



Celebrating the new Riverfront Stadium

Wichita Retirement Systems

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



Pension Trust Funds

Pension Trust Funds of the City of Wichita, Kansas

Annual Comprehensive Financial Report

For the Year Ended December 31, 2022



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
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Wichita, Kansas 67202
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WICHITA RETIREMENT SYSTEMS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the year ended December 31, 2022

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WICHITA RETIREMENT SYSTEMS

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WICHITA RETIREMENT SYSTEMS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the year ended December 31, 2022

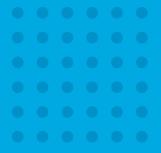
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Introductory Section



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

June 8, 2023

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 Annual Comprehensive Financial Report (ACFR) 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) and the Wichita Employees' Retirement System (WERS) for the year ended December 31, 2022. 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 controls established for this purpose. Because the cost of internal controls 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 Eide Bailly LLP issued an unmodified opinion on the financial statements of the WRS for the year ended December 31, 2022. The independent auditor's letter 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. With the exception of the Teamster represented Transit employees, 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 MissionSquare Retirement Governmental retirement programs.

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.

i

Plan Governance

A 16-member Board of Trustees oversees the PFRS. The members include the City Manager (or 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 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, and to keep the contribution rate as level from year to year as possible in the absence of plan benefit improvements.

The annual actuarial valuations prepared by the WRS' actuary, Cheiron, Inc., provide an indicator of the funded status of the Systems. As of December 31, 2022, the funded ratio of the PFRS was 90.2 percent and the funded ratio of the WERS was 90.3 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.

In 2022, the funded ratios for PFRS decreased from 94.4% to 90.2% and WERS decreased from 93.6% to 90.3%, primarily due to investment losses and salary increases that were more than expected. The results of the actuarial valuation determine the City's contribution rate for the second calendar year following the valuation date. In 2022, employer contributions for the PFRS decreased from 22.6 percent to 20.9 percent of annual covered payroll, and employer contributions for the WERS decreased from 13.9 percent to 12.9 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 230.

As of December 31, 2022, the fiduciary net position was \$1.35 billion, a decrease of 17.68% over the December 31, 2021, net position of \$1.64 billion. The net investment return of the WRS' combined investment portfolio was (13.15%) for the year ended December 31, 2022, outperforming the WRS' investment target benchmark return of (13.60%) for the same period. The investment return over the past ten-year period was 7.04%, outperforming the benchmark return of 6.86%.

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, fixed income, real estate and timber, with additional diversification achieved in equities and fixed income through domestic and international allocations. With the assistance of the Systems' financial consultant, Callan LLC and Pension Management staff, the Trustees continue to monitor the investment program and review the policy in regards 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

Retirement Board Education: Members of the WERS and PFRS Boards of Trustees attended Callan College in 2022, which provided an extensive overview of the fiduciary duties for the Trustees of the WRS. Staff coordinated the training through WRS' financial consultant, Callan LLC. The training defined the role of a fiduciary, outlined fiduciary responsibilities and reviewed the investment policy statements and the various laws governing different types of plans. Other topics presented included key fundamentals of capital market theory and asset allocation, as well as manager evaluation and how to develop the appropriate asset mix across selected asset classes, while stressing the importance of allocation reviews for Plan Sponsors. Callan provide an overview on Environmental Social Governance (ESG) and key implementation considerations in today's environment. Finally, the Callan financial consultants provided the WERS and PFRS Boards of Trustees the current trends for defined benefits and defined contribution plans.

Real Asset and Timber Structure Review: WRS' financial consultant recommended reviewing the real estate and timber structure of the portfolio with the members of the JIC after conducting the asset-liability study in 2021. The real estate allocation consists of two open-end real estate managers; however, one manager is on the watch list status due to poor performance since 2020. The remaining manager outperformed the benchmark with favorable results over a long-term period. After reviewing real estate results, the JIC chose to maintain the allocation in the current two real estate managers.

Timber investments in the portfolio consists of three closed-end private timber funds with the same timber management group. The financial consultant stated that timber investment returns have been muted through 2022; however, timber can be a hedge against inflation which is attractive under the current high inflationary environment and provides diversification for the portfolio. A significant trending topic in timber is the carbon market which poses an opportunity to enhance returns for the asset class. After reviewing options, the JIC stated their continued commitment to exposure in timberland with the management group.

Environmental Social Governance (ESG) and Diversity Considerations Review: The JIC requested the financial consultant report on WRS' investment managers regarding their ESG and Diversity considerations for the portfolio. Of the 14 investment management firms, each manager had an ESG Investment Policy with the exception of one; however, that manager considered and integrated ESG into their research for all asset classes. Two of the managers did not incorporate ESG considerations into research for all their asset classes. The financial consultant believes ESG criteria may have a material impact on investments and assessing potential financial outcomes.

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 annual comprehensive financial report for the fiscal year ended December 31, 2021. This was the 23rd 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 annual comprehensive 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 Systems believe that this current annual comprehensive 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 Systems also received the Public Pension Coordinating Council's (PPCC) Public Pension Standards Award for the fiscal year ended December 31, 2022, in recognition of meeting professional standards for pension plan design and administration, as set forth in the Public Pension Standards. This was the 20th consecutive year the Systems 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 Systems believe that its plan design and administration continued to meet the PPCC award criteria during 2023 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,

Mark L. Manning Director of Finance Dale R. Raine Interim City Treasurer

Roly Raine

Pam Beim Pension Manager



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Wichita Retirement Systems Kansas

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

December 31, 2021

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2022

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 Program Administrator

alan Allinble

WICHITA EMPLOYEES' RETIREMENT SYSTEM BOARD OF TRUSTEES

Mark Hall (President) Elected

Mark Manning (1st V.P.)

Terry Jones (2nd V.P.)

Carla Burgardt

Stephen Coberley

Arlen Hamilton

Mike Hastings

Sean Seamster

City Manager Appointee

Appointed by Council Member

Shelly Hammond Appointed by Mayor
Jeff Kennedy City Manager Designee

Maria Bias Elected
Joni Chamberlain Elected
Elizabeth Goltry Wadle Elected
Jay Newton III Elected
William Perkins Elected
Melinda Walker Elected

POLICE AND FIRE RETIREMENT SYSTEM BOARD OF TRUSTEES

Hans Asmussen (President) Police Elected Micah Hoelscher (1st V.P.) Fire Elected

Tracee Adams (2nd V.P.)

David Cain

Joseph Couey

Robert Decker

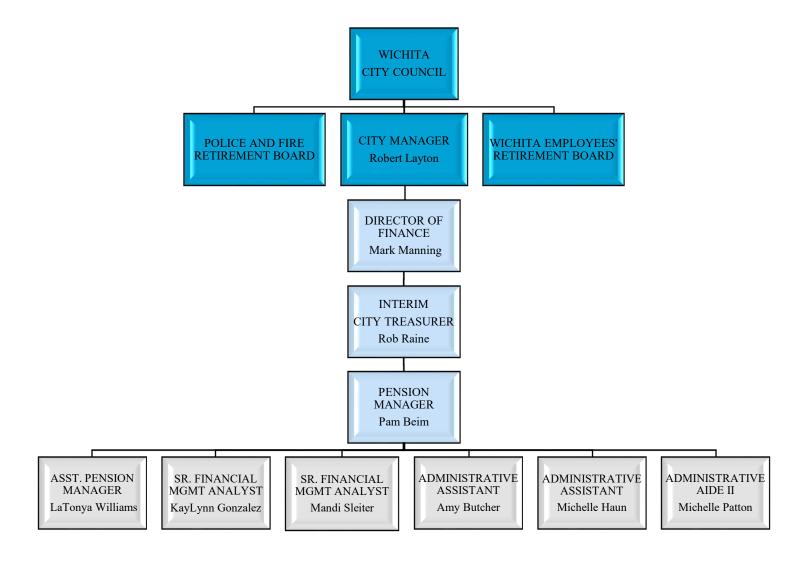
Nathan Schwiethale

Gavin Seiler

Appointed by Council Member

Joseph Bickel Appointed by Mayor
Mark Manning City Manager Designee

Tammy Snow Fire Chief
Merle Bumgarner Fire Elected
Brady Scifres Fire Elected
Joseph Sullivan Police Chief
Katherine Inkelaar Police Elected
Blake Mumma Police Elected



ACTUARY

Cheiron 200 W. Monroe Chicago, IL 60606

CUSTODY INSTITUTION

The Bank of New York Mellon 500 Grant Street, 151-4040 Pittsburg, PA 15258

DEFINED CONTRIBUTION PARTICIPANT ACCOUNTING

Northeast Retirement Services 12 Gill Street, Suite 2600 Woburn, Massachusetts 01801

FINANCIAL CONSULTANT

Callan, LLC 1900 16th Street, Suite 1175 Denver, Colorado 80202

INDEPENDENT AUDITORS

Eide Bailly LLP 877 W. Main St. Boise, ID 83702-5858

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-10. A schedule of brokerage commissions is presented on page B-11.

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Financial Section



Independent Auditor's Report

To the Board of Trustees Wichita Retirement Systems Wichita, Kansas

Report on Financial Statements

We have audited the financial statements of the Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas, as of and for the year ended December 31, 2022, and the related financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of the Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas, as of December 31, 2022, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City of Wichita, Kansas, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Wichita Retirement Systems, and do not purport to, and do not, present fairly the financial position of the City of Wichita, Kansas as of December 31, 2022, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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 Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 City of Wichita, Kansas' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the employer's net pension liability (asset) and related ratios – Wichita Employees' Retirement System and Police and Fire Retirement System of Wichita, Kansas, schedule of employer contributions – Wichita Employees' Retirement System and Police and Fire Retirement System of Wichita, Kansas, and schedule of investment returns be presented to supplement the basic financial statements. Such information is the responsibility of management, 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 GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas. The schedule of administrative expenses, schedule of investment expenses, and schedule of payments made to consultants other than investment advisors are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the schedule of administrative expenses, schedule of investment expenses, and schedule of payments made to consultants other than investment advisors are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on Summarized Comparative Information

We have previously audited the 2021 financial statements of Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas, and we expressed an unmodified audit opinion on those audited financial statements in our report dated June 24, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2021, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 6, 2023, on our consideration of the Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas' 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 solely 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 the effectiveness of Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas' 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 Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas' internal control over financial reporting and compliance.

Boise, Idaho

Esde Saelly LLP

June 6, 2023

This Management's 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, 2022. The management discussion and analysis is presented in conjunction with the transmittal letter at the front of this report and the WRS's 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-8 and A-9. 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, 2022, with combined total comparative information as of December 31, 2021. 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, 2022, with combined total comparative information for the year ended December 31, 2021. This statement presents information showing how the Systems' net position changed during the fiscal year. Notes to the Financial Statements begin on page A-11 which provides additional information, and 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-30, 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 (Asset) 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 (asset) and the degree to which net position restricted for pensions is sufficient to cover the liability (asset) 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 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 decreased by \$289.7 million during the 2022 fiscal year. This change primarily consisted of a \$286.7 million decrease in cash and investments, excluding securities lending investments, due to the net depreciation in the fair value of investment holdings. The net investment return was (13.15%) for the year ended December 31, 2022. Investment returns by asset class were: domestic equity (19.39%), international equity (15.63%), fixed income (13.79%), real estate 6.69% and timber 30.50%.

As of December 31, 2022, total securities lending collateral increased by \$1.6 million as compared to December 31, 2021. Several factors influence the amount of securities lent at any point in time, including the demand for the securities, the negotiated rebate rate and the overall market volatility.

Comparative summary financial statements for the years ended December 31, 2022 and 2021 are presented in the accompanying tables:

Sun		of Fiduciary Net Po of December 31,	sition			
		2022		2021	Incr	ease (Decrease)
ASSETS						
Total cash and investments	\$	1,355,746,070	\$	1,642,439,333	\$	(286,693,263)
Total receivables		14,078,434		6,731,117		7,347,317
Investment in securities lending collateral		13,141,922		11,518,710		1,623,212
Total assets		1,382,966,426		1,660,689,160		(277,722,734)
LIABILITIES						
Accounts payable and accrued expenses		2,969,476		2,868,763		100,713
Investment purchases pending		17,453,167		7,151,550		10,301,617
Securities lending obligations		13,141,922		11,518,710		1,623,212
Total liabilities		33,564,565		21,539,023		12,025,542
FIDUCIARY NET POSITION	\$	1,349,401,861	\$	1,639,150,137	\$	(289,748,276)
		nges in Fiduciary ar ended Decembe				
		2022		2021	Incr	ease (Decrease)
ADDITIONS Contributions	\$	38,346,475	\$	39,319,151	\$	
Net Investment income (loss)	Ψ	′ ′	φ	39,319,131		(072 676)
· · · · · · · · · · · · · · · · · · ·		(222 325 <u>4</u> 39)		213 104 339	Ψ	,
Reclassifications due to participant conversion		(222,325,439) 295.038		213,104,339 417.138	Ψ	(435,429,778)
Reclassifications due to participant conversion Total additions		(222,325,439) 295,038 (183,683,926)	_	213,104,339 417,138 252,840,628		(972,676) (435,429,778) (122,100) (436,524,554)
Total additions	_	295,038		417,138		(435,429,778) (122,100)
Total additions DEDUCTIONS		295,038 (183,683,926)	_	417,138 252,840,628		(435,429,778) (122,100) (436,524,554)
Total additions		295,038		417,138 252,840,628 92,827,073		(435,429,778) (122,100)
Total additions DEDUCTIONS Pension benefits Pension administration		295,038 (183,683,926) 101,756,648	_	417,138 252,840,628		(435,429,778) (122,100) (436,524,554) 8,929,575 221,560
Total additions DEDUCTIONS Pension benefits		295,038 (183,683,926) 101,756,648 1,391,518	_	417,138 252,840,628 92,827,073 1,169,958		(435,429,778) (122,100) (436,524,554) 8,929,575 221,560 (173,969)
Total additions DEDUCTIONS Pension benefits Pension administration Employee contributions refunded	_	295,038 (183,683,926) 101,756,648 1,391,518 2,621,146		92,827,073 1,169,958 2,795,115		(435,429,778) (122,100) (436,524,554) 8,929,575 221,560 (173,969)
Total additions DEDUCTIONS Pension benefits Pension administration Employee contributions refunded Reclassifications due to participant conversion Total deductions	=	295,038 (183,683,926) 101,756,648 1,391,518 2,621,146 295,038 106,064,350	_	92,827,073 1,169,958 2,795,115 417,138 97,209,284		(435,429,778) (122,100) (436,524,554) 8,929,575 221,560 (173,969) (122,100) 8,855,066
Total additions DEDUCTIONS Pension benefits Pension administration Employee contributions refunded Reclassifications due to participant conversion	_	295,038 (183,683,926) 101,756,648 1,391,518 2,621,146 295,038	_	92,827,073 1,169,958 2,795,115 417,138		(435,429,778) (122,100) (436,524,554) 8,929,575 221,560 (173,969) (122,100)

Changes in Fiduciary Net Position. Additions to fiduciary net position that are necessary to finance Plan benefit obligations come primarily from employer and employee contributions and net earnings on investments. For the year ended December 31, 2022, total additions resulted in a reduction of (\$183.7) million, which is approximately a \$436.5 million decrease from the 2021 total additions of \$252.8 million. This was largely due to a total net investment loss of (\$222.3) million.

