under service retirement provisions elect a Back DROP of up to five years which maximizes the actuarial value of the retirement benefit determined as of the retirement date. These rates were first used for the December 31, 2014 valuation.

Plans A & B			Plan C-79				
				Less than 30 YOS		30 or More YOS	
Years of Service (YOS)	Police	Fire	Age of Member	Police	Fire	Police	Fire
less than 28	5 %	5 %	50	10 %	10 %	10 %	20 %
29	5	5	51	10	10	10	20
30	10	5	52	10	10	10	20
31	10	5	53	20	15	10	20
32	30	25	54	20	15	10	20
33	50	25	55	20	10	10	25
34	50	25	56	20	10	30	25
35	100	100	57	20	20	30	30
35 or more	100	100	58	20	15	30	50
			59	20	15	30	50
			60 or more	100	100	100	100

Marriage: Eighty percent of non-retired members were assumed to be married for purposes of death benefits. In each case, the male was assumed to be three years older than the female.

Sick Leave: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits. The calculated normal retirement benefits were increased by 3% to account for the inclusion of unused sick leave in the calculation of service credit. This assumption was last revised with the December 31, 2014 valuation.

Forfeiture of Vested Benefits: A percentage of the actuarial present value of vested termination benefits is assumed to be forfeited by a withdrawal of accumulated contributions. This percentage is applied individually based on years of service. The data in the accompanying table was first used for the December 31, 2014 actuarial valuation.

Years of Service	Percent Forfeiting
10 - 14	75 %
15 - 19	10
20 or more	-

Mortality Assumptions: This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each pension payment being made after retirement. As summarized in the following table, the RP-2000 tables are used, with generational mortality. The table was first used in the December 31, 2004 actuarial valuation.

Pre-retirement mortality rates	based on the RP-2000 Employee Table for males and females, as appropriate, with adjustments for mortality improvements based on Scale AA.
Post-retirement mortality rates	based on the RP-2000 Healthy Annuitant Table for males and females, as appropriate, with adjustments for mortality improvements based on Scale AA.
Disabled mortality rates	based on the RP-2000 Disabled Table for males and females, as appropriate, with adjustments for mortality improvements based on Scale AA.

Rates of Disability: This assumption measures the probabilities of a member receiving a disability retirement. The rates do not apply to members who are eligible to retire. The rates of recovery from disability are assumed to be zero. The accompanying table provides the assumed probability of active members becoming disabled in during the next year. These rates were first used for the December 31, 2014 valuation.

Annual Probability of Becoming Disabled		
Age	Police	Fire
20	0.09 %	0.07 %
25	0.15	0.12
30	0.30	0.24
35	0.49	0.39
40	0.69	0.54
45	0.88	0.70
50	1.08	0.85
55	1.28	0.91

Rates of Separation from Active Membership: This assumption measures the probabilities of a member terminating employment. The rates do not apply to members who are eligible to retire. This assumption was last revised for the December 31, 2014 valuation.

	Annual Probability of Terminating	
Years of Service	Police	Fire
0 - 4	5.50 %	3.00 %
5 - 7	3.00	3.00
8 - 13	3.00	2.00
14 - 15	1.00	2.00
16 - 22	1.00	-
More than 22	-	-

Vested Deferred Pensions: Amounts for Plan C-79 are assumed to increase during the deferral period to 4.0% per year, compounded annually. This assumption was most recently revised with the December 31, 2009 valuation.

C. Actuarial Tables

Several tables are presented on the following pages to provide information about active members of the Police and Fire Retirement System, as well as retirees and beneficiaries. These tables also present information about the solvency of the plan, system experience and funding progress.

Active Member Valuation Data

	Number of Members					
Valuation Date	Plan A	Plan C-79	Total Members	Annual Covered Payroll (in thousands)	Average Annual Pay	Percentage Change in Average Annual Pay
12/31/2008	47	1,029	1,076	$ 60,282	$ 56,024	6.8 %
12/31/2009	32	1,068	1,100	63,055	57,323	2.3
12/31/2010	21	1,068	1,089	63,077	57,922	1.0
12/31/2011	14	1,074	1,088	62,759	57,683	(0.4)
12/31/2012	11	1,073	1,084	64,150	59,179	2.6
12/31/2013	9	1,076	1,085	65,306	60,190	1.7
12/31/2014	8	1,060	1,068	64,572	60,461	0.5
12/31/2015	5	1,045	1,050	65,560	62,439	3.3
12/31/2016	4	1,059	1,063	66,946	62,979	0.9
12/31/2017	2	1,080	1,082	69,634	64,357	2.2