Deductions from fiduciary net position are consistent with characteristics of a mature pension system. Pension benefits increased from \$92.8 million in 2021 to \$101.8 million in 2022, or approximately \$9.0 million or 9.6%. This amount includes DROP and BackDROP payments, which were \$13.7 million or 44.8% higher than 2021 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, 2022 (with comparative totals as of December 31, 2021)

	P	Police and Fire Employees' Employees' Retirement Retirement Retirement						tals		
		System		System		Plan 3b		2022		2021
ASSETS										
Cash	\$	44,142	\$	19,889	\$	-	\$	64,031	\$	212,219
Receivables:										
Investment sales pending		5,353,928		4,262,930		21,781		9,638,639		2,724,889
Interest and dividends		1,983,568		1,572,785		6,924		3,563,277		3,289,226
Other receivables		574,083		294,113		8,322		876,518		717,002
Total receivables		7,911,579		6,129,828	_	37,027	_	14,078,434	_	6,731,117
Investments, at fair value:										
Government short-term investment fund		24,580,400		17,767,502		84,097		42,431,999		39,084,798
Equity:										
Domestic equity		276,212,956		219,916,565		2,783,298		498,912,819		687,946,938
International equity		202,450,991		161,196,335		410,872		364,058,198		436,045,037
Fixed income		134,978,962		107,474,387		396,355		242,849,704		284,852,534
Real estate		60,145,922		47,891,422		=		108,037,344		104,863,921
Target date and money market funds		-		=		5,974,974		5,974,974		7,250,166
Timber		51,216,412		40,778,677		-		91,995,089		81,936,372
Derivative investments		790,317		629,274		2,321		1,421,912		247,348
Securities lending short-term collateral										
investment pool		7,303,190		5,814,994		23,738		13,141,922		11,518,710
Total investments		757,679,150		601,469,156	_	9,675,655		1,368,823,961		1,653,745,824
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	_				_	-	_	<u>-</u>		
Total assets		765,634,871		607,618,873	_	9,712,682		1,382,966,426		1,660,689,160
LIABILITIES										
Accounts payable and accrued payroll		1,843,258		1,123,908		2,310		2,969,476		2,868,763
Investment purchases pending		9,696,725		7,720,795		35,647		17,453,167		7,151,550
Securities lending obligations	_	7,303,190		5,814,994	_	23,738		13,141,922	_	11,518,710
Total liabilities		18,843,173		14,659,697	_	61,695		33,564,565		21,539,023
NET POSITION										
Restricted for pensions	\$	746,791,698	\$	592,959,176	\$	9,650,987	\$	1,349,401,861	\$	1,639,150,137

WICHITA RETIREMENT SYSTEMS STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For the year ended December 31, 2022 (with comparative totals for the year ended December 31, 2021)

	Police and Fire Retirement	Employees' Retirement	Employees' Retirement	Tot	Totals		
	System	System	Plan 3b	2022	2021		
ADDITIONS							
Contributions:							
Employer	\$ 17,183,919	\$ 10,407,635	\$ 212,909	\$ 27,804,463	\$ 28,808,329		
Employee	6,505,692	3,823,411	212,909	10,542,012	10,510,822		
Total contributions	23,689,611	14,231,046	425,818	38,346,475	39,319,151		
Investment income (loss):							
From investing activities:							
Net appreciation (depreciation) in the fair value of investments	(400 045 460)	(402 607 252)	(2.047.707)	(222 020 122)	202 250 220		
	(128,215,163)	(103,687,253)	(2,017,707)	(233,920,123)	203,250,329		
Interest	4,704,710	3,757,127	15,259	8,477,096	8,187,566		
Dividends	5,390,261	4,336,753	40,525	9,767,539	8,469,722		
Commission recapture	16,747	13,472	136	30,355	23,964		
Total investing activity income (loss)	(118,103,445)	(95,579,901)	(1,961,787)	(215,645,133)	219,931,581		
Less investment expenses:							
Consulting services	150,500	175,502	-	326,002	242,852		
Custodial bank	167,170	167,170	-	334,340	289,494		
Investment management fees	3,400,922	2,726,085	17,218	6,144,225	6,443,614		
Total investment expenses	3,718,592	3,068,757	17,218	6,804,567	6,975,960		
Net income (loss) from investing activities	(121,822,037)	(98,648,658)	(1,979,005)	(222,449,700)	212,955,621		
From securities lending activities:							
Securities lending income	156,893	125,846	680	283,419	179,072		
Less securities lending (income) expense:							
Borrower rebates	61,876	49,392	213	111,481	(25,238)		
Management fees	26,345	21,199	133	47,677	55,592		
Total securities lending expense	88,221	70,591	346	159,158	30,354		
Net income from securities lending activities	68,672	55,255	334	124,261	148,718		
Total net investment income (loss)	(121,753,365)	(98,593,403)	(1,978,671)	(222,325,439)	213,104,339		
Reclassifications due to participant conversion			295,038	295,038	417,138		
Total additions	(98,063,754)	(84,362,357)	(1,257,815)	(183,683,926)	252,840,628		
	(**************************************	(* 1,000,000)	(1,-11,11)	(****,****)			
DEDUCTIONS							
Pension benefits	52,379,531	49,377,117	-	101,756,648	92,827,073		
Pension administration	620,157	695,705	-	1,315,862	1,105,844		
City administrative charges	37,828	37,828	-	75,656	64,114		
Employee contributions refunded	803,311	990,688	827,147	2,621,146	2,795,115		
Reclassifications due to participant conversion		295,038		295,038	417,138		
Total deductions	53,840,827	51,396,376	827,147	106,064,350	97,209,284		
Change in net position	(151,904,581)	(135,758,733)	(2,084,962)	(289,748,276)	155,631,344		
Net position, beginning	898,696,279	728,717,909	11,735,949	1,639,150,137	1,483,518,793		
Net position, ending	\$ 746,791,698	\$ 592,959,176	\$ 9,650,987	\$ 1,349,401,861	\$ 1,639,150,137		
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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, Kansas (Systems) are reported as pension trust funds of the City of Wichita, Kansas and its component units (the reporting entity or "the City"). 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, 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, 2021, 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 (230; 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 pooled arrangements such as a mutual fund or commingled fund operated by a qualified investment counselor or an insurance company. The amount of such investment shall not 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. The amount of such investment shall 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;
- 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 \$64,031 held in the City's pooled funds, as of December 31, 2022, 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 five asset types: domestic equities, international equities, fixed income, real estate and timber.

With the assistance of the financial consultant, the Joint Investment Committee (JIC) establishes the investment policies which are reviewed annually. In 2018, the JIC approved a seven-year time frame to achieve an annualized real rate of return of four and a half percent (4.50%) above the price inflation assumption. Each manager's performance will also be compared to a relevant market index as outlined in the investment policy.

The investments of the Wichita Retirement Systems (WRS), excluding the securities lending short-term collateral investment pool, on December 31, 2022, are listed in the accompanying table.

The pension funds invest in various assetbacked 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

Type of Investment	Fair Value
Gov ernment short-term investment fund	\$ 42,431,999
Domestic equity	498,912,819
International equity	364,058,198
Fix ed income	242,849,704
Real estate	108,037,344
Target date and money market funds	5,974,974
Timber	91,995,089
Derivative investments	1,421,912
Total investments	\$ 1,355,682,039

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.

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:

The Retirement 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 Retirement Systems categorize its fair value measurements within the fair value hierarchy established by GAAP. The Fair value of measurements for the investments of the WRS on December 31, 2022, are listed in the accompanying table:

	1	2/31/2022	Level 1 Inputs		Level 2 Inputs		
vestments by fair value level ¹ :							
Short-Term Investments	\$	9,583,155	\$	4,876,035	\$	4,707,12	
Equity:							
Domestic equity		345,911,584		345,911,584			
International equity		141,280,621		141,280,621			
Fix ed income		233,480,167		30,632,000		202,848,16	
Money market funds		267,009		267,009			
Derivative investments		1,421,912		69,120		1,352,79	
Total investments by fair value level		731,944,448	\$	523,036,369	\$	208,908,07	
nvestments measured at net asset value (NAV): Government short-term investment fund Equity:		32,848,844					
Domestic equity		153,001,235					
International equity		222,777,577					
Fix ed income		9,369,537					
Real estate		108,037,344					
Target date funds		5,707,965					
Timber		91,995,089					
Total investments measured at NAV		623,737,591					
Total investments	\$	1,355,682,039					

Short-term investments, equity, fixed income and money market funds in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Equity securities, if any, 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.

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 to produce the daily settlement price.

Additional information relating to the investments measured at the NAV for WRS on December 31, 2022, are listed in the accompanying table:

Investments Measured at Net Asset Value (NAV)	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period (Days)
Gov ernment short-term inv estment fund	\$ 32,848,844	-	Daily	5
Domestic equity	153,001,235	-	Daily	1
International equity	222,777,577	-	Bi-monthly, monthly	15-30
Fixed income	9,369,537	-	Daily	1
Real estate	108,037,344	-	Quarterly	45-60
Target date funds	5,707,965	-	Daily	1
Timber	91,995,089	-	N/A	N/A
Total investments measured at NAV	\$ 623,737,591	\$ -		

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

Government short-term investment fund – The government short-term investment fund that is measured at the NAV is a collective trust that invests any cash balances from the actively managed fund managers of the Systems, as well as the Systems' cash fund. The investment objective of the Fund is to maintain liquidity to ensure cash availability for withdrawals while preserving the principal.

Domestic equity – The Systems have one domestic equity fund manager that is an S&P 500 securities lending index fund measured at the NAV. This Fund seeks an investment return that approximates the performance of the S&P 500 over the long term. NAV is calculated on a daily basis based upon the fair value of the underlying investments.

International equity – The Systems have three fund managers with commingled investments in international equities that are measured using NAV. These fund managers are structured as limited partnerships and a MSCI securities lending index fund. The limited partnerships calculate NAV through a capital account maintained for each partner. The MSCI securities lending index fund calculates NAV on a per unit basis of the Fund and is determined as of the last business day of each month and at least one other business day during the month.

Fixed income – The Systems have one fund manager that invests in commingled fixed income funds. These investments are structured within three funds: Opportunistic US\$ High Yield Securities, Floating Rate High Income and Opportunistic Non-Dollar Hedged. The NAV for these funds is calculated daily on a per share value from the fair value of the underlying investments at the end of each day that the New York Stock Exchange is open as of the close of regular trading.

Real estate – The Systems have two fund managers that invest in real estate measured at the NAV. These investments are in Real Estate Investment Trusts (REITs) and commingled real estate through a limited partnership. Both fund managers calculate NAV per unit from fair value estimates based on values from independent appraisals on a quarterly basis.

Target date funds – The Systems have various target date funds that are measured at the NAV. The NAV is determined each business day based on the value of the underlying investments.

Timber – The Systems have one fund manager that invests in timber measured at the NAV. This fund manager is structured as a limited partnership and calculates NAV from independent appraisals in capital accounts maintained for each limited partner.

<u>Custodial Credit Risk</u>: 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, 2022, the WRS' cash deposits in the amount of \$64,031 were included in the City's pooled cash. The WRS' debt securities investments were registered in the name of WRS and were held in the possession of the WRS' custodial bank, The Bank of New York Mellon. Additional information about the City's pooled cash and investments is available in the City's separately issued Annual Comprehensive Financial Report, available online at www.wichita.gov or upon request from the Pension Management Office.

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates will adversely affect the price of a bond. One way to evaluate interest rate risk is through the modified duration methodology. Duration is a measure of how much bond prices may change if interest rates move. The modified duration methodology estimates the sensitivity of a bond's price to interest rate changes and is measured in years. WRS manages interest rate risk by complying with the following policies:

- 1. Fixed income managers have full discretion over the issuers selected and must manage portfolios to their guidelines.
- 2. According to the Investment Policy Statement, the Active Core and Core Plus fixed income managers must not be less than 80% or more than 120% of the duration of the Bloomberg Barclays Capital Aggregate Index (Index), unless the Joint Investment Committee prospectively grants a written exception. As of December 31, 2022, the duration of the Index was 6.17 years, which equated to a minimum and maximum range for each fixed income portfolio of 4.94 years and 7.40 years, respectively. The Active Core portfolio duration was 6.15 years and the Active Core Plus portfolio was 6.93 years; both were within the duration range.

For global fixed income managers, portfolio duration must not be less than 60% or more than 140% of the duration of the Barclays Global Aggregate Bond Index, which was 6.69 years ending December 31, 2022. The global fixed income portfolio duration was 5.62 years, which was between the stated parameters of 4.01 years to 9.37 years.

The table below represents the interest rate risk based on the weighted average modified duration of the fixed income portfolio:

Investment Type	Fair Value	Percent of all Fixed Income Assets	Weighted Average Modified Duration (% value change) ¹
Corporate debt instruments, long-term	\$ 81,479,426	28.4 %	6.0 %
Government securities long-term	31,138,188	10.9	12.2
Mortgage and asset-backed securities	72,538,690	25.3	5.9
Global fixed income	49,745,775	17.3	7.9
Actively managed investments	234,902,079	81.9	7.2
Gov ernment short-term investment fund	42,431,999	14.8	-
Pooled high-yield fixed income securities	9,369,537	3.3	1.9
Total investment in debt securities	\$ 286,703,615	100.0 %	

¹ The modified duration equals the percentage change in price of the bond for a 100 basis point (1%) movement in interest rates. The calculation provides an additional measurement to evaluate interest rate risk with the relationship between changes in interest rates and changes in the price of the bond.

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 2022, 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, 2022, and their respective ratings by Standard and Poor's or an equivalent nationally recognized statistical rating organization.

Ovelity Beting		Total Debt
Quality Rating AAA	\$	Securities
AA+	φ	18,154,290
AA+ AA		93,953,087
AA-		2,258,709
		3,023,552
A+		4,836,857
A		14,494,806
A-		19,357,439
BBB+		27,159,264
BBB		15,485,656
BBB-		12,280,577
BB+		3,630,927
BB		1,237,699
BB-		1,893,066
B+		567,805
В		734,689
B-		15,743
CCC+		146,211
CCC		215,086
CCC-		61,782
CC		152,075
NR		24,550,254
WR		62,042
Total credit risk debt securities		244,271,616
Government short-term investment fund*		42,431,999
Total investment in debt securities	\$	286,703,615

*The collective trust government short-term investment fund itself is not rated. Each holding within the fund is rated, but an average rating is not available.

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 (13.73%) for the year ended December 31, 2022. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

<u>Derivatives</u>: 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, 2022. 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, 2022, are shown on the following pages. 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.

The WRS' investments in derivative instruments on December 31, 2022, are presented in the accompanying tables:

Derivative Investments Summary							
	Change in Notional		Exposure/				
Classification and Type	Fair Value	Value	Fair Value				
Foreign currency forward (FFX) contracts	\$ (138,254)	\$ 40,434,185	\$ (374,490)				
Futures contracts	181,880	3,410,943	421,491				
Options	(10,493)	-	(38,070)				
Swaps	1,324,226	80,040,900	1,412,981				
Total derivative investments	\$ 1,357,359	\$ 123,886,028	\$ 1,421,912				

	Deri	vative Investments	Detail	
	Change in	Notional	Exposure/	Counterparty
Classification and Type	Fair Value	Value	Fair Value	(Counterparty Rating)
FFX contracts:				
Australian dollar	\$ -	\$ 84,729	\$ (518,476)	N/A¹
Brazil real	-	-	(182,588)	N/A¹
Canadian dollar	-	1,326,402	(373,633)	N/A¹
Chinese r yuan hk	-	-	(797,514)	N/A ¹
Chinese yuan renminbi	-	66,532	1,593	N/A¹
Czech koruna	-	380,003	126,703	N/A¹
Euro currency unit	-	1,076,399	(15,572,653)	N/A¹
Indian rupee	-	241,647	137,955	N/A¹
Indonesian rupiah	-	-	(488,980)	N/A¹
Japanese yen	-	613,108	(2,794,129)	N/A¹
Malay sian ringgit	-	-	(188,715)	N/A¹
Mexican peso	-	1,554,064	(2,848,720)	N/A ¹
New Taiwan dollar	-	331,585	-	N/A¹
New Zealand dollar	-	265,000	(472,848)	N/A¹
Norwegian krone	-	431,316	469,671	N/A¹
Pound sterling	-	76,391	(2,197,043)	N/A¹
Singapore dollar	-	-	(2,187,775)	N/A¹
South African rand	-	-	(451,370)	N/A¹
South Korean won	-	187,357	(53,440)	N/A¹
Swedish krona	-	-	(94,906)	N/A¹
Swiss franc	-	395,697	64,841	N/A¹
U.S. dollar	-	33,403,955	28,047,537	N/A¹
Aggregated	(138,254)	-	-	N/A¹
Total FFX contracts	(138,254)	40,434,185	(374,490)	
Futures contracts:				
Futures contracts: 3-month cash futures	109,711	(12,827,961)	109,711	Goldman Sachs & Co, NY (BBB+)
Eurodollar futures	(3,253)	,		Goldman Sachs & Co, NY (BBB+)
	` '	2,139,065	(3,253)	, , ,
Futures contracts	(239,612)	- E74 400	(41.064)	N/A Coldman Saaha & Co. N.V. (PRP)
Intl bond futures	(41,964)	574,492	(41,964)	Goldman Sachs & Co, NY (BBB+)
Intl gov t bond futures	359,591	(9,707,956)	359,591	Goldman Sachs & Co, NY (BBB+)
Intl gov't bond futures Intl gov't bond futures - UK	(27,941)	2,780,339 635,048	(27,941)	JP Morgan Chase & Co (A-)
Treasury bonds	(33,176) 142,267	635,948 (373,923)	(33,176) 142,266	Goldman Sachs & Co, NY (BBB+) Goldman Sachs & Co, NY (BBB+)
Treasury notes	(83,743)	20,190,939	(83,743)	Goldman Sachs & Co, NY (BBB+)
Total futures contracts	181,880	3,410,943	421,491	Columnationalis & Co, IVI (DDD+)
Total lutures contracts	101,000	3,410,943	421,491	

 $^{^{1}}$ Counterparty ratings for FFX contracts are not available by currency. See table on the following page summarizing FFX contract ratings by counterparty.

	Change in	Notional	Exposure/	Counterparty
Classification and Type	Fair Value	Value	Fair Value	(Counterparty Rating)
Options:				
C redit default swaps	\$ 2,428	N/A	\$ (62,915)	Citigroup Inc (BBB+)
Credit default swaps	5,014	N/A	7,010	N/A
Foreign currency options	-	N/A	(4,284)	N/A
Futures contracts	(2,336)	N/A	-	N/A
Interest rate futures	(11,085)	N/A	19,619	Goldman Sachs & Co, NY (BBB+)
Treasury notes	(4,514)	N/A	2,500	Goldman Sachs & Co, NY (BBB+)
Total options	(10,493)	•	(38,070)	
Swaps:				
Cleared credit default swaps	142,451	4,300,000	(746)	Citigroup Inc (BBB+)
Cleared credit default swaps	(26,307)	26,378,900	(52,623)	JP Morgan Chase & Co (A-)
Cleared interest rate swaps	(92,432)	28,580,000	(94,474)	CME Group Inc (AA-)
Cleared zero coupon swaps	1,309,248	20,782,000	1,560,824	CME Group Inc (AA-)
Fixed income securities	(8,734)	-	-	N/A
Total swaps	1,324,226	80,040,900	1,412,981	
Total derivative investments	\$ 1,357,359	\$ 123,886,028	\$ 1,421,912	

FFX Contracts Rating by Counte	rparty	2
Counterparty	Ехро	sure/ Fair
(Counterparty Rating)		Value
Bank of America Corp (A-)	\$	(123,606)
Barclays PLC (BBB)		(103,790)
Citigroup Inc (BBB+)		(16,432)
The Goldman Sachs Group Inc (BBB+)		(31,165)
HSBC Holdings PLC (A-)		(126,560)
JPMorgan Chase & Co (A-)		39,932
Morgan Stanley (A-)		(12,869)
Total FFX counterparties	\$	(374,490)
2 Carreto martin retires for FFV contracts and		بيط ملطمانم

² Counterparty ratings for FFX contracts are not available by currency, thus, summarized by Counterparty.

<u>Foreign Currency Risk</u>: 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, 2022, is presented in the accompanying table:

	Cash and Cash			
Currency	Equivalents	Equities	Fixed Income	Derivatives
Argentina peso	\$ 274	\$ -	\$ -	\$ -
Australian dollar	129,738	8,528,842	504,174	(564,375)
Brazil real	-	-	178,121	(182,588)
Canadian dollar	254,793	-	1,091,206	(373,292)
Chinese r yuan hk	-	-	-	(797,514)
Chinese yuan renminbi	48,886	-	219,113	1,593
Czech koruna	-	-	-	126,703
Danish krone	-	1,701,252	-	-
Euro currency unit	351,640	55,227,161	13,893,859	(15,328,919)
Hong Kong dollar	-	5,248,692	-	-
Hungarian Forint	(45,809)	-	-	-
Indian rupee	-	-	-	137,955
Indonesian rupiah	163,191	-	1,057,743	(488,980)
Japanese yen	116,710	32,842,681	2,935,694	(2,740,599)
Malay sian ringgit	-	-	185,156	(188,715)
Mexican peso	133,907	-	4,284,008	(2,943,194)
New Zealand dollar	(1,869)	44,084	477,552	(472,848)
Norwegian krone	(1,524)	591,883	-	469,671
Pound sterling	181,550	18,172,699	1,913,503	(2,230,219)
Russian ruble (new)	-	-	145,356	-
Singapore dollar	35	2,620,899	2,177,570	(2, 187, 776)
South African rand	-	-	436,563	(451,370)
South Korean won	-	-	-	(53,440)
Swedish krona	(4,399)	3,498,665	87,951	(94,906)
Swiss franc	-	11,679,043	195,799	64,841
Total subject to foreign currency risk	\$ 1,327,121	\$ 140,155,900	\$ 29,783,370	\$ (28,297,972)

All forward foreign currency contracts are carried at fair value by the WRS. As of December 31, 2022, the Systems held forward currency contracts with an unrealized loss of \$374,490. If held, forward foreign currency contracts are reported as derivative investments in the financial statements.

<u>Securities Lending Transactions</u>: 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, The Bank of New York Mellon, is the lending agent for the Systems' domestic securities for initial collateral of 102% of the fair value of the loaned securities and international equity securities for initial collateral of 105% of the fair value of such securities. Collateral may consist of cash (U.S. currency only); securities issued or guaranteed by the U.S. government or its agencies or instrumentalities; sovereign debt, corporate bonds and equities. Additional forms of collateral may be acceptable 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.

At year-end, the WRS had no credit risk exposure to borrowers because the amounts the WRS owes the borrowers exceeded the amounts the borrowers owed the Systems. All securities loans, whether domestic or international, are open loans and can be terminated on demand by either the system or the borrower. At year-end, loaned securities were secured with cash collateral or securities collateral. The amount shown on the Statement of Fiduciary Net Position only reflects transactions where cash collateral was received. Cash collateral is invested in a separately managed cash collateral account. Also, since securities loans are terminable at will, the duration of the securities loans do not generally match the duration of the investments made with the cash collateral received from the borrower.

<u>Custodial Credit Risk Related to Securities Lending</u>: Custodial credit risk for lent securities is the risk that, in the event of the failure of the counterparty, the WRS will not be able to recover the value of its investments or collateral securities that are in possession of an outside party. Consistent with the WRS' securities lending policy, \$63,146,501 was held by the counterparty acting as the WRS' agent in securities lending transactions on December 31, 2022.

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 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, 2022, is presented in the following table (expressed in thousands of dollars):

	Ве	ginning						Ending
	В	alance	Inc	reases	Dec	reases	E	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

<u>Plan Description:</u> 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 of service and are 100% 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.

<u>Benefits Provided</u>: 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 2 members are eligible to retire at age 62 with seven years of actual service. Benefits for Plan 2 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 2.25%, subject to a maximum of 75% of the FAS. 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.	2022	the WFRS r	ılan m	embershin	consisted	of the following:
AS ULDECELLIDEL ST.	ZUZZ.	แเลงงะเวอง	JIAH H	ICHIDCISHID	COHSISIEU	oi ilie iollowilia.

Member Category	Plan 1	Plan 2	Plan 3	Total
Inactive employees or beneficiaries currently receiving benefits	524	984	-	1,508
Inactive employees entitled to but not yet receiving benefits	-	146	-	146
Active employees	-	768	641	1,409
Total membership	524	1,898	641	3,063

Deferred Retirement Option Plan (DROP) Provision: The benefit structure of both Plan 1 and Plan 2 includes 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, 2022, was \$4,286,095.

<u>Funding Policy</u>: 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 2 and 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 2022 was 12.9% of annual covered payroll for Plans 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, 2022, WERS received \$10,407,635 in contributions from the employer for Plans 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, 2022, valuation was based on the results of the most recent demographic experience study dated April 17, 2018, which covered a three-year period ending December 31, 2016. An economic experience study was adopted by the Boards, based upon actuarial assumptions presented March 9, 2022, effective with the December 31, 2021, valuation.

Price inflation	2.75%
Wage inflation	3.25%
Salary increases, including wage inflation	3.5% to 6.5%
Long-term rate of return, net of investment	
expense, including price inflation	7.38%
Active Members	Based on the RP-2000 Non-Annuitant Healthy Mortality Table, set forward two years
	for males, projected on a generational basis using Scale AA.
Healthy Retirees And Beneficiaries	Based on the RP-2000 Annuitant Healthy Mortality Table, set forward two years for
	males, projected on a generational basis using Scale AA.
Disabled Retirees	Based on the RP-2000 Disabled Mortality, projeted on a generational basis using 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

A t Ol	Target	Long-Term Expected Real Rate
Asset Class	Allocation	of Return*
Large cap equity	32%	4.49%
Small cap equity	8%	4.95%
International equity	27%	5.22%
Fixed Income	20%	1.51%
Real Estate	7%	4.00%
Timber	5%	1.82%
Cash	1%	0.17%
Total	100%	
* Geometric mean, net of in	nv estment ex penses.	

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 2.24% inflation assumption) for each major asset class are summarized in the accompanying table.

<u>Discount Rate</u>: The fiduciary net position is projected to be available to make future benefit payments; therefore, a Municipal Bond Index Rate was not used in the determination of the Single Equivalent Interest Rate (SEIR) for either the December 31, 2022, or the December 31, 2021, 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, 2022, valuation is 7.38%. Please note 7.25% is used in the annual funding valuation to determine the City's contribution rate.

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 2126. 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, 2022, 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

Total Pension Liability (TPL)	\$ 719,189,726
Less: Fiduciary Net Position (FNP)	(592,959,176)
Net Pension Liability (NPL)	\$ 126,230,550
Ratio of FNP to TPL	82.45%

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, 2021. A Schedule of Changes in the Employer's Net Pension Liability (Asset) and Related Ratios is presented in the required supplementary information of this report on page A-30.

<u>Sensitivity Analysis</u>: The accompanying table presents the net pension liability of the City using the discount rate of 7.38%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.0% lower (6.38%) or 1.0% higher (8.38%) than the current rate.

			City's Net				
	Rate	Pension Liability					
1.0% Decrease	6.38%	\$	203,457,587				
Current Rate	7.38%		126,230,550				
1.0% Increase	8.38%		60,758,814				

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 100% 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-8.

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, 2022, employee and employer contributions to Plan 3b totaled \$212,909 and \$212,909, respectively. As of December 31, 2022, there were 80 members covered under the defined contribution Plan 3b.

6. Police and Fire Retirement System of Wichita, Kansas

<u>Plan Description</u>: 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.

<u>Benefits Provided:</u> 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, 2022, 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	408	130	583	1,121
Inactive employees entitled to, but not yet receiving benefits	-	-	43	43
Active employees	1	-	1,115	1,116
Total membership	409	130	1,741	2,280

Backward Deferred Retirement Option Plan (DROP) Provision: The benefit structure of the Wichita Police and Fire Retirement System includes a Backward Deferred Retirement Option Pan (DROP). The Backward DROP is available to Plan A and Plan C-79 members. 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.

<u>Funding Policy</u>: 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 2022 was 20.9% 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, 2022, PFRS received \$17,183,919 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 below. The actuarial assumptions used in the December 31, 2022, valuation was based on the results of the most recent demographic experience study dated April 17, 2018, which covered a three-year period ending December 31, 2016. An economic experience study was adopted by the Boards, based upon actuarial assumptions presented March 9, 2022, effective with the December 31, 2021, valuation.

Price inflation	2.75%
Wage inflation	3.25%
Salary increases, including wage inflation	4.00% to 5.75%
Long-term rate of return, net of investment	
expense, including price inflation	7.34%
Active Members	Based on the RP-2000 Non-Annuitant Healthy Mortality Table, set forward two years for males, projected on a generational basis using Scale AA.
Healthy Retirees And Beneficiaries	Based on the RP-2000 Annuitant Healthy Mortality Table, set forward two years for males, projected on a generational basis using Scale AA.
Disabled Retirees	Based on the RP-2000 Disabled Mortality, projeted on a generational basis using Scale AA.

Actuarial Rate of Return Assumption and Discount Rate: PFRS discount rate is 7.34%. Information about the actuarial rate of return assumption and the discount rate assumption 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, 2022, 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

Total Pension Liability (TPL)	\$ 907,541,617
Less: Fiduciary Net Position (FNP)	746,791,698
Net Pension Liability (NPL)	\$ 160,749,919
Ratio of FNP to TPL	82.29%

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, 2021. A Schedule of Changes in the Employer's Net Pension Liability (Asset) and Related Ratios is presented in the required supplementary information of this report on page A-30.

<u>Sensitivity Analysis</u>: The accompanying table presents the net pension liability of the City using the discount rate of 7.34%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1.0% lower (6.34%) or 1.0% higher (8.34%) than the current rate.

		City's Net						
	Rate	Per	sion Liability					
1.0% Decrease	6.34%	\$	270,336,566					
Current Rate	7.34%		160,749,919					
1.0% Increase	8.34%		69,327,660					

7. Insurance

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 Annual Comprehensive Financial Report issued by the City of Wichita.