Retirants and Beneficiaries Added to and Removed from Rolls

Valuation Date	Added to Rolls No.	Added to Rolls Annual Pensions[1]	Removed from Rolls No.	Removed from Rolls Annual Pensions[1]	Year-End Rolls No.	Year-End Rolls Annual Pensions[1]	Average Pension	Percentage Change in Average Pension
12/31/2008	39	$ 510,543	32	$ 417,236	840	$ 19,492,053	$ 23,205	2.9%
12/31/2009	57	1,959,741	24	398,908	873	21,357,569	24,465	5.4
12/31/2010	47	1,439,435	28	541,662	892	22,570,141	25,303	3.4
12/31/2011	48	1,615,338	29	525,289	911	24,030,607	26,378	4.2
12/31/2012	33	1,201,800	23	435,120	921	25,226,219	27,390	3.8
12/31/2013	48	1,938,485	17	380,985	952	27,143,376	28,512	4.1
12/31/2014	63	2,400,693	42	850,741	971	29,165,652	30,037	5.3
12/31/2015	44	1,652,860	26	494,625	989	30,774,324	31,117	3.6
12/31/2016	31	1,286,489	33	629,314	987	31,914,576	32,335	3.9
12/31/2017	41	1,757,606	28	694,600	1,000	33,526,716	33,527	3.7

[1] Values are estimated based on annualized pension amounts.

Solvency Test

Valuation Date	Aggregate Actuarial Liability For: (1) Active Member Contributions	(2) Retirants and Beneficiaries[1]	(3) Active Members (Employer Financed)	Reported Valuation Assets	Portion of Actuarial Liabilities Covered by Reported Assets (1)	(2)	(3)
12/31/2008	$ 58,050,319	$ 238,590,747	$ 199,920,080	$ 472,345,191	100 %	100 %	87.9 %
12/31/2009	60,326,408	257,298,665	202,309,181	480,555,562	100	100	80.5
12/31/2010	63,515,814	270,693,677	202,698,947	497,925,786	100	100	80.8
12/31/2011	66,390,179	293,730,691	202,367,017	510,946,217	100	100	74.5
12/31/2012	70,527,705	305,985,839	212,559,831	533,380,618	100	100	73.8
12/31/2013	74,238,693	325,096,785	218,412,805	571,261,929	100	100	78.7
12/31/2014	74,684,418	348,915,979	208,304,004	600,860,146	100	100	85.1
12/31/2015	77,222,492	364,943,124	212,970,051	620,148,816	100	100	83.6
12/31/2016	81,765,281	377,864,418	222,014,789	640,508,756	100	100	81.5
12/31/2017	85,753,036	393,307,456	230,956,665	677,616,328	100	100	86.0

[1] Includes vested and nonvested terminated members.

System Experience: For the year ended December 31, 2017, the Police and Fire Retirement System experienced an actuarial gain of $8.6 million. The gain for the 2017 plan year reflects the combined impact of an actuarial net gain of $6.8 million on the actuarial value of plan assets and an actuarial gain of $1.8 million on liabilities. Information about the factors that contributed to the actuarial gain is presented in the following table.

	Increase (Decrease)		
	Actuarial Liability (a)	Actuarial Value of Assets (b)	Unfunded Actuarial Liability (a) - (b)
Balances as of December 31, 2016	$ 681,644,488	$ 640,508,756	$ 41,135,732
Changes for the year:			
Normal cost	14,568,340	-	14,568,340
Contributions	-	18,285,163	(18,285,163)
Benefit payments	(36,930,533)	(36,930,533)	-
Interest	52,552,138	48,930,402	3,621,736
Expected actuarial value at December 31, 2017	711,834,433	670,793,788	41,040,645
Actual actuarial value as of December 31, 2017	710,017,157	677,616,328	32,400,829
Actuarial gain (loss)	$ 1,817,276	$ 6,822,540	$ 8,639,816