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY (ASSET) AND RELATED RATIOS WICHITA EMPLOYEES' RETIREMENT SYSTEM

For the years ended December 31, 2014 through December 31, 2022 ¹

	 2022		2021	 2020	2019	2018
TOTAL PENSION LIABILITY						
Service cost	\$ 9,796,265	\$	9,220,703	\$ 9,639,316	\$ 10,132,953	\$ 10,067,053
Interest	50,309,417		49,907,671	49,106,352	47,499,432	47,789,825
Benefit term changes	-		-	-	-	-
Differences between expected						
and actual experience	2,296,782		478,629	(1,365,285)	3,656,262	(2,668,930)
Assumption changes	(2,847,201)		17,287,512	669,701	(19,749,611)	32,865,478
Reclassification due to conversion						
of members to Plan 3b	(295,038)		(417,138)	(63,361)	(94,720)	(179,012)
Benefit payments, including						
member refunds	 (50,367,805)		(47,000,275)	 (45,828,504)	 (44,447,896)	 (41,670,299)
Net change in total pension liability	8,892,420		29,477,102	12,158,219	(3,003,580)	46,204,115
Total pension liability - beginning	710,297,306		680,820,204	668,661,985	 671,665,565	625,461,450
Total pension liability - ending (a)	719,189,726		710,297,306	680,820,204	668,661,985	671,665,565
PLAN FIDUCIARY NET POSITION						
Employer contributions	10,407,635		10,722,494	11,010,091	9,683,553	10,099,027
Employee contributions	3,823,411		3,632,713	3,809,288	3,770,224	3,755,812
Reclassification due to conversion						
of members to Plan 3b	(295,038)		(417,138)	(63,361)	(94,720)	(179,012)
Net investment income	(98,593,403)		95,356,927	80,782,297	102,909,003	(39,511,690)
Benefit payments, including						
member refunds	(50,367,805)		(47,000,275)	(45,828,504)	(44,447,896)	(41,670,299)
Administrative expenses	 (733,533)	_	(605,918)	 (573,137)	 (619,398)	 (580,204)
Net change in plan fiduciary net position	(135,758,733)		61,688,803	49,136,674	71,200,766	(68,086,366)
Plan fiduciary net position - beginning	 728,717,909		667,029,106	 617,892,432	546,691,666	614,778,032
Plan fiduciary net position - ending (b)	592,959,176		728,717,909	 667,029,106	617,892,432	546,691,666
Net pension liability (asset) - ending (a) - (b)	\$ 126,230,550	\$	(18,420,603)	\$ 13,791,098	\$ 50,769,553	\$ 124,973,899
Plan fiduciary net position as a percentage of the total pension liability	82.45%		102.59%	97.97%	92.41%	81.39%
Covered payroll	\$ 80,679,341	\$	77,140,245	\$ 80,365,628	\$ 80,029,364	\$ 78,898,648
Employer's net pension liability (asset) as a percentage of covered payroll	156.46%		(23.88)%	17.16%	63.44%	158.40%

 2017	2016		2015	2014		
\$ 10,049,029 46,669,189 -	\$ 9,679,684 45,634,881 -	\$	9,644,456 44,305,832 -	\$	9,278,998 43,680,283 -	
(1,893,808)	(2,791,029)		(656,102) (8,877,507)		(3,427,255) (3,550,489)	
(191,292)	(244,793)		(465,171)		(571,242)	
 (39,282,815)	 (39,144,783)		(37,089,403)		(37,681,042)	
15,350,303	13,133,960		6,862,105		7,729,253	
610,111,147	596,977,187		590,115,082		582,385,829	
625,461,450	610,111,147		596,977,187		590,115,082	
9,642,540 3,682,056	8,946,064 3,642,007		9,031,463 3,574,026		9,423,640 3,394,544	
(191,292)	(244,793)		(465,171)		(571,242)	
91,773,973	35,956,780		13,380		28,659,491	
(39,282,815)	(39,144,783)		(37,089,403)		(37,681,042)	
 (633,379)	 (615,829)		(624,085)		(621,460)	
64,991,083	8,539,446		(25,559,790)		2,603,931	
549,786,949	 541,247,503		566,807,293		564,203,362	
614,778,032	549,786,949		541,247,503		566,807,293	
\$ 10,683,418	\$ 60,324,198	\$	55,729,684	\$	23,307,789	
98.29%	90.11%		90.66%		96.05%	
\$ 78,394,634	\$ 77,121,241	\$	74,028,385	\$	71,391,212	
13.63%	78.22%		75.28%		32.65%	

NOTES TO SCHEDULE

Benefit changes:

• There have been no benefit changes in the plan in the last ten years.

Changes in actuarial assumptions:

December 31, 2021 valuation

• Decrease in the investment return assumption from 7.50% to 7.25%.

December 31, 2018 valuation

- Decrease in the price inflation rate from 3.25% to 2.75%.
- Decrease in the investment return assumption from 7.75% to 7.50%.
- Decrease in the general wage growth assumption from 4.0% to 3.25%.
- Decrease in the covered payroll growth from 4.00% to 3.25%.
- Decrease in the indexation of terminated vested benefits from 4.00% to 3.50%.
- Modification of the retirement rates to better reflect the actual experience.
- Increase in the probability of entering the DROP from 70% to 75%.
- Change the termination of employment assumption.
- Decrease the merit component of the salary increase assumption.
- Reduce the sick leave load assumption from 2.50% to 1.75%.

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.

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

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY (ASSET) AND RELATED RATIOS POLICE AND FIRE RETIREMENT SYSTEM OF WICHITA, KANSAS

For the years ended December 31, 2014 through December 31, 2022¹

	2022		2021		2020		2019	2018
TOTAL PENSION LIABILITY			_		_			 _
Service cost	\$ 19,320,826	\$	17,772,976	\$	17,070,149	\$	16,230,358	\$ 15,754,976
Interest	61,525,792		59,373,364		57,538,167		55,560,527	53,649,438
Benefit term changes	-		-		-		-	-
Differences between expected								
and actual experience	15,091,525		6,094,423		(3,886,707)		(3,777,136)	11,768,665
Assumption changes	(3,002,231)		24,321,745		1,753,326		(12,112,003)	26,241,485
Benefit payments, including								
member refunds	 (53,182,842)	_	(47,333,495)	_	(45,162,140)	_	(42,111,381)	 (39,381,501)
Net change in total pension liability	39,753,070		60,229,013		27,312,795		13,790,365	68,033,063
Total pension liability - beginning	 867,788,547		807,559,534		780,246,739		766,456,374	 698,423,311
Total pension liability - ending (a)	907,541,617		867,788,547	_	807,559,534	_	780,246,739	766,456,374
PLAN FIDUCIARY NET POSITION								
Employer contributions	17,183,919		17,889,908		16,617,743		13,965,415	14,331,422
Employee contributions	6,505,692		6,682,182		5,927,784		5,428,455	5,599,216
Net investment income	(121,753,365)		116,265,367		97,865,002		120,349,987	(43,988,371)
Benefit payments, including	, , ,							, , ,
member refunds	(53,182,842)		(47,333,495)		(45,162,140)		(42,111,381)	(39,381,501)
Administrative expenses	(657,985)		(556,934)		(574,182)		(612,049)	(590,098)
•								
Net change in plan fiduciary net position	(151,904,581)		92,947,028		74,674,207		97,020,427	(64,029,332)
Plan fiduciary net position - beginning	898,696,279		805,749,251		731,075,044		634,054,617	698,083,949
Plan fiduciary net position - ending (b)	746,791,698		898,696,279		805,749,251		731,075,044	634,054,617
Net pension liability (asset) - ending (a) - (b)	\$ 160,749,919	\$	(30,907,732)	\$	1,810,283	\$	49,171,695	\$ 132,401,757
Plan fiduciary net position as a percentage of the total pension liability	82.29%		103.56%		99.78%		93.70%	82.73%
Covered payroll	\$ 82,219,708	\$	79,158,885	\$	75,880,105	\$	73,891,085	\$ 72,017,196
Employer's net pension liability (asset) as a percentage of covered payroll	195.51%		(39.05)%		2.39%		66.55%	183.85%

	2017		2016		2015		2014			
\$	15,178,226	\$	14,772,379	\$	14,981,100	\$	15,894,290			
	51,532,754 -		49,519,284 -		47,600,166 -		46,490,734			
	(1,784,785)		(2,576,401)		(3,259,180)		(12,040,126)			
	-		-		(10,871,013)		226,376			
_	(36,930,533)		(35,552,267)		(36,090,820)		(36,415,156)			
	27,995,662		26,162,995		12,360,253		14,156,118			
	670,427,649		644,264,654		631,904,401	_	617,748,283			
	698,423,311		670,427,649		644,264,654	_	631,904,401			
	13,369,785		12,585,895		13,964,379		14,464,181			
	4,915,378		4,776,958		4,603,331		4,529,895			
	103,236,679		39,901,640		(163,702)		30,596,067			
	(36,930,533)		(35,552,267)		(36,090,820)		(36,415,156)			
	(554,641)		(548,171)		(521,018)		(542,207)			
	(00.,0)	_	(8.18,11.1)		(021,010)	-	(0:12,20:)			
	84,036,668		21,164,055		(18,207,830)		12,632,780			
	614,047,281		592,883,226		611,091,056		598,458,276			
_	698,083,949		614,047,281	_	592,883,226	-	611,091,056			
	, ,		<u> </u>	_	<u> </u>	_	<u> </u>			
\$	339,362	\$	56,380,368	\$	51,381,428	\$	20,813,345			
	99.95%		91.59%		92.02%		96.71%			
Ф	60 634 207	¢	66 046 250	¢	65 560 465	¢	64 572 227			
\$	69,634,297	\$	66,946,250	\$	65,560,465	\$	64,572,237			
	0.49%		84.22%		78.37%		32.23%			

NOTES TO SCHEDULE

Benefit changes:

• There have been no benefit changes in the plan in the last ten years.

Changes in actuarial assumptions:

December 31, 2021 valuation

• Decrease in the investment return assumption from 7.50% to 7.25%.

December 31, 2018 valuation

- Decrease in the price inflation rate from 3.25% to 2.75%.
- Decrease in the investment return assumption from 7.75% to 7.50%.
- Decrease in the general wage growth assumption from 4.0% to 3.25%.
- Decrease in the covered payroll growth from 4.00% to 3.25%.
- Decrease in the indexation of terminated vested benefits from 4.00% to 3.50%.
- Modification of the retirement rates to better reflect the actual experience.
- Increase in the probability of entering the DROP from 70% to 75%.
- Change the termination of employment assumption.
- Decrease the merit component of the salary increase assumption.
- Reduce the sick leave load assumption from 2.50% to 1.75%.

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.

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

SCHEDULE OF EMPLOYER CONTRIBUTIONS WICHITA EMPLOYEES' RETIREMENT SYSTEM

For the years ended December 31, 2013 through December 31, 2022 (dollars expressed in thousands)

	 2022	2021	 2020	 2019	 2018
Actuarially determined employer contributions Actual employer contributions	\$ 10,408 10,408	\$ 10,722 10,722	\$ 11,010 11,010	\$ 9,684 9,684	\$ 10,099 10,099
Annual contribution deficiency (excess)	\$ 	\$ 	\$ 	\$ 	\$
Covered payroll	\$ 80,679	\$ 77,140	\$ 80,366	\$ 80,029	\$ 78,899
Contributions as a percentage of covered payroll	12.90%	13.90%	13.70%	12.10%	12.80%

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, 2022.

Actuarial cost method

Entry age normal

Level percentage of payroll, open

Remaining amortization period

Rolling 20 years

Asset valuation method

Expected Value + 25% of (Fair Value - Expected Value)

Price inflation

2.75%

Salary increases, including wage inflation

3.50% - 6.50%

Investment Rate of Return

7.50%

2017	2016	2015	2014	2013
 2011	 2010	2010	2014	2010
\$ 9,643 9,643	\$ 8,946 8,946	\$ 9,031 9,031	\$ 9,424 9,424	\$ 8,940 8,940
 0,010	 0,010	 0,001	 0,121	 0,010
\$ 	\$ 	\$ 	\$ 	\$
\$ 78,395	\$ 77,121	\$ 74,028	\$ 71,391	\$ 70,953
12.30%	11.60%	12.20%	13.20%	12.60%

SCHEDULE OF EMPLOYER CONTRIBUTIONS POLICE AND FIRE RETIREMENT SYSTEM OF WICHITA, KANSAS

For the years ended December 31, 2013 through December 31, 2022 (dollars expressed in thousands)

	2022		2021		2020		2019		2018	
Actuarially determined employer contributions Actual employer contributions	\$	17,184 17,184	\$	17,890 17,890	\$	16,618 16,618	\$	13,965 13,965	\$	14,331 14,331
Annual contribution deficiency (excess)	\$		\$		\$		\$		\$	
Covered payroll	\$	82,220	\$	79,159	\$	75,880	\$	73,891	\$	72,017
Contributions as a percentage of covered payroll		20.90%		22.60%		21.90%		18.90%		19.90%

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, 2022.

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 2.75%

Salary increases, including wage inflation 4.00% - 5.75%

Investment Rate of Return 7.50%

 2017	 2016	2015		2014		2013	
\$ 13,370 13,370	\$ 12,586 12,586	\$	13,964 13,964	\$	14,464 14,464	\$	14,890 14,890
\$ 	\$ 	\$		\$		\$	-
\$ 69,634	\$ 66,946	\$	65,560	\$	64,572	\$	65,306
19.20%	18.80%		21.30%		22.40%		22.80%

SCHEDULE OF INVESTMENT RETURNS

For the years ended December 31, 2014 through December 31, 2022 ¹

	2022	2021	2020	2019
Annual money-weighted rate of return,				
net of investment expenses	(13.73) %	14.84 %	13.85 %	19.77 %

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

2018		2017		2016		2015		2014		
(5.86)	%	17.40	%	7.16	%	0.63	%	5.18	%	

SCHEDULE OF ADMINISTRATIVE EXPENSES

For the year ended December 31, 2022 (with comparative totals for the year ended December 31, 2021)

	ce and Fire		nployees' etirement	Totals					
	System	System			2022		2021		
Personnel services:									
Wages	\$ 316,160	\$	316,160	\$	632,320	\$	530,532		
Benefits	 90,365		90,365		180,730		157,396		
Total personnel services	406,525		406,525		813,050		687,928		
Contractual services:									
Telephone	2,071		2,071		4,142		3,986		
Postage	2		2		4		34		
Transportation and travel	5,021		5,021		10,042		1,940		
Data center charges	12,434		12,434		24,868		20,202		
City adminstrative fees	37,828		37,828		75,656		64,114		
Actuarial fees	44,301		48,301		92,602		73,814		
Audit fees	9,550		9,550		19,100		17,170		
Studies and consultants	3,993		4,928		8,921		4,884		
Legal services	-		-		-		4,255		
Periodicals and manuals	392		392		784		484		
Membership dues	4,175		3,824		7,999		3,316		
Printing and photocopying	6,909		8,117		15,026		11,710		
Plan 3 participant administration	-		36,400		36,400		34,200		
Pension software expense	97,490		97,490		194,980		158,610		
Custody transactions	31,154		45,764		76,918		71,320		
Other	(7,272)		11,474		4,202		7,553		
Total contractual services	 248,048		323,596		571,644		477,592		
Commodities:									
Office equipment and supplies	1,733		1,733		3,466		2,710		
Data processing equipment	1,679		1,679		3,358		1,672		
Other	-		-		-		56		
Total commodities	3,412	_	3,412		6,824		4,438		
Total administrative expenses	\$ 657,985	\$	733,533	\$	1,391,518	\$	1,169,958		

SCHEDULE OF INVESTMENT EXPENSES

For the year ended December 31, 2022 (with comparative totals for the year ended December 31, 2021)

	Police and Fire Retirement		Employees' Retirement			nployees' etirement	Totals				
		System		System		Plan 3b		2022		2021	
Investment expenses:										_	
Financial consulting	\$	150,500	\$	175,502	\$	-	\$	326,002	\$	242,852	
Custodial bank		167,170		167,170		-		334,340		289,494	
Investment management fees		3,400,922		2,726,085		17,218		6,144,225		6,443,614	
Total investment expenses	\$	3,718,592	\$	3,068,757	\$	17,218	\$	6,804,567	\$	6,975,960	

SCHEDULE OF PAYMENTS MADE TO CONSULTANTS OTHER THAN INVESTMENT ADVISORS

For the year ended December 31, 2022 (with comparative totals for the year ended December 31, 2021)

		Police and Fire Retirement System		nployees' etirement	Totals					
				System		2022	2021			
Ice Miller LLP										
(legal services)	\$	-	\$	-	\$	-	\$	4,255		
Cheiron, Inc.										
(actuarial services)		44,301		48,301		92,602		73,814		
Eide Bailly LLP										
(auditing services)		9,550		9,550		19,100		17,170		
Northeast Retirement Services										
(participant accounting)		-		36,400		36,400		34,200		
Total payments	\$	53,851	\$	94,251	\$	148,102	\$	129,439		



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*

To the Board of Trustees Wichita Retirement Systems Wichita, Kansas

We have audited, 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, the financial statements of the Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas, as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise Wichita Retirement Systems' basic financial statements, and have issued our report thereon dated June 6, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered City of Wichita, Kansas' internal control over financial reporting (internal control) as a basis for designing 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 City of Wichita, Kansas' internal control. Accordingly, we do not express an opinion on the effectiveness of City of Wichita, Kansas' 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. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether Wichita Retirement Systems, the Pension Trust Funds of the City of Wichita, Kansas' 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 financial statements. 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

Esde Saelly LLP

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.