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AL) (b)	Unfunded AL (UAL) (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	UAL as a Percentage of Active Member Covered Payroll [(b)-(a)]/(c)
12/31/2008	$ 472,345	$ 496,561	$ 24,216	95.1%	$ 60,282	40.2%
12/31/2009	480,556	519,934	39,378	92.4	63,055	62.5
12/31/2010	497,926	536,908	38,982	92.7	63,077	61.8
12/31/2011	510,946	562,488	51,542	90.8	62,759	82.1
12/31/2012	533,381	589,074	55,693	90.5	64,150	86.8
12/31/2013	571,262	617,748	46,486	92.5	65,306	71.2
12/31/2014	600,860	631,904	31,044	95.1	64,572	48.1
12/31/2015	620,149	655,136	34,987	94.7	65,560	53.4
12/31/2016	640,509	681,644	41,135	94.0	66,946	61.4
12/31/2017	677,616	710,017	32,401	95.4	69,634	46.5

A Schedule of Employer Contributions, including a comparison of actuarially determined contributions to actual contributions made, is presented as Required Supplementary Information on page A-32 in the Financial Section of this report.

D. Summary of Benefit Provisions

Plan A is a closed plan which was applicable to members who entered the System between January 1, 1965 and December 31, 1978; and to members who entered prior to January 1, 1965 and elected Plan A coverage. Plan B is a closed plan which was applicable to members who entered the System prior to January 1, 1965 and elected Plan B coverage. Plan C-79 is an open plan which is applicable to members entering the System after December 31, 1978. A summary of benefit provisions applicable to the plans is presented below. A more detailed description of Plan provisions is available upon request from Pension Management.

Contributions:

- *Employee contributions:*

  Plan A: 8.0% of salary.

  Plan B: 6.0% of salary.

  Plan C-79: 7.0% of salary.

- *Employer contributions:*

  Actuarially determined amounts which, together with employee contributions and investment earnings, fund the obligations of the System in accordance with accepted actuarial principles.

Unused sick leave: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits.

Normal Retirement:

- *Eligibility:*

  Plan A: Any age with 20 years of actual service.

  Plan B: Any age with 20 years of actual service.

  Plan C-79: Age 55 with 10 years of actual service, age 50 with 20 or more years of actual service, or any age with 30 years of creditable service.

- *Benefit:* Years of service times 2.5% of final average salary, to a maximum of 75%.
- *Final Average Salary:* Average for the three consecutive years within the last 10 years of service that produce the highest average salary.

Service-Connected Disability:

- *Eligibility:* Seven or more years of service and under age 55. Disability must be permanent and preclude employee from performing the duties of their position.
- *Benefit:* 75% of final salary rate if injury, 50% if disease.
- *Conditions*: Benefit plus earnings from gainful employment cannot exceed current salary for rank held at time of disability. Benefit is recomputed at age 55 using service retirement formula, updated final average salary, and service credit for period of disability.

Non-Service Connected Disability:

- *Eligibility:* Seven or more years of service and under age 55. Disability must be permanent and preclude employee from performing the duties of their position.
- *Benefit:* 30% of final average salary plus 1% of final average salary for each year of service in excess of seven years. Maximum is 50% of final average salary.

- *Conditions*: Benefit plus earnings from gainful employment cannot exceed current salary for rank held at the time of disability.

Backward Deferred Retirement Option Plan (Back DROP):

- *Eligibility:* Must be eligible to receive a service retirement benefit as of the Backward DROP retirement date and elect the Back DROP for a period of 1 to 60 months.
- *Benefit:* Under the Back DROP, the member may elect a benefit based on a retirement date up to 60 months prior to the current date. The monthly benefit is computed based on service, final average salary and benefit formula at the selected prior date. The DROP account available to the retiring member is the computed benefit multiplied by the number of months of Back DROP plus applicable post-retirement adjustments and 5% annual compounded interest.

Deferred Retirement:

- *Eligibility:* Vested members of C-79 who leave City service may defer their pension benefit by electing to leave their contributions in the Retirement System until they are eligible for a retirement benefit; age 55 with less than 20 years of actual service and age 50 with 20 or more years of actual service. A refund of employee contributions, plus 5% annual interest, may be elected in lieu of a retirement benefit.
- *Benefit:* Retirement benefit is computed as for normal retirement. Deferred pensions are indexed during the deferral period based on changes in the National Average Earnings Index, up to 5.5% annually.

Pre-Retirement Survivor Benefits Service-Connected Death:

- *Eligibility:* When death results from performance of duty as a fire fighter or police officer, there is no minimum service requirement. Spouse and minor children of member at the time of death are eligible for a survivor's benefit.
- *Benefit:* 50% of final salary plus 10% of final salary for each minor child under age 18, to a maximum of 75% of final salary. If no surviving spouse, benefit is 20% of final salary for each child under age 18 to a maximum of 60% of final salary; terminates when child reaches age 18.