Boise, Idaho June 6, 2023 This page intentionally left blank.







Investment Section

Callan

Callan LLC 1900 16th Street Suite 1175 Denver, CO 80202 Main 303.861.1900 Fax 303.832.8230 www.callan.com

April 2023

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

RE: Report on 2022 Investment Activities

Dear Board Members:

The City of Wichita created the Wichita Retirement Systems (the "Fund") to make investments in the sole interest of the participants and beneficiaries of the Wichita Employees' Retirement System and the Police & Fire Retirement System of Wichita, Kansas. The combined Retirement Funds' assets are invested in accordance with the following 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 in order to meet benefit payment obligations when due.

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 also acknowledge the objective of controlling the costs involved with administering and managing the investments of the Fund.

Through the Joint Investment Committee, the two Boards 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. The Boards' investment consultant provides performance and other analyses to facilitate their ongoing evaluation of Fund's results.

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

Comments in the following paragraphs reflect investment results for the one-year period ended December 31, 2022.

Financial markets declined in 2022 as the Federal Reserve (Fed) embarked on an aggressive path of rate hikes to combat unexpectedly high and persistent inflation. Global stock and bond markets posted double-digit losses for the year, with U.S. bonds posting record-breaking calendar year losses and several U.S. stock indices falling the most since 2008. In addition to traditional financial asset declines, the crypto market shrank from a high of \$3 trillion in November 2021 to roughly \$800 billion at year-end, according to data

Callan

from CoinMarketCap. Commodities were a lone bright spot, buoyed by soaring energy prices in the first half of the year and metals later in the year.

The Federal Reserve raised its target range for the Fed Funds rate by 50 bps to 4.25% - 4.50% at its December meeting, the highest since 2007. The 2022 cumulative rate hike totaled 425 bps. The Fed has been explicit in its intent to aggressively fight inflation and is willing to see the economy slow and unemployment rise to bring it down. The median Fed Funds rate projection from the Fed for year-end 2023 is now 5.1%, up 50 bps from the September projections.

In response to dramatically increasing interest rates, the U.S. fixed income market experienced its worst year ever in 2022, by a wide margin. The Bloomberg U.S. Aggregate Bond Index sank 13.0%; the next worst calendar year was 1994 when the Aggregate fell 2.9%. The silver lining lies in the 4.68% yield-to-worst for the Index, up from 1.75% at the beginning of the year. The yield curve remained inverted at year-end, reflecting investor expectations for the economy to slow and an eventual need for the Fed to lower rates. The fourth quarter brought some relief to bond investors as longer rates fell modestly and most "spread" sectors outperformed Treasuries.

U.S. stock indices posted positive returns in 4Q as investor sentiment improved, but the 2022 results remained dismal with most indices posting double-digit declines. The S&P 500 Index rose 7.6% for the quarter, which lowered its loss for the year to 18.1%. Value stocks trounced growth for the year (Russell 1000 Value: -7.5%; Russell 1000 Growth: -29.1%). Looking back three years, growth is now only modestly ahead of value (Russell 1000 Value: +6.0%; Russell 1000 Growth: +7.8%); Small-cap stocks exhibited a similar pattern.

While financial markets were challenged in 2022, economic data was more promising. The labor market remained strong despite well-publicized layoffs across the tech industry. In 2022, 4.5 million jobs were created, down from the record-setting 6.7 million added in 2021. The unemployment rate dropped a tenth of a percentage point in December to 3.5%. Hourly wages were 4.6% higher than a year earlier.

Inflation began to show signs of moderating, with the annual rate of inflation slowing for the sixth straight month in December. The headline Consumer Price Index (CPI) rose 6.5% year-over-year, off the midsummer peak of 9.1% (June 2022). These year-over-year figures remain well above the Federal Reserve's long-run inflation rate objective of 2%, but most components of the CPI registered smaller gains or even price declines in the most recent reading.

As noted in the Schedule of Investment Results, the Total Fund returned -13.2% (net of fees) for the year ended December 31, 2022, which outperformed the -13.6% return of the target benchmark. In aggregate, active management added value during the year, particularly within the Timber and International Equity asset classes.

Respectfully submitted,

Gordon Weightman, CFA Senior Vice President

Callan LLC

Alexander Ford Vice President Callan LLC

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Perry Hopper, CFA, CAIA Assistant 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 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.

<u>Investment Policies</u>: 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. In the event an investment manager search is deemed prudent by the JIC, a "candidate profile" will be created for each search that lists the rationale and objective in addition to any preferences and requirements relevant to the selection of candidates.

<u>Investment Objectives</u>: The goal of the Fund is to ensure sufficient resources to meet or exceed benefit obligations. 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, 2022, the blended target consisted of the following:

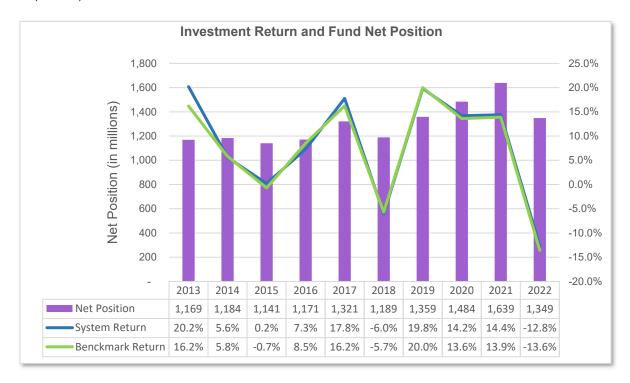
	Target	
Asset Class	Allocation	Relevant Index
Domestic Equity	40%	Russell 3000 Index
International Equity	27%	Morgan Stanley Capital International All Country World ex-U.S. Investable Markets Index. (MSCI - ACWI ex-U.S. IMI)
Fix ed Income	20%	,
Real Estate	20% 7%	Bloomberg Aggregate Bond Index National Council of Real Estate Investment Fiduciaries
Real Estate	1 70	Open-End Diversified Core Equity Value-Weighted Index (NCREIF ODCE Value Weighted)
Timber	5%	National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland 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 4.50% higher than the price inflation assumption.

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 seven-year periods. Over the long term, (ie. a market cycle or periods greater than seven years), each manager's performance will also be compared to a relevant market index.

Investment Performance

The accompanying chart illustrates the portfolio's annual gross investment performance compared to the benchmark and changes in the Fund's net position based on asset class allocations at year-end. Net investment performance was not available until 2018 with the change of the custodian of the Fund. The 2022 Fund return of (12.76%) outperformed the benchmark return of (13.60%). The Fund's net position decreased by (\$289.7) million, or (17.68%).



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

	Annualized Returns ¹				
	1 year	3 years	5 years	10 years	
Fund performance ²	(12.76%)	4.47%	5.11%	7.52%	
Fund target performance ³	(13.60%)	3.77%	4.79%	6.86%	
Domestic equity	(19.04%)	7.33%	8.74%	12.03%	
Russell 3000 Index	(19.21%)	7.07%	8.79%	12.13%	
International equity	(15.30%)	1.99%	1.75%	4.89%	
MSCI ACWI ex US IMI Index	(16.58%)	0.20%	0.85%	3.98%	
Fix ed income	(13.56%)	(2.49%)	0.37%	1.59%	
Bloomberg Aggregate Index	(13.01%)	(2.71%)	0.02%	1.06%	
Real Estate	7.56%	9.06%	7.52%	9.41%	
NCREIF NFI-ODCE Val Wt Nt	6.55%	8.97%	7.72%	9.11%	
Timber	31.73%	11.66%	7.49%	6.46%	
NCREIF Timberland Index	12.90%	7.51%	5.37%	5.80%	

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

- (a) From 10/01/11 until 10/01/16; 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.
- (b) From 10/01/16 until 05/31/19; 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.
- (c) From 06/01/19 until present; 40% Russell 3000 Index; 27% MSCI ACWI ex US IMI Index, 20% Blmbg Aggregate Index, 7% NCREIF NFI-ODCE Val Wt Nt, 5% NCREIF Timberland Index and 1% 3-month Treasury Bill Index.

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, LLC, the Board's financial consultant.

² Performance is gross of fees. Timber was funded after January 2011.

³ Fund target performance is as follows:

The Boards review the adopted Asset Allocation Plan at least every three years. 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, 2022, 65.30% of the Fund's assets were invested in equities, 18.70% in fixed income, 8.00% in real estate, 6.80% in timber and 1.20% in cash. The accompanying table displays the Fund's target and actual asset allocations on December 31, 2022.

		Asset Allo	ocation	
Asset Class	Minimum ¹	Target	Maximum ¹	Actual
Domestic equity:				
Large/mid-cap	17.00%	20.00%	23.00%	19.30
Large-cap passive	10.20%	12.00%	13.80%	11.40
Small-cap	6.80%	8.00%	9.20%	7.20
Total domestic equity	34.00%	40.00%	46.00%	37.90
International equity:				
Active core	8.70%	10.30%	11.80%	10.80
Passive core	6.20%	7.30%	8.40%	7.70
Small-cap	3.50%	4.00%	4.60%	4.50
Emerging markets	4.60%	5.40%	6.20%	4.40
Total international equity	23.00%	27.00%	31.00%	27.40
Fix ed income:				
Active core	6.80%	8.00%	9.20%	7.60
Active core plus	6.80%	8.00%	9.20%	7.20
Global .	3.40%	4.00%	4.60%	3.90
Total fixed income	17.00%	20.00%	23.00%	18.70
Real estate:				
Core	5.00%	7.00%	9.00%	8.00
Timber	3.00%	5.00%	7.00%	6.80
Cash	0.00%	1.00%	5.00%	1.20

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, 2022 are summarized in the accompanying tables. A complete listing of the portfolio of investments is available from the Pension Management Office upon request.

		argest Equity Holo			
	AS	or December 31, 2	Number of		
		Fair	Shares/Par	Percent of Total	
Holding		Value	Value	Portfolio	
Microsoft Corp	\$	12,661,297	52,795	0.94	%
Amazon.com Inc		5,906,796	70,319	0.44	
Apple Inc.		5,183,168	39,892	0.38	
Nestle SA		4,504,929	38,902	0.33	
AIA Group Ltd		4,099,255	368,600	0.30	
Alphabet Inc		3,913,614	44,107	0.29	
Merck & Co Inc		3,821,806	34,217	0.28	
Roche Holding AG		3,759,984	11,975	0.28	
Hess Corp		3,550,606	25,036	0.26	
Vici Properties Inc		3,326,233	101,440	0.25	
Total	\$	50,727,688	787,283	3.75	%
	Ten Larc	est Fixed Income	Holdings		
		of December 31, 2			
			Number of		
		Fair	Shares/Par	Percent of Total	
Holding		Value	Value	Portfolio	
US Treasury Note	\$	4,632,469	6,935,000	0.34	%
US Treasury Bond		3,569,824	4,179,487	0.26	
Bundesobligation Regs		3,140,384	3,830,000	0.23	
US Treasury Note		2,828,924	3,003,682	0.21	
Singapore Gov ernment Bond		2,498,710	2,823,468	0.19	
US Treasury Bond		2,389,357	2,620,756	0.18	
US Treasury Note		2,306,634	2,683,153	0.17	
US Treasury Note US Treasury Bond		2,306,634 2,187,382	2,683,153 2,975,000	0.17 0.16	
·					
US Treasury Bond		2,187,382	2,975,000	0.16	

The tables presented on the following pages provide additional information about portfolio investments, including fair value of investment assets by investment, assets under management and related investment management fees by manager and brokerage commissions earned for the year ended December 31, 2022.

Investment Summary by Type of Investment as of December 31, 2022					
Type of Investment		Fair Value	% of Total Portfolio		
Gov ernment short-term investment fund	\$	42,431,999	3.10 %		
Equity:					
Domestic equity		498,912,819	36.45		
International equity		364,058,198	26.60		
Total equities		862,971,017	63.05		
Fixed income		242,849,704	17.74		
Real estate		108,037,344	7.89		
Target date and money market funds		5,974,974	0.44		
Timber		91,995,089	6.72		
Derivative investments		1,421,912	0.10		
Securities lending short-term collateral investment pool		13,141,922	0.96		
Total Investments	\$	1,368,823,961	100.00 %		

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Investment Assets Under Managemo	ent and Related	Management Fees				
As of and for the year ended December 31, 2022						
Asset Category/Investment Manager	Ma	nagement Fees		Fair Value		
Fixed income:						
Insight Investment	\$	184,658	\$	49,745,775		
Richmond Capital Management, Inc.		196,445		99,260,309		
Western Asset Management Co.		303,604		95,265,532		
BNYM ¹ securities lending short-term collateral investment pool		-		13,141,922		
BNYM ¹ Collective Trust GSTIF ²				42,431,999		
Total fixed income		684,707		299,845,537		
Domestic equity:						
Barrow Hanley Global Investors		670,002		142,742,100		
Boston Partners Asset Management		500,533		47,234,715		
Fred Alger Management, Inc.		543,023		109,787,144		
Peregrine Capital Management		436,024		46,147,625		
SSGA ³ S&P 500 Flagship Fund		30,197		153,001,235		
Total domestic equity		2,179,779		498,912,819		
International equity:						
AQR Capital Management		484,911		58,949,178		
Brandes Investment Partners		420,191		60,311,457		
Fidelity Investment Asset Mgmt		616,251		141,280,621		
SSGA ³ MSCI World-Ex-U.S. Index		57,689		103,516,942		
Total international equity		1,579,042		364,058,198		
Real estate:						
RREEF America REIT II		640,987		64,987,173		
UBS Trumbull Property Fund		278,198		43,050,171		
Total real estate		919,185	-	108,037,344		
Timber:			-			
Molpus Woodlands Fund III		217,193		25,517,182		
Molpus Woodlands Fund IV		285,098		34,550,915		
Molpus Woodlands Fund V		279,221		31,926,992		
Total timber		781,512		91,995,089		
Defined contribution pooled funds:						
SSGA ³ Target Date Funds		_		5,707,970		
SSGA ³ Cash Series Prime Fund CL C		_		267,004		
Total defined contribution pooled funds				5,974,974		
Total	\$	6,144,225	\$	1,368,823,961		
			_			
¹ The Bank of New York Mellon						
² Gov ernment Short Term Inv estment Fund						
³ State Street Global Advisors						