Pre-Retirement Survivor Benefits Non-Service-Connected Death:

- *Eligibility:* Spouse and minor children of member at the time of death.

  Plan A: Three or more years of service.

  Plan B: 20 or more years of service.

  Plan C-79: Three or more years of service.

- *Benefit:*

  Plan A: 35% of final average salary plus 1% of final average salary for each year of service over three years to a maximum of 50% of final average salary, plus 10% of final average salary on account of each minor child under age 18 to a maximum of 66 2/3% of final average salary. If no surviving spouse, benefit is 15% of final average salary for each child under age 18 to a maximum of 50% of final average salary; terminates when child reaches age 18.

  Plan B: 50% of final salary.

  Plan C-79: Identical to Plan A benefits.

Post-Retirement Survivor Benefits:

- *Eligibility:* 20 or more years of service. If retired prior to January 1, 2000, surviving spouse must have been married to retired member at date of retirement. Effective January 1, 2000, surviving spouse must have been married to retired member for a minimum of 12 months at time of death.
- *Benefit:*

  Plan A: 35% of final average salary plus 1% of final average salary for each year of service over three years to a maximum of 50% of final average salary, plus 10% of final average salary for each minor child under age 18 to a maximum of 66 2/3%. If no surviving spouse, 15% of final average salary for each child to a maximum of 50%.

  Plan B: 50% of final salary to surviving spouse or if no surviving spouse pension's payable to children under age 18.

  Plan C-79: Identical to Plan A benefits.

Funeral Benefit:

- *Eligibility:* Plan A, B and C-79 members who retired after November 21, 1973.
- *Benefit:*

  Plan A: $750 payable to a beneficiary. Plan A members who retired prior to November 21, 1973 are not eligible for a funeral benefit.

  Plan B: $750 payable to a beneficiary. Plan B members who retired between Jaunary 1, 1965 and November 21, 1973 are eligible for a $100 funeral benefit payable to a beneficiary.

  Plan C-79: $750 payable to a beneficiary

Refund of Contributions:

- *Eligibility:* Termination of employment without eligibility for any other benefit.
- *Benefit:* Accumulated contributions at the time of termination plus 5% annual interest, beginning January 1, 2000.

STATISTICAL SECTION

Statistical Section Overview

This section includes detailed schedules showing trends related to changes in the net position, including deductions from the net position for benefits and refunds beginning on page D-2, average benefit payments beginning on page D-8, and retired members by type and benefit amount beginning on page D-12. These schedules may be considered useful in evaluating the condition of the Systems and understanding the information presented in the financial statements, note disclosures and required supplementary information.

The Schedule of Changes in Fiduciary Net Position, including deductions from the net position for benefits and refunds, is derived from the Comprehensive Annual Financial Report for the relevant fiscal year. All other information is derived from internal sources of the Systems, except for information that is derived from the actuarial valuations of the plans.

WICHITA RETIREMENT SYSTEMS

CHANGES IN FIDUCIARY NET POSITION
WICHITA EMPLOYEES' RETIREMENT SYSTEM

For years ended December 31, 2008 through December 31, 2017
(accrual basis of accounting)

	Fiscal Year			
	2017	2016	2015	2014
ADDITIONS				
Employer contributions	$ 9,642,540	$ 8,946,064	$ 9,031,463	$ 8,464,927
Employee contributions	3,682,056	3,642,007	3,574,026	2,435,831
Net income (loss) from investing activities	91,773,973	35,956,780	13,380	27,894,626
Reclassifications due to participant conversion	-	-	-	2,942,734
Total additions	105,098,569	48,544,851	12,618,869	41,738,118
DEDUCTIONS				
Benefit payments				
Service retirement	33,606,377	32,442,114	31,786,968	30,632,053
Survivor benefit	3,492,605	3,394,194	3,121,649	2,956,020
DROP lump sum payments	1,077,319	2,122,297	885,185	2,798,396
Qualified domestic relations order	150,477	142,351	99,384	58,561
Disability (service)	54,609	53,905	53,201	59,753
Disability (non-service)	239,262	220,021	216,319	216,557
Funeral benefits	48,063	86,569	59,823	57,349
Pension administration	633,379	615,829	553,844	441,869
Depreciation	-	-	70,241	63,888
Refunds	614,103	683,332	866,874	400,433
Reclassifications due to participant conversion	191,292	244,793	465,171	-
Total deductions	40,107,486	40,005,405	38,178,659	37,684,879
Net increase (decrease) in fiduciary net position	64,991,083	8,539,446	(25,559,790)	4,053,239
Net position - beginning, as previously reported	549,786,949	541,247,503	552,232,824	548,179,585
Prior period adjustment	-	-	14,574,469	-
Net position - beginning, restated	549,786,949	541,247,503	566,807,293	548,179,585
Net position - ending	$ 614,778,032	$ 549,786,949	$ 541,247,503	$ 552,232,824