\$	Schedule of Brokerage Co	ommissions				
F	or the year ended Decem	ber 31, 2022				
Total Number of Commission						
Brokerage Firm	Commissions	Shares	Per Share	of Total		
Piper Jaffray & Co, Jersey City	\$ 25,174	722,529	\$ 0.03484	8.33 %		
Goldman Sachs & Co, Ny	22,459	21,288,690	0.00105	7.44		
BNY Convergex, New York	21,777	621,891	0.03502	7.22		
Cowen And Co Llc, New York	18,446	741,971	0.02486	6.11		
J.P Morgan Securities Inc, New York	11,983	389,317	0.03078	3.97		
Guggenheim Capital Markets Llc, New York	11,629	325,050	0.03578	3.85		
Morgan Stanley And Co, Llc, New York	11,510	478,798	0.02404	3.82		
Goldman Sachs Intl, London (Gsilgb2x)	7,350	1,347,003	0.00546	2.44		
Merrill Lynch Pierce Fenner Smith Inc Ny	7,198	235,335	0.03059	2.39		
Wedbush Securities Inc/P3, Los Angeles	7,076	271,461	0.02607	2.35		
J.P. Morgan Securities Llc, New York	5,945	215,484	0.02759	1.97		
Baird, Robert W & Co Inc, Milwaukee	5,860	174,301	0.03362	1.94		
UBS Securities Llc, Stamford	5,623	337,386	0.01667	1.86		
Morgan Stanley & Co, London (MsIngb2x)	5,616	374,211	0.01501	1.86		
Cowen And Company, Llc, Jersey City	5,431	155,173	0.03500	1.80		
Credit Suisse International, London	5,212	16,900,000	0.00031	1.73		
Jefferies & Co Inc, New York	4,927	142,126	0.03467	1.63		
RBC Capital Markets Llc, New York	4,873	171,623	0.02839	1.62		
Pershing Llc, Jersey City	4,767	151,349	0.03150	1.58		
UBS Equities, London	4,767	455,317	0.01047	1.58		
Wells Fargo Securities, Llc, New York	4,335	129,141	0.03357	1.44		
Stifel Nicolaus	4,120	123,661	0.03332	1.37		
Jefferies & Co Ltd, London	4,067	235,431	0.01727	1.35		
Credit Suisse, New York (Csus)	4,052	223,076	0.01816	1.34		
Suntrust Capital Markets Inc, New York	3,708	104,796	0.03538	1.23		
Raymond James & Assoc Inc, St Petersburg	3,528	111,869	0.03154	1.17		
Merrill Lynch Gilts Ltd, London	3,396	141,100	0.02407	1.13		
Barclays Capital Inc/Le, New Jersey	3,325	116,644	0.02851	1.10		
Liquidnet Inc, New York	3,238	181,275	0.01786	1.07		
J.P. Morgan Securities, Hong Kong	3,205	137,500	0.02331	1.06		
Instinet Europe Limited, London	3,098	212,742	0.01456	1.03		
Other firms (Includes 83 brokerage firms,	64.000	2 420 204	0.04074	04.00		
each contributing less than 1% of total	64,006	3,420,201	0.01871	21.22		
Total brokerage commissions	\$ 301,701	50,636,451	\$ 0.00596	100.00 %		

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Actuarial Section



June 1, 2023

Boards of Trustees for the Wichita Employees' Retirement System and Police and Fire Retirement System of Wichita, Kansas City Hall, 12th Floor 455 N. Main Street Wichita, KS 67202

Re: Certification of the December 31, 2022 Actuarial Valuations

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Wichita Employees' Retirement System and the Police and Fire Retirement System of Wichita, Kansas as of December 31, 2022. This letter includes references to three documents produced by Cheiron for each System: the Actuarial Valuation Report as of December 31, 2022, the GASB 67 Report as of December 31, 2022, and the GASB 68 Report as of December 31, 2022.

Actuarial Valuation Reports as of December 31, 2022

The purpose of the annual Actuarial Valuation Reports as of December 31, 2022 is to determine the actuarial funding status of the Systems on that date and to calculate the employer contribution rate for Fiscal Year 2024.

Actuarial funding is based on the Entry Age Normal cost method. Under this method, a contribution rate provides for the current cost (normal cost) plus a level percentage of payroll to amortize the Unfunded Actuarial Liability (UAL). The UAL is amortized over an open (rolling) 20-year period as a level percentage of payroll. For actuarial valuation purposes, System assets are based on the Actuarial Value of Assets. For these Systems, the Actuarial Value of Assets is calculated as the expected Actuarial Value of Assets plus 25% of the difference between the expected Actuarial Value of Assets and the actual fair value of assets. The actuarial value is limited to no less than 80% and no more than 120% of fair value.

The funding objective of the Systems is to establish and receive contributions which (1) when expressed as a percent of active payroll, will remain approximately level from generation to generation of Wichita citizens, and (2) when combined with present assets and future investment returns will be sufficient to meet the financial obligations of the Systems for present and future retirees and beneficiaries.

The Boards of Trustees are responsible for establishing and maintaining the funding policy of the Systems.

The December 31, 2022 valuation results are based on the same actuarial assumptions and methods used in the December 31, 2021 valuations. The demographic assumptions were based on recommendations from the experience studies covering the period January 1, 2014 through December 31, 2016 prepared by the prior actuary. The economic assumptions were adopted by the Board, effective with the December 31, 2021 valuation, based on recommendations from the economic experience study presented to the Board on March 9, 2022. Cheiron has reviewed the assumptions. While we consider these assumptions to be generally reasonable, we have not performed our own demographic actuarial experience study. The actuarial assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice.

We certify that the valuations were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice, in particular Standards Nos. 4, 27, 35, and 44.

GASB 67 and 68 Reports as of December 31, 2022

The purpose of the GASB 67 and 68 Reports as of December 31, 2022 is to provide accounting and financial reporting information under GASB 67 for the Systems and under GASB 68 for the City of Wichita. These reports are not appropriate for other purposes, including the measurement of funding requirements for the Systems.

For financial reporting purposes, measurements as of the reporting date are based on the fair value of assets and the Total Pension Liability as of December 31, 2022.

The calculation of the Total Pension Liability and the projection of the System's contributions and projected benefit payments as of December 31, 2022 were based on the same data, actuarial assumptions and methods, and plan provisions as used in the actuarial valuation reports as of December 31, 2022, except for the discount rate.

For the Actuarial Valuations as of December 31, 2022, the investment rate of return is net of both investment and administrative expenses and is assumed to be 7.25%. The administrative expenses are expected to be 0.13% of assets for the Wichita Employees' Retirement System and 0.09% for the Police and Fire Retirement System of Wichita, Kansas. Therefore, in accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.38% per annum for the Wichita Employees' Retirement System and 7.34% per annum for the Police and Fire Retirement System of Wichita, Kansas, net of investment expenses.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.



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We prepared the following supporting schedules that are included in the Annual Comprehensive Financial Report. All historical information prior to December 31, 2019, is based on information reported by the prior actuary.

Actuarial Section

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

Statistical Section

Average Benefit by Years of Service Retired Members by Type and Benefit Amount

Financial Section

Calculation of the Total Pension Liability and Net Pension Liability/(Asset)
Sensitivity Analysis of the Net Pension Liability/(Asset)
Schedule of Changes in the Employers' Net Pension Liability/(Asset) and Related Ratios
Schedule of Employer Contributions

Disclaimers

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) for the intended purpose of calculating liabilities and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations or known weaknesses that would affect our reports.

Projections in our reports were developed using P-scan, our proprietary tool for the intended purpose of developing projections. The projections shown in our reports cover multiple individual scenarios and the variables are not necessarily correlated. We are not aware of any material inconsistencies, unreasonable output resulting from aggregation of assumptions, material limitations or known weaknesses that would affect the projections shown in our reports.

In preparing our reports, we relied on information (some oral and some written) supplied by the Wichita Retirement Systems staff. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. The reports do not reflect any subsequent changes in the membership or assets.



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Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

These reports are for the use of the Boards and their auditor in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of these reports is not an intended user and is considered a third party.

Cheiron's reports were prepared solely for the Wichita Employees' Retirement System and the Police and Fire Retirement System of Wichita, Kansas for the purposes described herein, except that the Plan's Auditor may rely on these reports solely for the purpose of completing an audit related to the matters herein. They are not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

These reports and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Sincerely, Cheiron

Jake Libauskas, FSA, FCA, MAAA, EA

Consulting Actuary

Janet Cranna, FSA, FCA, MAAA, EA Principal Consulting Actuary



1. Wichita Employees' Retirement System

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 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 \$70.6 million as of December 31, 2022.

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. The demographic assumptions were proposed by the Fund's prior actuary following the completion of this experience study covering the period January 1, 2014, through December 31, 2016, and adopted by the Board on September 19, 2018. An economic experience study was performed and adopted by the Boards, based upon actuarial assumptions presented March 9, 2022, effective with the December 31, 2021, valuation. 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 7.25% per year, compounded annually. This rate consists of 2.75% 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, 2021, valuation.

The 7.38% 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.

<u>Salary Projections</u>: 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 3.25% 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 4.00% per year. These assumptions were first used for the December 31, 2021, valuation. Assumptions about annual rates of salary increases are summarized in the accompanying table:

Years of	Inflation	Productivity	Merit and	
Service	Component	Component	Longevity	Total
Under 1	2.75%	0.50%	3.25%	6.50%
1	2.75	0.50	3.10	6.35
2	2.75	0.50	2.90	6.15
3	2.75	0.50	2.70	5.95
4	2.75	0.50	2.50	5.75
5	2.75	0.50	2.30	5.55
6	2.75	0.50	2.10	5.35
7	2.75	0.50	1.90	5.15
8	2.75	0.50	1.80	5.05
9	2.75	0.50	1.70	4.95
10	2.75	0.50	1.60	4.85
11	2.75	0.50	1.50	4.75
12	2.75	0.50	1.40	4.65
13	2.75	0.50	1.30	4.55
14	2.75	0.50	1.20	4.45
15	2.75	0.50	1.06	4.31
16	2.75	0.50	0.92	4.17
17	2.75	0.50	0.78	4.03
18	2.75	0.50	0.64	3.89
19	2.75	0.50	0.50	3.75
20	2.75	0.50	0.35	3.60
Over 20	2.75	0.50	0.25	3.50

<u>Annual Post-Retirement Benefit Increases</u>: 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) <u>Elections</u>: 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: 75% 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, 2018 actuarial valuation.

Rates of Retirement Retirement				
Age	Plan 2			
55-59	1%			
60	3			
61	10			
62	50			
63	25			
64	25			
65	40			
66-69	40			
70	100			

<u>Marriage</u>: 70% 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.

<u>Sick Leave</u>: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits. The calculated normal retirement benefits were increased by 1.75% to account for the inclusion of unused sick leave in the calculation of service credit. This assumption was first used with the December 31, 2018 valuation.

<u>Forfeiture of Vested Benefits</u>: 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	Percent
Service	Forfeiting
Less than 15	60%
15 - 19	40
20 - 24	20
25 or more	-

<u>Plan 3 Transfer</u>: 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.

<u>Mortality Assumptions</u>: 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.

Active Members	Based on the RP-2000 Employee Mortality Tables (set forward two years for males) with generational projection using Scale AA.
Healthy Retirees And Beneficiaries	Based on the RP-2000 Healthy Annuitant Mortality Tables (set forward two years for males) with generational projection using Scale AA.
Disabled Retirees	Based on the RP-2000 Disabled Mortality Tables with generational projection using 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 first used for the December 31, 2018 valuation.

<u>Vested Deferred Pensions</u>: Amounts are assumed to increase during the deferral period at 3.50% per year, compounded annually. This assumption was first used in the December 31, 2018 valuation.

Years of	Termination	Years of	Termination
Service	Rates	Service	Rates
0-1	13.50 %	15	3.00 %
2	12.00	16	2.75
3	10.00	17	2.50
4	9.00	18	2.25
5	8.00	19	2.00
6	7.00	20	1.75
7	6.00	21	1.50
8	5.00	22	1.25
9-11	4.50	23-25	1.00
12	4.00	26-29	0.50
13	3.50	30+	-
14	3.25		

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.

		Number of	f Members ¹				
Valuation					Annual Covered	Avanana	Percentage Change in
Date December 31,	Plan 1	Plan 2	Plan 3 ²	Total	Payroll (in thousands)	Average Annual Pay	Average Annual Pay
2013	15	957	517	1,489	\$ 70,953	\$ 47,652	1.2 %
2014	8	989	520	1,517	71,391	47,061	(1.2)
2015	5	988	539	1,532	74,028	48,321	2.7
2016	3	952	617	1,572	77,121	49,059	1.5
2017	3	891	647	1,541	78,395	50,873	3.7
2018	2	852	675	1,529	78,899	51,601	1.4
2019	1	821	696	1,518	80,029	52,720	2.2
2020	0	790	638	1,428	80,366	56,278	6.7
2021	0	779	635	1,414	77,140	54,555	(3.1)
2022	0	768	641	1,409	80,679	57,260	5.0

² Plan 3 totals do not include Plan 3b members, who have made an irrevocable election to remain in the defined contribution plan.

Valuation	Add	ed to Rolls	Remo	Removed from Rolls		r-End Rolls	Annual Pensions		
Date		Annual		Annual		Annual	Average	Percentage	
December 31,	No.	Pensions ²	No.	Pensions ²	No.	Pensions ²	Pension	Increase	
2013	72	\$ 1,676,296	47	\$ 744,036	1,327	\$ 33,294,857	\$ 25,090	3.0	
2014	68	1,549,070	54	927,726	1,341	34,427,388	25,673	2.3	
2015	90	1,830,381	51	1,132,754	1,380	35,726,088	25,888	0.8	
2016	78	1,730,868	65	1,194,869	1,393	36,931,056	26,512	2.4	
2017	71	1,678,547	48	1,153,410	1,416	38,125,080	26,924	1.6	
2018	77	1,811,362	72	1,537,746	1,421	39,094,992	27,512	2.2	
2019	78	2,148,529	69	1,428,652	1,430	40,503,100	28,324	2.9	
2020	86	2,425,255	57	1,426,896	1,459	42,141,748	28,884	2.0	
2021	103	2,911,475	68	1,555,927	1,494	44,052,935	29,487	2.1	
2022	86	2,870,438	72	1,709,274	1,508	45,901,191	30,438	3.2	

¹ Excludes DROP members.

 $^{^{\}rm 2}$ Values are estimated based upon annualized pension amounts.

	Aggr	egate	Actuarial Liabili	ity Fo	or:				
Valuation Date	(1) Active Member		(2) Inactive Members, Retirees and		(3) Active Member (Employer Financed)	Reported Actuarial Value of		on of Actua Liabilities by Reported	
December 31,	Contributions ¹		Beneficiaries ²		Contributions ¹	Assets	(1)	(2)	(3)
2013	\$ 50,337,976	\$	362,224,034	\$	169,823,819	\$ 542,157,342	100 %	100 %	76.3 %
2014	51,408,059		369,926,908		168,780,115	560,031,764	100	100	82.2
2015	51,609,961		378,186,127		176,058,606	568,464,178	100	100	78.8
2016	53,857,062		385,231,766		181,400,097	575,971,337	100	100	75.6
2017	55,050,806		395,107,729		184,748,720	598,793,422	100	100	80.5
2018	56,965,551		408,534,420		193,208,730	598,778,588	100	100	69.0
2019	56,989,509		422,969,785		195,297,778	613,063,149	100	100	68.2
2020	56,284,261		441,288,791		188,648,034	636,876,961	100	100	73.8
2021	55,727,450		465,098,445		194,702,240	669,951,808	100	100	76.6
2022	54,350,901		476,413,401		198,645,067	658,835,272	100	100	64.5

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<u>System Experience</u>: For the year ended December 31, 2022, the Wichita Employees' Retirement System experienced an actuarial loss of approximately \$26.4 million. The loss for the 2022 plan year reflects the combined impact of an actuarial net loss of \$22 million on the actuarial value of plan assets and an actuarial loss of \$4.4 million on liabilities. The loss on System liabilities were primarily due to negative investment returns. Information about the factors that contributed to the actuarial loss are presented in the following table:

Syste	em Experience (Gain)/Loss		
	Actuarial Liability	Actuarial Value of Assets	Unfunded Actuarial Liability
	(a)	(b)	(a) - (b)
Value as of December 31, 2021	\$ 715,528,135	\$ 669,951,808	\$ 45,576,327
Changes for the year:			
Normal cost	9,324,461	-	9,324,461
Contributions	-	14,231,046	(14,231,046)
Benefit payments	(50,367,805)	(50,367,805)	-
Plan 3 members transferring to Plan 3b	(295,038)	(295,038)	-
Interest	50,747,418	47,273,960	3,473,458
Assumption changes	<u> </u>		
Expected actuarial value at December 31, 2022	724,937,171	680,793,971	44,143,200
Actual actuarial value as of December 31, 2022	729,409,369	658,835,272	70,574,097
Actuarial (gain) loss	\$ 4,472,198	\$ 21,958,699	\$ 26,430,897

				Schedule	of Fu	nding Progr	ess			
					Ur	funded			Active	UAL as
	A	ctuarial	Α	ctuarial	A	ctuarial		N	/lember	a Percentage of
Actuarial	١	/alue of	L	iability	L	iability	Funded	С	overed	Active Member
Valuation Date		Assets		(AL)		(UAL)	Ratio	F	Payroll	Covered Payroll
December 31,		(a)		(b)		(b)-(a)	(a)/(b)		(c)	[(b)-(a)]/(c)
2013	\$	542,157	\$	582,386	\$	40,229	93.1%	\$	70,953	56.7%
2014		560,032		590,115		30,083	94.9		71,391	42.1
2015		568,464		605,855		37,391	93.8		74,028	50.5
2016		575,971		620,219		44,248	92.9		77,121	57.4
2017		598,793		634,907		36,114	94.3		78,395	46.1
2018		598,779		658,709		59,930	90.9		78,899	76.0
2019		613,063		675,257		62,194	90.8		80,029	77.7
2020		636,877		686,221		49,344	92.8		80,366	61.4
2021		669,952		715,528		45,576	93.6		77,140	59.1
2022		658,835		729,409		70,574	90.3		80,679	87.5
(Rounded dollar a	mounts a	re in thousan	ds.)							