Note: In 2015, a prior period adjustment was made to report non-vested Plan 3 participants as part of the Wichita Employees' Retirement System. Prior to 2015, those members were reported with Plan 3b members in the defined contribution plan. Reclassifications due to participant conversion represent members of Plan 3 who vest with seven years of service and move into either Plan 2 or Plan 3b.

Fiscal Year					
2013	2012	2011	2010	2009	2008
$ 7,990,502	$ 6,471,423	$ 6,596,124	$ 4,529,765	$ 2,545,331	$ 2,450,162
2,304,481	2,343,641	2,537,440	2,664,619	2,639,080	2,621,076
92,166,874	57,965,946	2,570,423	55,169,082	78,011,118	(150,525,640)
2,465,600	2,025,607	2,680,431	1,276,393	1,664,681	2,019,289
104,927,457	68,806,617	14,384,418	63,639,859	84,860,210	(143,435,113)
29,346,178	28,490,161	25,279,476	23,806,844	22,406,162	21,107,131
2,762,399	2,658,630	2,591,380	2,478,774	2,449,423	2,369,917
2,650,766	1,327,860	5,873,920	3,104,564	2,352,858	1,820,599
56,936	53,820	56,285	74,004	81,064	63,516
57,193	67,910	67,247	78,511	75,314	76,736
232,372	243,470	247,876	254,152	262,579	286,251
267,956	93,770	66,890	93,649	55,317	71,192
404,514	396,167	444,630	429,764	444,112	438,411
63,890	62,562	63,016	63,477	64,615	34,266
570,712	341,634	449,266	191,171	247,890	313,595
-	-	-	-	-	-
36,412,916	33,735,984	35,139,986	30,574,910	28,439,334	26,581,614
68,514,541	35,070,633	(20,755,568)	33,064,949	56,420,876	(170,016,727)
479,665,044	444,594,411	465,349,979	432,285,030	375,864,154	545,880,881
-	-	-	-	-	-
479,665,044	444,594,411	465,349,979	432,285,030	375,864,154	545,880,881
$ 548,179,585	$ 479,665,044	$ 444,594,411	$ 465,349,979	$ 432,285,030	$ 375,864,154

WICHITA RETIREMENT SYSTEMS

CHANGES IN FIDUCIARY NET POSITION
WICHITA EMPLOYEES' RETIREMENT SYSTEM PLAN 3b

For years ended December 31, 2008 through December 31, 2017
(accrual basis of accounting)

	Fiscal Year			
	2017	2016	2015	2014
ADDITIONS				
Employer contributions	$ 200,003	$ 203,532	$ 190,049	$ 1,147,770
Employee contributions	200,003	203,509	190,049	1,147,770
Net income (loss) from investing activities	1,156,192	467,817	(80,749)	1,104,224
Reclassifications due to participant conversion	191,292	244,793	465,171	-
Total additions	1,747,490	1,119,651	764,520	3,399,764
DEDUCTIONS				
Pension administration	9,725	7,366	5,056	64,686
Depreciation	-	-	-	54,768
Refunds	348,275	614,342	733,125	1,107,222
Reclassifications due to participant conversion	-	-	-	2,942,734
Total deductions	358,000	621,708	738,181	4,169,410
Net increase (decrease) in fiduciary net position	1,389,490	497,943	26,339	(769,646)
Net position - beginning, as previously reported	7,106,704	6,608,761	21,156,891	21,926,537
Prior period adjustment	-	-	(14,574,469)	-
Net position - beginning, restated	7,106,704	6,608,761	6,582,422	21,926,537
Net position - ending	$ 8,496,194	$ 7,106,704	$ 6,608,761	$ 21,156,891

Note: In 2015, a prior period adjustment was made to report non-vested Plan 3 participants as part of the Wichita Employees' Retirement System. Prior to 2015, those members were reported with Plan 3b members in the defined contribution plan. Reclassifications due to participant conversion represent members of Plan 3 who vest with seven years of service and move into either Plan 2 or Plan 3b.