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-34 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 applies to all employees hired or rehired on or after July 18, 1981; employees who voluntarily elected, in writing, to convert from Plan 1 to Plan 2 prior to December 18, 1981; and to all employees hired after January 1, 1994, who become vested and do not elect to remain in Plan 3. 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 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.

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

Normal Retirement:

· Eligibility:

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

· Benefit:

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

• <u>Final Average Salary</u>: Average for the three consecutive years within the last 10 actual years of service that produce the highest average salary.

Early Retirement:

- Eligibility: Age 55 with seven or more years of service.
- <u>Benefit</u>: An amount computed as for normal retirement, but reduced for each month retirement precedes age 62 under Plan 2. The amount of reduction per month of early retirement is computed as follows:

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:

• <u>Eligibility</u>: 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 2: 50% of final rate of salary.

Non-Service-Connected Disability:

- <u>Eligibility</u>: Seven or more years of service and 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 2: 25% of final rate of salary.

Deferred Retirement Option Plan (DROP):

- <u>Eligibility</u>: Must be eligible for retirement and elect to participate in the DROP for one to 60 months.
- <u>Benefit</u>: 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 2: Termination of service with seven or more years of service and under age 62.

<u>Benefit</u>: 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 (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.
- <u>Benefit</u>: 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 18 years old, married, or deceased.

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

- <u>Eligibility</u>: Death of employee with seven or more years of credited service.
- <u>Benefit</u>: 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):

- <u>Eligibility</u>: Spouse must have been married to retired employee for one year or more prior to 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.
- <u>Benefit</u>: 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.

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

• <u>Benefit</u>: 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-24.

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:

- <u>Eligibility</u>: 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:

- <u>Eligibility</u>: 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.

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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-27. 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 \$89.5 million as of December 31, 2022.

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. The demographic assumptions were proposed by the Fund's prior actuary following the completion of this experience study covering the period January 1, 2014 through December 31, 2016, and adopted by the Board on September 19, 2018. An economic experience study was performed and adopted by the Boards, based upon actuarial assumptions presented March 9, 2022, effective with the December 31, 2021, valuation. 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 7.25% per year, compounded annually. This rate consists of 2.75% 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, 2022 valuation.

The 7.34% 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.

<u>Salary Projections</u>: 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 3.25% 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 4.00% per year. This assumption was first used for the December 31, 2021 valuation. Assumptions about annual rates of salary increases are summarized in the accompanying table.

Years of	Inflation	Productivity	Merit and	
Service	Component	Component	Longevity	Total
Under 15	2.75 %	0.50 %	2.50 %	5.75 %
15-17	2.75	0.50	1.00	4.25
18+	2.75	0.50	0.75	4.00

<u>Annual Post-Retirement Benefit Increases</u>: 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. Deferred vested members with less than 20 years of service are assumed to retire at age 55 and those with 20 or more years of service are assumed to retire at age 50. These rates were first used for the December 31, 2018 valuation.

		Plan	C-79		
	Less than 3	30 YOS		30 or Moi	re YOS
Age of			Service of		
Member	Police	Fire	Member	Police	Fire
50-58	10 %	10 %	30	0 %	0 %
59	10	15	31	0	0
60+	100	100	32	25	15
			33	50	20
			34	75	50
			35+	100	100

<u>Marriage</u>: 80% 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.

<u>Sick Leave</u>: Accumulated unused sick leave is converted to service credits for the purpose of computing annual benefits. The calculated normal retirement benefits were increased by 2.50% to account for the inclusion of unused sick leave in the calculation of service credit. This assumption was last revised with the December 31, 2018 valuation.

<u>Forfeiture of Vested Benefits</u>: 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, 2018 actuarial valuation.

Years of Service	Percent Forfeiting
10 - 14	65 %
15 - 19	10
20 or more	-

<u>Mortality Assumptions</u>: 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.

Active Members	Based on the RP-2000 Employee Mortality Tables (set forward two years for males) with generational projection using Scale AA.
Healthy Retirees And Beneficiaries	Based on the RP-2000 Healthy Annuitant Mortality Tables (set forward two years for males) with generational projection using Scale AA.
Disabled Retirees	Based on the RP-2000 Disabled Mortality Tables with generational projection using 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.

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, 2018 valuation.

<u>Vested Deferred Pensions</u>: Amounts for Plan C-79 are assumed to increase during the deferral period at 3.50% per year, compounded annually. This assumption was most recently revised with the December 31, 2018 valuation.

Annual P	robability of Becomir	ng 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

Term	nination Rates before I	Retirement
Years of		
Service	Police	Fire
0-5	5.50 %	2.00 %
6	4.50	2.00
7-8	3.00	2.00
9-13	3.00	1.50
14-16	2.00	1.50
17-22	2.00	-
Over 22	-	-

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 Mem	ber Valuation	Data			
	Nur	nber of Memb	ers					
Valuation				Annual Co	overed			Percentage Change in
Date			Total	Payro			verage	Average
December 31,	Plan A	Plan C-79	Members	(in thous	ands)	Anı	nual Pay	Annual Pay
2013	9	1,076	1,085	\$	65,306	\$	60,190	1.7 %
2014	8	1,060	1,068		64,572		60,461	0.5
2015	5	1,045	1,050		65,560		62,439	3.3
2016	4	1,059	1,063		66,946		62,979	0.9
2017	2	1,080	1,082		69,634		64,357	2.2
2018	2	1,065	1,067		72,017		67,495	4.9
2019	1	1,093	1,094		73,891		67,542	0.1
2020	1	1,115	1,116		75,880		67,993	0.7
2021	1	1,119	1,120		79,159		70,678	3.9
2022	1	1,115	1,116		82,220		73,674	4.2

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	Add	ded to Rolls		Removed om Rolls	End o	of Year Rolls	Annual F	Pensions	
Valuation Date	Date Annual		Annual			Annual	Average	Percentage Increase	
December 31,	No.	Pensions ¹	No.	Pensions ¹	No.	Pensions ¹	Pension	(Decrease)	
2013	48	\$ 1,938,485	17	\$ 380,985	952	\$ 27,143,376	\$ 28,512	4.1	
2014	63	2,400,693	42	850,741	971	29,165,652	30,037	5.3	
2015	44	1,652,860	26	494,625	989	30,774,324	31,117	3.6	
2016	31	1,286,489	33	629,314	987	31,914,576	32,335	3.9	
2017	41	1,757,606	28	694,600	1,000	33,526,716	33,527	3.7	
2018	43	1,888,265	28	544,427	1,015	35,386,980	34,864	4.0	
2019	56	2,090,904	27	604,235	1,044	37,445,846	35,868	2.9	
2020	57	2,473,237	41	1,024,790	1,060	39,429,415	37,198	3.7	
2021	58	2,415,326	43	1,126,089	1,075	41,220,576	38,345	3.1	
2022	77	3,275,490	31	722,243	1,121	44,392,174	39,601	3.3	

	Aggı	regate Actuarial Lia	ability	For					
Valuation Date	(1) Active Member	(2) Retirants and		(3) ive Members (Employer	Reported Valuation	Portion of Actuarial Liabilities Covered by Reported Assets			
December 31,	Contributions	Beneficiaries ¹	Fina	nced Portion)	Assets	(1)	(2)	(3)	
2013	\$ 74,238,693	\$ 325,096,785	\$	218,412,805	\$ 571,261,929	100 %	100 %	78.7	
2014	74,684,418	348,915,979		208,304,004	600,860,146	100	100	85.1	
2015	77,222,492	364,943,124		212,970,051	620,148,816	100	100	83.6	
2016	81,765,281	377,864,418		222,014,789	640,508,756	100	100	81.5	
2017	85,753,036	393,307,456		230,956,665	677,616,328	100	100	86.0	
2018	88,116,395	425,093,252		248,875,679	690,969,459	100	100	71.4	
2019	91,219,009	446,538,086		250,689,554	722,197,375	100	100	73.6	
2020	93,912,548	466,754,126		253,079,217	766,121,894	100	100	81.2	
2021	96,912,524	499,190,198		277,462,561	824,660,202	100	100	82.4	
2022	95,542,693	537,566,193		283,488,662	827,126,234	100	100	68.4	

<u>System Experience</u>: For the year ended December 31, 2022, the Police and Fire Retirement System experienced an actuarial loss of \$42 million. The loss for the 2022 plan year reflects the combined impact of an actuarial net loss of \$26.8 million on the actuarial value of plan assets and an actuarial loss of \$15.2 million on liabilities primarily due to negative investment returns.

System Experience (Gain)/Loss											
		Actuarial	Ac	tuarial Value		Unfunded					
		Liability		of Assets	Actu	arial Liability					
		(a)		(b)		(a) - (b)					
Balances as of December 31, 2021	\$	873,565,283	\$	824,660,202	\$	48,905,081					
Changes for the year:											
Normal cost		18,255,940		-		18,255,940					
Contributions		-		23,689,611		(23,689,611)					
Benefit payments		(53, 182, 842)		(53, 182, 842)		-					
Interest		62,762,891		58,737,441		4,025,450					
Assumption changes		-		-		-					
Change in Benefits		-		-		-					
Expected actuarial value at December 31, 2022		901,401,272		853,904,412		47,496,860					
Actual actuarial value as of December 31, 2022		916,597,548		827,126,234		89,471,314					
Actuarial (gain) loss	\$	15,196,276	\$	26,778,178	\$	41,974,454					

Schedule of Funding Progress											
	Α	.ctuarial	Α	ctuarial	-	funded ctuarial			Active ember	UAL as a Percentage of	
Valuation	١	/alue of	L	iability	L	iability	Funded	C	overed	Active Member	
Date		Assets		(AL)		(UAL)	Ratio	P	ayroll	Covered Payroll	
December 31,		(a)		(b)		(b)-(a)	(a)/(b)		(c)	[(b)-(a)]/(c)	
2013	\$	571,262	\$	617,748	\$	46,486	92.5%	\$	65,306	71.2 %	
2014		600,860		631,904		31,044	95.1		64,572	48.1	
2015		620,149		655,136	34,987		94.7		65,560	53.4	
2016		640,508		681,644	41,136		94.0		66,946	61.4	
2017		677,616		710,017		32,401	95.4	69,634		46.5	
2018		690,969		762,085		71,116	90.7		72,017	98.7	
2019		722,197		788,446		66,249	91.6		73,891	89.7	
2020		766,122		813,746		47,624	94.1		75,880	62.8	
2021		824,660		873,565		48,905	94.4		79,159	61.8	
2022		827,126		916,597		89,471	90.2		82,220	108.8	
(Rounded dollar	r amo	unts are in th	ousan	ds.)							

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-36 in the Financial Section of this report.

D. Summary of Benefit Provisions

Plan A is a closed plan which was applicable to commissioned 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 commissioned 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 commissioned members entering the System on or after January 1, 1979. 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 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.

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

Normal Retirement:

• Eligibility:

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%.
- <u>Final Average Salary</u>: Average for the three consecutive years within the last 10 years of service that produce the highest average salary.

Service-Connected Disability:

- <u>Eligibility</u>: Disability must be permanent and preclude employee, under age 55, from performing the duties of their position.
- Benefit: 75% of final salary rate if injury, 50% if disease.
- <u>Conditions</u>: 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:

- <u>Eligibility</u>: Seven or more years of service and under age 55. Disability must be permanent and preclude employee from performing the duties of their position.
- <u>Benefit</u>: 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.
- <u>Conditions</u>: 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):

- <u>Eligibility</u>: 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 one to 60 months.
- <u>Benefit</u>: 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:

- <u>Eligibility</u>: 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.
- <u>Benefit</u>: 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:

- <u>Eligibility</u>: 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.
- <u>Benefit</u>: 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 18 years old, married, or deceased.

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

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

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

Benefit:

Plan C-79: Identical to Plan A benefits.

Post-Retirement Survivor Benefits:

• <u>Eligibility</u>: 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 prior to 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 January 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.
- <u>Benefit</u>: Accumulated contributions at the time of termination plus 5% annual interest, beginning January 1, 2000.