Fiscal Year					
2013	2012	2011	2010	2009	2008
$ 1,116,464	$ 1,189,456	$ 1,244,150	$ 2,298,753	$ 1,478,256	$ 1,494,079
1,116,240	1,189,456	1,244,150	1,349,100	1,478,256	1,494,079
3,655,978	2,315,117	170,531	2,124,997	2,608,965	(4,387,641)
-	-	-	-	-	-
5,888,682	4,694,029	2,658,831	5,772,850	5,565,477	(1,399,483)
73,351	72,742	76,217	73,844	77,565	69,865
54,763	53,625	54,017	54,408	55,384	29,371
1,010,244	959,751	709,739	642,116	477,290	698,751
2,465,600	2,025,607	2,680,431	1,276,393	1,664,681	2,019,289
3,603,958	3,111,725	3,520,404	2,046,761	2,274,920	2,817,276
2,284,724	1,582,304	(861,573)	3,726,089	3,290,557	(4,216,759)
19,641,813	18,059,509	18,921,082	15,194,993	11,904,436	16,121,195
-	-	-	-	-	-
19,641,813	18,059,509	18,921,082	15,194,993	11,904,436	16,121,195
$ 21,926,537	$ 19,641,813	$ 18,059,509	$ 18,921,082	$ 15,194,993	$ 11,904,436

WICHITA RETIREMENT SYSTEMS

CHANGES IN FIDUCIARY NET POSITION
POLICE AND FIRE RETIREMENT SYSTEM

For years ended December 31, 2008 through December 31, 2017
(accrual basis of accounting)

	Fiscal Year			
	2017	2016	2015	2014
ADDITIONS				
Employer contributions	$ 13,369,785	$ 12,585,895	$ 13,964,379	$ 14,464,181
Employee contributions	4,915,378	4,776,958	4,603,331	4,529,895
Net income (loss) from investing activities	103,236,679	39,901,640	(163,702)	30,596,067
Total additions	121,521,842	57,264,493	18,404,008	49,590,143
DEDUCTIONS				
Benefit payments				
Service retirement	27,471,812	26,169,001	24,767,622	22,854,129
Survivor benefit	3,253,128	3,275,582	3,216,979	3,147,177
Backward DROP lump sum payments	4,279,460	3,951,323	5,550,489	7,903,252
Qualified domestic relations order	220,953	221,720	200,947	159,200
Disability (service)	1,439,920	1,546,440	1,818,427	1,794,729
Disability (non-service)	72,513	71,496	70,479	70,558
Funeral benefits	18,772	20,974	17,697	28,688
Pension administration	554,641	548,171	483,193	478,320
Depreciation	-	-	37,825	63,887
Refunds	173,975	295,731	448,180	457,423
Total deductions	37,485,174	36,100,438	36,611,838	36,957,363
Net increase (decrease) in fiduciary net postion	84,036,668	21,164,055	(18,207,830)	12,632,780
Net position - beginning	614,047,281	592,883,226	611,091,056	598,458,276
Net position - ending	$ 698,083,949	$ 614,047,281	$ 592,883,226	$ 611,091,056

Fiscal Year					
2013	2012	2011	2010	2009	2008
$ 14,889,714	$ 14,113,014	$ 13,806,880	$ 13,119,984	$ 11,034,552	$ 10,549,401
4,607,691	4,543,523	4,403,425	4,467,983	4,443,524	4,277,247
99,494,232	60,619,414	2,404,099	54,963,698	75,500,370	(140,686,744)
118,991,637	79,275,951	20,614,404	72,551,665	90,978,446	(125,860,096)
21,081,456	19,751,947	18,492,549	17,657,512	16,313,729	15,124,453
2,963,019	2,798,141	2,704,987	2,569,695	2,367,563	2,293,653
5,202,861	3,245,820	2,877,779	4,296,127	3,444,839	2,013,670
130,426	116,670	117,737	115,432	93,762	80,179
1,701,928	1,816,648	1,835,512	1,745,289	1,557,901	1,459,306
68,445	67,428	66,411	65,394	64,377	63,359
9,871	11,425	21,371	16,618	14,891	18,351
402,003	396,424	445,898	421,251	438,348	418,165
401,901	62,562	63,016	63,477	64,615	34,266
63,890	357,192	636,120	492,380	295,424	493,516
32,025,800	28,624,257	27,261,380	27,443,175	24,655,449	21,998,918
86,965,837	50,651,694	(6,646,976)	45,108,490	66,322,997	(147,859,014)
511,492,439	460,840,745	467,487,721	422,379,231	356,056,234	503,915,248
$ 598,458,276	$ 511,492,439	$ 460,840,745	$ 467,487,721	$ 422,379,231	$ 356,056,234

WICHITA RETIREMENT SYSTEMS

AVERAGE BENEFIT BY YEARS OF SERVICE
New Retirees by Calendar Year
WICHITA EMPLOYEES' RETIREMENT SYSTEM

For years ended December 31, 2008 through December 31, 2017

	Fiscal Year			
	2017	2016	2015	2014
AVERAGE MONTHLY PENSION BENEFIT				
0 - 5 years of service	$ -	$ -	$ -	$ -
5 - 10 years of service	1,092	648	746	665
10 - 15 years of service	1,332	1,159	1,095	950
15 - 20 years of service	2,175	1,915	1,791	1,624
20 - 25 years of service	2,299	2,249	1,861	1,957
25 - 30 years of service	2,395	2,849	2,983	2,230
More than 30 years of service	4,235	3,456	4,003	3,217
Average for all years of service	2,310	2,167	2,174	1,921
AVERAGE FINAL AVERAGE SALARY				
0 - 5 years of service	$ -	$ -	$ -	$ -
5 - 10 years of service	5,807	3,293	3,823	3,206
10 - 15 years of service	4,722	4,226	3,617	3,353
15 - 20 years of service	5,699	4,837	4,546	4,343
20 - 25 years of service	4,609	4,442	3,727	4,027
25 - 30 years of service	3,868	4,419	4,799	4,065
More than 30 years of service	5,425	4,322	5,197	4,495
Average for all years of service	4,971	4,289	4,367	4,026
NUMBER OF RETIRED MEMBERS				
0 - 5 years of service	-	-	-	-
5 - 10 years of service	4	7	11	11
10 - 15 years of service	14	15	7	10
15 - 20 years of service	8	8	13	19
20 - 25 years of service	10	13	9	14
25 - 30 years of service	6	7	9	9
More than 30 years of service	10	17	13	20
Total for all years of service	52	67	62	83

Fiscal Year					
2013	2012	2011	2010	2009	2008
$ -	$ -	$ -	$ 290	$ -	$ -
1,164	980	554	-	593	528
1,278	921	994	2,852	1,158	821
1,621	2,026	1,655	-	1,482	1,547
1,992	2,492	1,853	2,745	2,173	2,250
2,433	2,477	2,435	3,646	2,870	3,137
3,891	3,455	3,187	1,993	2,758	3,760
1,760	2,084	1,844	2,928	2,084	2,420
$ -	$ -	$ -	$ 2,956	$ -	$ -
5,437	3,361	3,110	-	2,962	2,660
4,091	3,472	3,298	5,058	3,904	3,089
3,914	4,541	4,359	-	3,451	3,901
4,288	5,275	4,021	5,100	4,192	4,133
4,397	4,762	4,090	5,134	4,225	4,371
5,388	5,125	4,703	4,269	4,008	5,005
4,409	4,460	3,995	4,839	3,929	4,094
-	-	-	1	-	-
8	2	11	-	6	4
17	6	21	2	10	16
12	5	23	-	5	9
6	4	31	2	5	6
7	6	18	7	23	25
4	4	19	2	4	18
54	27	123	14	53	78

WICHITA RETIREMENT SYSTEMS

AVERAGE BENEFIT BY YEARS OF SERVICE
New Retirees by Calendar Year
POLICE AND FIRE RETIREMENT SYSTEM