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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 Annual Comprehensive 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, 2013 through December 31, 2022 (accrual basis of accounting)

	Fiscal Year							
		2022		2021		2020		2019
ADDITIONS								
Employer contributions	\$	10,407,635	\$	10,722,494	\$	11,010,091	\$	9,683,553
Employee contributions		3,823,411		3,632,713		3,809,288		3,770,224
Net income (loss) from investing activities		(98,593,403)		95,356,927		80,782,297		102,909,003
Reclassifications due to participant conversion		-		-		-		-
Total additions		(84,362,357)		109,712,134		95,601,676		116,362,780
DEDUCTIONS								
Benefit payments								
Service retirement		40,463,641		38,827,309		37,091,691		35,624,779
Survivor benefit		4,142,204		3,922,599		3,683,114		3,715,161
DROP lump sum payments		4,349,608		2,936,292		3,534,655		3,737,391
Qualified domestic relations order		106,988		121,966		131,473		130,868
Disability (service)		68,220		75,935		65,686		73,146
Disability (non-service)		174,875		176,838		208,574		234,168
Funeral benefits		71,581		55,279		153,632		107,570
Pension administration		733,533		605,918		573,137		619,398
Depreciation		-		-		-		-
Refunds		990,688		884,057		959,679		824,813
Reclassifications due to participant conversion		295,038		417,138		63,361		94,720
Total deductions		51,396,376		48,023,331		46,465,002		45,162,014
Net increase (decrease) in fiduciary net position		(135,758,733)		61,688,803		49,136,674		71,200,766
Net position - beginning, as previously reported Prior period adjustment		728,717,909		667,029,106		617,892,432		546,691,666
Net position - beginning, restated		728,717,909		667,029,106		617,892,432		546,691,666
Net position - beginning, restated Net position - ending	œ.	592,959,176	\$	728,717,909	\$	667,029,106	\$	617,892,432
Net position - enaing	φ	592,959,176	ф	120,111,909	Φ	007,029,100	Φ	017,092,432

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

	2018	2017		2016	2015	2014	2013
\$	10,099,027 3,755,812	\$ 9,642,540 3,682,056	\$	8,946,064 3,642,007	\$ 9,031,463 3,574,026	\$ 8,464,927 2,435,831	\$ 7,990,502 2,304,481
	(39,511,690)	91,773,973		35,956,780	13,380	27,894,626	92,166,874
	-	-		-	-	2,942,734	2,465,600
	(25,656,851)	105,098,569		48,544,851	12,618,869	41,738,118	104,927,457
	34,715,603	33,606,377		32,442,114	31,786,968	30,632,053	29,346,178
	3,576,872	3,492,605		3,394,194	3,121,649	2,956,020	2,762,399
	1,969,674	1,077,319		2,122,297	885,185	2,798,396	2,650,766
	135,301	150,477		142,351	99,384	58,561	56,936
	74,483	54,609		53,905	53,201	59,753	57,193
	253,239	239,262		220,021	216,319	216,557	232,372
	54,276	48,063		86,569	59,823	57,349	267,956
	580,204	633,379		615,829	553,844	441,869	404,514
	-	-		-	70,241	63,888	63,890
	890,851	614,103		683,332	866,874	400,433	570,712
	179,012	191,292		244,793	465,171	-	-
_	42,429,515	40,107,486	_	40,005,405	 38,178,659	37,684,879	36,412,916
	(68,086,366)	64,991,083		8,539,446	(25,559,790)	4,053,239	68,514,541
	614,778,032	549,786,949		541,247,503	552,232,824	548,179,585	479,665,044
		<u>-</u>		-	14,574,469	-	-
	614,778,032	549,786,949		541,247,503	566,807,293	548,179,585	479,665,044
\$	546,691,666	\$ 614,778,032	\$	549,786,949	\$ 541,247,503	\$ 552,232,824	\$ 548,179,585

WICHITA RETIREMENT SYSTEMS

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

For years ended December 31, 2013 through December 31, 2022 (accrual basis of accounting)

		Fisc			
	2022	2021		2020	2019
ADDITIONS		 			
Employer contributions	\$ 212,909	\$ 195,927	\$	197,163	\$ 198,342
Employee contributions	212,909	195,927		197,162	198,343
Net income (loss) from investing activities	(1,978,671)	1,482,045		1,470,084	1,776,395
Reclassifications due to participant conversion	295,038	417,138		63,361	94,720
Total additions	(1,257,815)	2,291,037		1,927,770	2,267,800
DEDUCTIONS					
Pension administration	-	7,106		11,093	9,384
Depreciation	-	-		-	-
Refunds	827,147	1,288,418		964,393	575,000
Reclassifications due to participant conversion	-	-		-	-
Total deductions	827,147	1,295,524		975,486	584,384
Net increase (decrease) in fiduciary net position	(2,084,962)	995,513		952,284	1,683,416
Net position - beginning, as previously reported Prior period adjustment	11,735,949 -	10,740,436		9,788,152	8,104,736 -
Net position - beginning, restated	 11,735,949	 10,740,436		9,788,152	 8,104,736
Net position - ending	\$ 9,650,987	\$ 11,735,949	\$	10,740,436	\$ 9,788,152

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

	2018		2017		2016		2015		2014		2013
\$	202,075	\$	200,003	\$	203,532	\$	190,049	\$	1,147,770	\$	1,116,464
•	202,077	·	200,003	•	203,509	·	190,049	·	1,147,770	•	1,116,240
	(598,098)		1,156,192		467,817		(80,749)		1,104,224		3,655,978
	179,012		191,292		244,793		465,171		-		-
	(14,934)		1,747,490		1,119,651		764,520		3,399,764		5,888,682
	27,384		9,725		7,366		5,056		64,686		73,351
	-		-		-		-		54,768		54,763
	349,140		348,275		614,342		733,125		1,107,222		1,010,244
	-		-		-		-		2,942,734		2,465,600
	376,524		358,000		621,708		738,181		4,169,410		3,603,958
	(391,458)		1,389,490		497,943		26,339		(769,646)		2,284,724
	8,496,194		7,106,704		6,608,761		21,156,891		21,926,537		19,641,813
	-		-		-		(14,574,469)		-		-
	8,496,194		7,106,704		6,608,761		6,582,422		21,926,537		19,641,813
\$	8,104,736	\$	8,496,194	\$	7,106,704	\$	6,608,761	\$	21,156,891	\$	21,926,537

WICHITA RETIREMENT SYSTEMS

CHANGES IN FIDUCIARY NET POSITION POLICE AND FIRE RETIREMENT SYSTEM OF WICHITA, KANSAS

For years ended December 31, 2013 through December 31, 2022 (accrual basis of accounting)

	Fiscal Year									
		2022		2021		2020		2019		
ADDITIONS										
Employer contributions	\$	17,183,919	\$	17,889,908	\$	16,617,743	\$	13,965,415		
Employee contributions		6,505,692		6,682,182		5,927,784		5,428,455		
Net income (loss) from investing activities		(121,753,365)		116,265,367		97,865,002		120,349,987		
Total additions		(98,063,754)		140,837,457		120,410,529		139,743,857		
DEDUCTIONS										
Benefit payments										
Service retirement		36,610,009		34,027,529		32,556,490		30,941,654		
Survivor benefit		4,335,634		4,052,214		3,768,561		3,611,221		
Backward DROP lump sum payments		9,310,075		6,494,055		5,801,901		5,232,443		
Qualified domestic relations order		254,295		232,690		232,683		237,496		
Disability (service)		1,781,299		1,791,884		1,751,762		1,573,985		
Disability (non-service)		63,792		62,953		62,114		69,254		
Funeral benefits		24,427		49,530		26,090		20,697		
Pension administration		657,985		556,934		574,182		612,049		
Depreciation		-		-		-		-		
Refunds		803,311		622,640		962,539		424,631		
Total deductions		53,840,827		47,890,429		45,736,322		42,723,430		
Net increase (decrease) in fiduciary net postion		(151,904,581)		92,947,028		74,674,207		97,020,427		
Net position - beginning		898,696,279		805,749,251		731,075,044		634,054,617		
Net position - ending	\$	746,791,698	\$	898,696,279	\$	805,749,251	\$	731,075,044		

Fiscal Year

2018	2017	2016		2015	2014	2013
\$ 14,331,422 5,599,216 (43,988,371) (24,057,733)	\$ 13,369,785 4,915,378 103,236,679 121,521,842	\$ \$ 12,585,895 4,776,958 39,901,640 57,264,493		13,964,379 4,603,331 (163,702) 18,404,008	\$ 14,464,181 4,529,895 30,596,067 49,590,143	\$ 14,889,714 4,607,691 99,494,232 118,991,637
28,998,635	27,471,812	26,169,001		24,767,622	22,854,129	21,081,456
3,431,832	3,253,128	3,275,582		3,216,979	3,147,177	2,963,019
4,836,668	4,279,460	3,951,323		5,550,489	7,903,252	5,202,861
222,699	220,953	221,720		200,947	159,200	130,426
1,533,354	1,439,920	1,546,440		1,818,427	1,794,729	1,701,928
73,957	72,513	71,496		70,479	70,558	68,445
23,283	18,772	20,974		17,697	28,688	9,871
590,098	554,641	548,171		483,193	478,320	402,003
-	-	-		37,825	63,887	401,901
261,073	173,975	295,731		448,180	457,423	63,890
39,971,599	37,485,174	36,100,438		36,611,838	36,957,363	32,025,800
(64,029,332)	84,036,668	21,164,055		(18,207,830)	12,632,780	86,965,837
698,083,949	614,047,281	592,883,226		611,091,056	598,458,276	511,492,439
\$ 634,054,617	\$ 698,083,949	\$ 614,047,281	\$	592,883,226	\$ 611,091,056	\$ 598,458,276

WICHITA RETIREMENT SYSTEMS

AVERAGE BENEFIT BY YEARS OF SERVICE¹ New Retirees by Calendar Year WICHITA EMPLOYEES' RETIREMENT SYSTEM

For years ended December 31, 2013 through December 31, 2022

	Fiscal Year							
		2022		2021		2020		2019
AVERAGE MONTHLY PENSION BENEFIT								
0 - 5 years of service	\$	-	\$	-	\$	-	\$	-
5 - 10 years of service		1,280		806		711		779
10 - 15 years of service		1,487		1,824		1,169		1,196
15 - 20 years of service		1,848		1,785		1,799		1,986
20 - 25 years of service		3,753		2,127		2,412		2,155
25 - 30 years of service		3,430		4,109		2,568		3,485
More than 30 years of service		4,504		3,721		4,281		3,752
Average for all years of service		3,013		2,343		2,431		2,551
AVERAGE FINAL AVERAGE SALARY								
0 - 5 years of service	\$	-	\$	-	\$	-	\$	-
5 - 10 years of service		6,460		4,632		3,914		4,490
10 - 15 years of service		4,771		6,156		4,030		4,403
15 - 20 years of service		4,644		4,945		4,751		4,795
20 - 25 years of service		7,315		4,262		4,837		4,413
25 - 30 years of service		5,426		6,780		4,132		5,817
More than 30 years of service		5,802		4,771		5,419		4,811
Average for all years of service		5,808		5,287		4,827		4,843
NUMBER OF RETIRED MEMBERS								
0 - 5 years of service		-		-		-		-
5 - 10 years of service		7		11		3		5
10 - 15 years of service		5		16		14		11
15 - 20 years of service		13		12		15		5
20 - 25 years of service		11		7		19		7
25 - 30 years of service		7		8		9		5
More than 30 years of service		16		14		17		22
Total for all years of service		59		68		77		55

¹ Includes new disabilities and members entering DROP.

Fiscal Year

2018	 2017	2016	2015	2014	 2013
\$ _	\$ -	\$ -	\$ -	\$ -	\$ -
709	1,092	648	746	665	1,164
989	1,332	1,159	1,095	950	1,278
1,795	2,175	1,915	1,791	1,624	1,621
2,291	2,299	2,249	1,861	1,957	1,992
2,617	2,395	2,849	2,983	2,230	2,433
4,020	4,235	3,456	4,003	3,217	3,891
2,573	2,310	2,167	2,174	1,921	1,760
\$ _	\$ _	\$ _	\$ _	\$ _	\$ -
4,185	5,807	3,293	3,823	3,206	5,437
3,930	4,722	4,226	3,617	3,353	4,091
4,422	5,699	4,837	4,546	4,343	3,914
4,523	4,609	4,442	3,727	4,027	4,288
4,276	3,868	4,419	4,799	4,065	4,397
5,148	5,425	4,322	5,197	4,495	5,388
4,617	4,971	4,289	4,367	4,026	4,409
-	-	-	-	-	-
5	4	7	11	11	8
11	14	15	7	10	17
9	8	8	13	19	12
15	10	13	9	14	6
8	6	7	9	9	7
26	 10	17	 13	 20	4
 74	 52	 67	62	 83	 54

WICHITA RETIREMENT SYSTEMS

AVERAGE BENEFIT BY YEARS OF SERVICE¹ New Retirees by Calendar Year POLICE AND FIRE RETIREMENT SYSTEM OF WICHITA, KANSAS

For years ended December 31, 2013 through December 31, 2022

	2022	2021		2020		2019
AVERAGE MONTHLY PENSION BENEFIT						
0 - 5 years of service	\$ 3,530	\$ -	\$	-	\$	-
5 - 10 years of service	-	-		3,460		3,379
10 - 15 years of service	1,828	1,481		2,296		-
15 - 20 years of service	2,868	3,850		3,825		4,196
20 - 25 years of service	3,348	3,579		3,635		3,230
25 - 30 years of service	4,628	4,212		4,551		4,233
More than 30 years of service	4,990	4,678		4,739		4,866
Average for all years of service	4,075	3,942		4,173		3,913
AVERAGE FINAL AVERAGE SALARY						
0 - 5 years of service	\$ 4,706	\$ -	\$	-	\$	-
5 - 10 years of service	-	-		4,441		4,341
10 - 15 years of service	3,676	4,616		4,209		-
15 - 20 years of service	5,154	5,238		5,661		5,464
20 - 25 years of service	5,840	6,062		5,840		5,931
25 - 30 years of service	6,711	6,204		6,667		6,119
More than 30 years of service	6,665	6,238		6,360		6,488
Average for all years of service	6,181	6,085		6,068		6,026
NUMBER OF RETIRED MEMBERS						
0 - 5 years of service	1	-		-		-
5 - 10 years of service	-	-		3		1
10 - 15 years of service	3	1		3		-
15 - 20 years of service	2	1		3		2
20 - 25 years of service	16	15		5		15
25 - 30 years of service	22	16		17		11
More than 30 years of service	10	 5		9		7
Total for all years of service	54	38		40		36

¹ Includes new disabilities.

Fiscal Year

2018	2017		2016		2015		2014		2013	
\$ -	\$	-	\$	-	\$	-	\$	3,710	\$	-
-		-		-		-		-		3,371
-		2,744		2,688		-		1,867		2,254
4,549		2,533		1,895		4,203		1,993		3,930
3,861		3,144		3,108		3,004		2,971		3,037
4,073		4,320		4,509		4,074		4,212		4,138
4,359		6,304		4,658		4,589		4,870		4,790
4,116		3,972		4,235		3,979		3,984		3,697
\$ -	\$	_	\$	_	\$	-	\$	4,890	\$	-
-		_		-		-		-		4,262
-		5,122		5,014		-		5,150		4,065
5,429		4,726		3,590		5,280		4,842		4,961
6,062		5,596		5,586		5,490		5,132		4,936
6,196		6,349		6,887		5,963		5,698		5,696
5,711		7,929		5,917		5,824		6,192		6,387
5,983		6,082		6,055		5,756		5,671		5,337
_		-		-		-		1		_
-		=		-		_		=		1
-		1		1		_		1		3
1		5		1		1		1		1
10		7		2		8		13		10
13		14		7		9		11		20
11		4		10		11		17		2
 35		31		21		29		44		37

WICHITA RETIREMENT SYSTEMS

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

As of December 31, 2022

		Non-Service			Service		
Monthly Benefit	Active in DROP	Disability	QDRO ¹	Service	Disability	Survivor	Total
Less than \$500	-	1	1	37	-	54	93
500 - 1,000	3	3	4	126	-	56	192
1,000 - 1,500	7	2	1	161	-	52	223
1,500 - 2,000	8	2	-	156	2	49	217
2,000 - 2,500	3	1	1	133	1	35	174
2,500 - 3,000	7	1	1	108	-	9	126
3,000 - 3,500	9	-	-	109	-	7	125
3,500 - 4,000	8	-	-	110	-	3	121
4,000 - 4,500	6	-	-	72	-	-	78
4,500 - 5,000	4	-	-	72	-	-	76
More than \$5,000	6	-	-	136	-	2	144
	61	10	8	1,220	3	267	1,569

POLICE AND FIRE RETIREMENT SYSTEM OF WICHITA, KANSAS

As of December 31, 2022

Monthly Benefit	Non-Service Disability	QDRO ¹	Service	Recalc. Service Disability	Service Disability	Survivor	Total
Less than \$500	-	2	4	-	-	-	6
500 - 1,000	2	10	4	-	2	21	39
1,000 - 1,500	3	6	33	-	-	30	72
1,500 - 2,000	-	2	56	1	-	41	100
2,000 - 2,500	-	1	114	2	-	48	165
2,500 - 3,000	-	-	98	1	1	30	130
3,000 - 3,500	-	-	94	5	5	14	118
3,500 - 4,000	-	-	97	13	9	4	123
4,000 - 4,500	-	-	93	19	10	2	124
4,500 - 5,000	-	-	89	14	8	1	112
More than \$5,000	-	-	120	8	2	2	132
	5	21	802	63	37	193	1,121

¹ Qualified Domestic Relations Order