For years ended December 31, 2008 through December 31, 2017

	Fiscal Year			
	2017	2016	2015	2014
AVERAGE MONTHLY PENSION BENEFIT				
0 - 5 years of service	$ -	$ -	$ -	$ 3,710
5 - 10 years of service	-	-	-	-
10 - 15 years of service	2,744	2,688	-	1,867
15 - 20 years of service	2,533	1,895	4,203	1,993
20 - 25 years of service	3,144	3,108	3,004	2,971
25 - 30 years of service	4,320	4,509	4,074	4,212
More than 30 years of service	6,304	4,658	4,589	4,870
Average for all years of service	3,972	4,235	3,979	3,984
AVERAGE FINAL AVERAGE SALARY				
0 - 5 years of service	$ -	$ -	$ -	$ 4,890
5 - 10 years of service	-	-	-	-
10 - 15 years of service	5,122	5,014	-	5,150
15 - 20 years of service	4,726	3,590	5,280	4,842
20 - 25 years of service	5,596	5,586	5,490	5,132
25 - 30 years of service	6,349	6,887	5,963	5,698
More than 30 years of service	7,929	5,917	5,824	6,192
Average for all years of service	6,082	6,055	5,756	5,671
NUMBER OF RETIRED MEMBERS				
0 - 5 years of service	-	-	-	1
5 - 10 years of service	-	-	-	-
10 - 15 years of service	1	1	-	1
15 - 20 years of service	5	1	1	1
20 - 25 years of service	7	2	8	13
25 - 30 years of service	14	7	9	11
More than 30 years of service	4	10	11	17
Total for all years of service	31	21	29	44

Fiscal Year					
2013	2012	2011	2010	2009	2008
$ -	$ -	$ -	$ 290	$ -	$ -
3,371	-	-	-	3,016	-
2,254	2,344	2,381	2,852	2,237	2,539
3,930	3,929	3,784	-	3,834	-
3,037	3,691	2,983	2,745	2,808	2,489
4,138	-	4,064	3,646	3,964	3,989
4,790	-	4,847	1,993	4,034	4,308
3,697	3,281	3,349	2,928	3,180	3,351
$ -	$ -	$ -	$ 2,956	$ -	$ -
4,262	-	-	-	3,341	-
4,065	3,838	3,980	5,058	5,074	4,536
4,961	5,120	4,970	-	4,893	-
4,936	5,652	4,704	5,100	4,771	4,615
5,696	-	5,810	5,134	5,426	5,488
6,387	-	6,463	4,269	5,378	5,744
5,337	4,959	4,997	4,839	4,943	5,113
-	-	-	1	-	-
1	-	-	-	2	-
3	2	2	2	4	2
1	1	2	-	1	-
10	3	9	2	12	7
20	-	4	7	9	9
2	-	1	2	1	2
37	6	18	14	29	20

WICHITA RETIREMENT SYSTEMS

RETIRED MEMBERS BY TYPE AND BENEFIT AMOUNT
WICHITA EMPLOYEES' RETIREMENT SYSTEM

As of December 31, 2017

Monthly Benefit	Active in DROP	Non-Service Disability	QDRO[1]	Service	Service Disability	Survivor	Total
Less than $500	-	2	2	55	-	72	131
500 - 1,000	1	9	5	147	1	68	231
1,000 - 1,500	9	3	2	144	-	66	224
1,500 - 2,000	6	2	-	154	2	41	205
2,000 - 2,500	13	2	1	115	1	20	152
2,500 - 3,000	7	-	1	91	-	3	102
3,000 - 3,500	12	-	-	110	-	4	126
3,500 - 4,000	8	-	-	87	-	-	95
4,000 - 4,500	1	-	-	74	-	-	75
4,500 - 5,000	5	-	-	48	-	-	53
More than $5,000	5	-	-	83	-	1	89
	67	18	11	1,108	4	275	1,483

POLICE AND FIRE RETIREMENT SYSTEM

As of December 31, 2017

Monthly Benefit	Non-Service Disability	QDRO[1]	Service	Recalc. Service Disability	Service Disability	Survivor	Total
Less than $500	-	3	5	-	-	4	12
500 - 1,000	2	8	11	-	4	23	48
1,000 - 1,500	4	8	52	1	-	35	100
1,500 - 2,000	-	1	101	2	-	42	146
2,000 - 2,500	-	-	125	1	-	42	168
2,500 - 3,000	-	-	104	6	5	12	127
3,000 - 3,500	-	-	82	6	7	3	98
3,500 - 4,000	-	-	73	17	13	1	104
4,000 - 4,500	-	-	67	18	9	1	95
4,500 - 5,000	-	-	45	3	-	1	49
More than $5,000	-	-	47	5	-	1	53
	6	20	712	59	38	165	1,000

[1] Qualified Domestic Relations Order